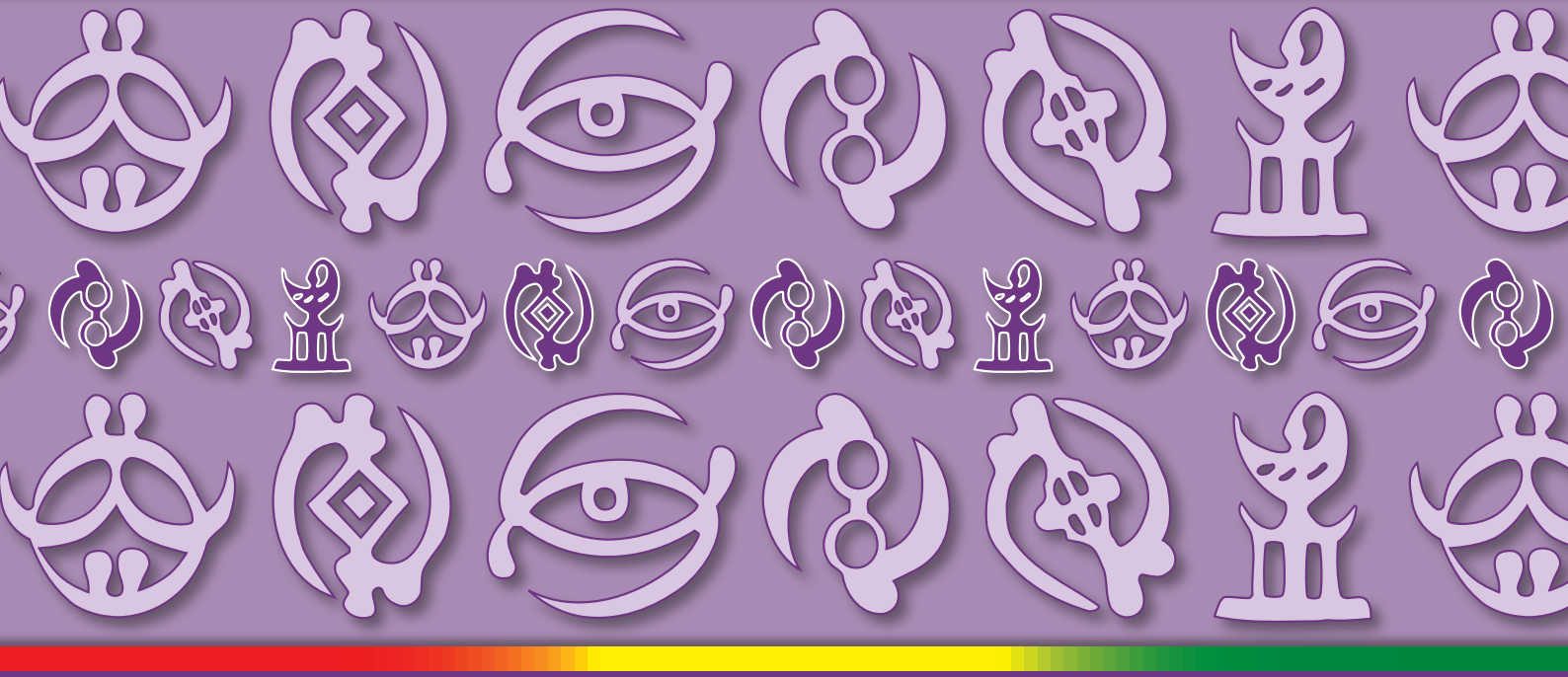
Ghana



Demographic and Health Survey

2022

Ghana
Demographic and Health Survey
2022

Ghana Statistical Service
Accra, Ghana

The DHS Program
ICF
Rockville, Maryland, USA

January 2024

The 2022 Ghana Demographic and Health Survey (2022 GDHS) was implemented by the Ghana Statistical Service (GSS). Funding for the 2022 GDHS was provided by the Government of Ghana; the United States Agency for International Development (USAID); the U.S. President's Malaria Initiative (PMI); the United Nations Population Fund (UNFPA); the United Nations Children's Fund (UNICEF); the World Bank; the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund); the Korean International Cooperation Agency (KOICA); the World Health Organization (WHO); and the Foreign, Commonwealth and Development Office (UK-FCDO). ICF provided technical assistance through The DHS Program, a USAID-funded project providing support and technical assistance in the implementation of population and health surveys in countries worldwide.

Additional information about the 2022 GDHS may be obtained from the Ghana Statistical Service, Head Office, P.O. Box GP 1098, Accra, Ghana; email: info@statsghana.gov.gh.

Information about The DHS Program may be obtained from ICF, 530 Gaither Road, Suite 500, Rockville, MD 20850, USA; telephone: +1-301-407-6500; fax: +1-301-407-6501; email: info@DHSprogram.com; internet: www.DHSprogram.com.

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TABLES, FIGURES, AND MAPS

FOREWORD

Demographic and Health Surveys are population-based surveys that are essential to monitor progress in service utilisation and management of health-related issues to inform decision making. The 2022 Ghana Demographic and Health Survey (2022 GDHS) is the seventh in the series of DHS surveys conducted by the Ghana Statistical Service (GSS) in collaboration with the Ministry of Health/Ghana Health Service (MoH/GHS) and other stakeholders, with funding from the United States Agency for International Development (USAID) and other partners.

The survey provides national estimates of demographic and health indicators that are comparable to data collected in the six previous DHS surveys and similar surveys in other developing countries. The information gathered will add to the large database of population-based indicators for Ghana.

Data were collected from a nationally representative sample of approximately 18,540 households from all 16 regions in Ghana. The survey interviewed 17,933 households, 15,014 women of reproductive age (age 15 to 49), and 7,044 men age 15 to 59. In addition, 4,935 children age 0–5 were measured for anthropometry, and children age 6–59 months were tested for malaria using malaria rapid diagnostic tests (RDTs) and microscopy.

The report provides information on fertility, fertility preferences, family planning practices, childhood mortality, maternal and child health, nutrition, knowledge of HIV prevention methods, violence against women, women's empowerment, health insurance, water, sanitation, menstrual hygiene, malaria prevalence, marriage and sexual activity, and other health issues. These data are disaggregated by region, type of locality, and selected demographic characteristics including sex, age, education, and wealth.

These indicators are essential for policy planning, programme planning, and monitoring and evaluation of population and health programmes, including those related to the Health Sector Medium-Term Development Plan 2022–2025, the Sustainable Development Goals (SDGs), and other national and international agendas. The findings from this report will support the design, implementation, monitoring, and evaluation of policies and programmes to improve health care in general as well as reproductive, maternal, and child health in particular.

Findings from the Key Indicators Report (KIR) of the 2022 GDHS were released on 5 June 2023 during the 2023 Annual Health Summit hosted by the Ministry of Health. This was a source of information for programme managers on performance, monitoring, and evaluation of programme interventions.

Professor Samuel Kobina Annim
Government Statistician
Ghana Statistical Service

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The Ghana Statistical Service (GSS) acknowledges the Ghana Health Service Ethical Review Committee for the ethical clearance that allowed performance of anaemia and malaria testing.

The GSS is indebted to its development partners, including the United States Agency for International Development; the World Bank; the United Nations Population Fund; the World Health Organization; the Foreign, Commonwealth and Development Office; the United Nations Children's Fund; the Korean International Cooperation Agency; the Global Fund to Fight AIDS, Tuberculosis and Malaria; and the Government of Ghana, for funding the survey.

The Service wishes to express its deepest gratitude to the Ministry of Health, the Ghana Health Service, and the National Malaria Control Programme for their valuable partnership and for providing artemisinin-based combination therapy (ACT) and COVID-19 personal protective equipment used in both training and fieldwork.

The immense contribution of the National Public Health Reference Laboratory cannot go unacknowledged, especially during the training of field personnel, field supervision, and microscopy reading of malaria slides to determine malaria parasite infections. The GSS is also indebted to the Noguchi Memorial Institute for Medical Research for conducting external quality assurance of the microscopy readings of the malaria slides.

The Service appreciates the technical support provided by ICF through The Demographic and Health Surveys Program throughout the survey period.

Special admiration goes to the Steering and Technical Advisory Committee members and the Project Implementation Team for their invaluable contributions to and oversight of the implementation of the survey. To the media, we say thank you for publicising the survey and sensitising the public during the period of data collection and dissemination of the Key Indicators Report.

We appreciate the cooperation of all respondents during the data collection, the field officers who committed themselves to the collection of quality data, and other survey personnel whose contribution made the entire exercise a reality.

ACRONYMS AND ABBREVIATIONS

ACT	artemisinin-based combination therapy
AIDS	acquired immunodeficiency syndrome
ANC	antenatal care
ARI	acute respiratory infection
BCG	bacille Calmette-Guérin
BMI	body mass index
CAPI	computer-assisted personal interviewing
CBR	crude birth rate
CDC	U.S. Centers for Disease Control and Prevention
CHPS	community-based health planning and services
COVID	coronavirus disease
DEFT	design effect
DHS	Demographic and Health Survey
DMPA-SC	subcutaneous depot medroxyprogesterone acetate
DPT	diphtheria, pertussis, and tetanus
EA	enumeration area
ERC	Ethical Review Committee
FDA	Food and Drugs Authority
GAR	gross attendance ratio
GDHS	Ghana Demographic and Health Survey
GFR	general fertility rate
GHPC	Ghana Housing and Population Census
GHS	Ghana Health Service
GMIS	Ghana Malaria Indicator Survey
GPI	gender parity index
GPS	Global Positioning System
GSS	Ghana Statistical Service
HepB	hepatitis B
Hib	*Haemophilus influenzae* type B
HIV	human immunodeficiency virus
HPV	human papillomavirus
IPTp	intermittent preventive treatment during pregnancy
IPV	inactivated poliomyelitis vaccine
IRB	Institutional Review Board
ITN	insecticide-treated net
IUD	intrauterine contraceptive device
IYCF	infant and young child feeding
JMP	Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
KIR	Key Indicators Report
KMC	kangaroo mother care

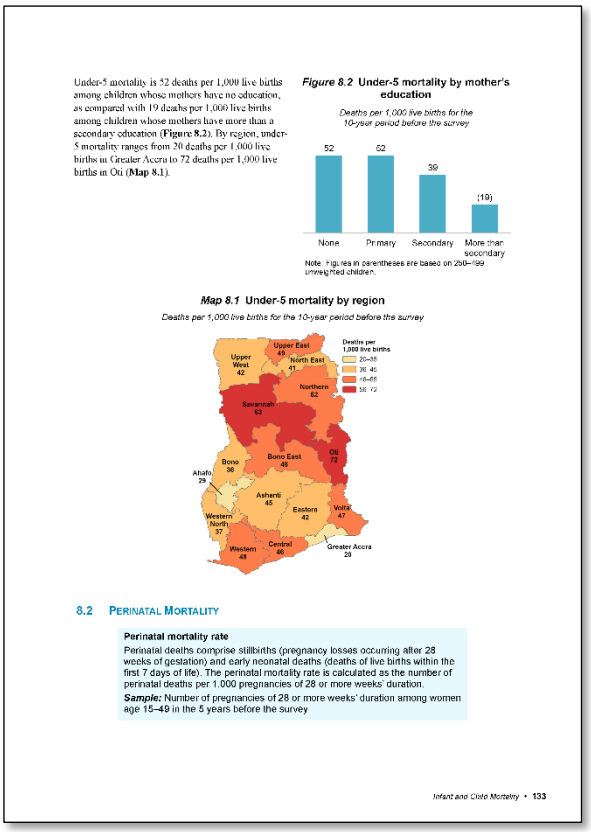
LAM	lactational amenorrhoea method
LLIN	long-lasting insecticidal net
LPG	liquified petroleum gas
MMR	measles, mumps, and rubella
MR	measles-rubella
MTCT	mother-to-child transmission
MUAC	mid-upper-arm circumference
NAR	net attendance ratio
NGO	nongovernmental organisation
NHIA	National Health Insurance Authority
NHIS	National Health Insurance Scheme
NMEP	National Malaria Elimination Programme
OOP	out-of-pocket payment
OPV	oral polio vaccine
ORS	oral rehydration salts
ORT	oral rehydration therapy
PCV	pneumococcal conjugate vaccine
PHC	Population and Housing Census
PMI	U.S. President's Malaria Initiative
PNC	postnatal care
PSU	primary sampling unit
RDT	rapid diagnostic test
RHF	recommended homemade fluids
RV	rotavirus vaccine
SD	standard deviation
SDG	Sustainable Development Goal
SDM	standard days method
SP	sulfadoxine-pyrimethamine
STI	sexually transmitted infection
TFR	total fertility rate
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

READING AND UNDERSTANDING TABLES FROM THE 2022 GHANA DEMOGRAPHIC AND HEALTH SURVEY (GDHS)

The 2022 Ghana DHS final report is based on approximately 200 tables of data. For quick reference, they are located at the end of each chapter and can be accessed through links in the pertinent text (electronic version). Additionally, this more reader-friendly version features about 90 figures that clearly highlight trends, subnational patterns, and background characteristics. Large, colourful maps display breakdowns for the regions in Ghana. The text has been simplified to highlight key points in bullets and to clearly identify indicator definitions in boxes.

While the text and figures featured in each chapter highlight some of the most important findings from the tables, not every finding can be discussed or displayed graphically. For this reason, GDHS data users should be comfortable reading and interpreting tables.

The following pages provide an introduction to the organization of GDHS tables and the presentation of background characteristics, along with a brief summary of sampling and understanding denominators. In addition, this section provides some exercises for users as they practice their new skills in interpreting GDHS tables.



Under-5 mortality is 52 deaths per 1,000 live births among children whose mothers have no education, as compared with 19 deaths per 1,000 live births among children whose mothers have more than a secondary education (**Figure 8.2**). By region, under-5 mortality ranges from 20 deaths per 1,000 live births in Greater Accra to 72 deaths per 1,000 live births in Oti (**Map 8.1**).

Figure 8.2 **Under-5 mortality by mother's education**

Deaths per 1,000 live births for the 10-year period before the survey

Note: Figures in parentheses are based on 250–499 unweighted children.

Map 8.1 **Under-5 mortality by region**

Deaths per 1,000 live births for the 10-year period before the survey

8.2 PERINATAL MORTALITY

Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy losses occurring after 28 weeks of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 28 or more weeks' duration.

Sample: Number of pregnancies of 28 or more weeks' duration among women age 15–49 in the 5 years before the survey

Infant and Child Mortality • 133

Example 1: Exposure to mass media: Women

A Question Asked of All Survey Respondents

Table 3.4.1 Exposure to mass media: Women 1

Percentage of women age 15–49 who are exposed to specific media on a weekly basis, according to background characteristics, Ghana DHS 2022

Background characteristic 3	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	2 Number of women
Age						
15–19	5.0	61.9	34.7	1.9	29.1	2,682
20–24	3.8	60.4	38.5	1.7	28.0	2,695
25–29	3.8	66.8	41.1	2.3	23.8	2,340
30–34	3.9	65.7	44.7	2.5	24.5	2,252
35–39	2.2	62.7	47.4	1.4	25.7	2,059
40–44	2.8	59.0	48.9	2.1	28.4	1,675
45–49	2.6	48.8	46.8	1.9	34.6	1,312
Residence						
Urban	5.0	73.0	45.3	2.8	19.1	8,557
Rural	1.7	46.4	38.3	0.9	38.3	6,457
Region						
Western	3.5	69.3	51.2	1.7	19.3	955
Central	5.3	73.5	46.0	2.1	17.7	1,703
Greater Accra	7.6	82.8	47.6	4.7	13.4	2,327
Volta	4.1	56.8	50.3	2.8	27.0	713
Eastern	3.0	71.3	47.6	1.8	17.9	1,220
Ashanti	1.8	62.4	47.6	1.0	24.0	2,928
Western North	3.4	57.6	38.3	1.5	28.4	411
Ahafo	1.1	43.5	33.4	1.0	39.7	317
Bono	1.8	61.4	40.2	0.9	27.5	567
Bono East	3.7	51.8	32.3	1.9	37.3	676
Oti	2.2	53.0	44.3	1.1	30.0	403
Northern	1.8	41.0	19.1	1.0	53.8	1,149
Savannah	1.0	37.9	30.0	0.6	44.7	319
North East	1.3	38.7	28.6	0.7	45.3	290
Upper East	3.5	30.8	36.2	1.7	49.4	640
Upper West	1.8	29.3	29.2	1.0	53.1	398
Education						
No education	0.2	33.1	29.2	0.1	52.2	2,411
Primary	0.7	54.7	38.0	0.1	32.6	2,071
Secondary	3.4	67.8	45.3	1.8	21.7	8,999
More than secondary	14.0	79.4	50.8	8.3	14.0	1,533
Wealth quintile						
Lowest	1.1	15.5	31.0	0.5	61.9	2,447
Second	1.8	46.7	36.7	0.5	38.1	2,712
Middle	1.4	67.4	40.3	0.7	22.8	3,121
Fourth	4.1	78.7	47.7	2.5	14.9	3,379
Highest	8.5	84.6	51.4	4.9	10.2	3,355
Total 4	3.6	61.6	42.3	2.0	27.3	15,014

5

Step 1: Read the title and subtitle, highlighted in orange in the table above. They tell you the topic and the specific population group being described. In this case, the table is about women age 15–49 and their exposure to different types of media. All eligible female respondents age 15–49 were asked these questions.

Step 2: Scan the column headings—highlighted in green in Example 1. They describe how the information is categorized. In this table, the first three columns of data show different types of media that women access at least once a week. The fourth column shows women who access all three types of media, while the fifth column shows women who do not access any of the three types of media on a weekly basis. The last column lists the number of women age 15–49 interviewed in the survey.

Step 3: Scan the row headings—the first vertical column highlighted in blue in Example 1. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents women's exposure to media by age, urban-rural residence, region, level of education, and wealth quintile. Most of the tables in the GDHS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in pink. These percentages represent the totals of all women age 15–49 and their weekly access to different types of media. In this case, 3.6% of women age 15–49 read a newspaper at least once a week, 61.6% watch television at least weekly, and 42.3% listen to the radio on a weekly basis.*

Step 5: To find out what percentage of women in rural areas listen to the radio at least once a week, draw two imaginary lines, as shown on the table. This shows that 38.3% of women age 15–49 in rural areas listen to the radio at least once a week.

By looking at patterns by background characteristics, we can see how exposure to mass media varies across Ghana. Mass media are often used to communicate health messages. Knowing how mass media exposure varies among different groups can help programme planners and policymakers determine how to most effectively reach their target populations.

*For the purpose of this document data are presented exactly as they appear in the table, including decimal places. However, the text in the remainder of this report rounds data to the nearest whole percentage point.

Practice: Use the table in Example 1 to answer the following questions:

a) What percentage of women in Ghana do not access any of the three media at least once a week?
b) Which age group of women is most likely to watch television at least once a week?
c) Compare women by urban-rural residence—which group is more likely to read a newspaper at least once a week?
d) What are the lowest and the highest percentages (range) of women who access none of the three media at least once a week by region?
e) Is there a clear pattern in weekly exposure to newspapers by educational level?
f) Is there a clear pattern in weekly exposure to television by wealth quintile?

Answers:

a) 27.3%.
b) Women age 25–29: 66.8% of women in this age group watch television at least once a week.
c) 5.0% of women in urban areas read a newspaper at least once a week, as compared with 1.7% of women in rural areas.
d) The percentage of women who access none of the three media ranges from a low of 13.4% in Greater Accra to a high of 53.8% in Northern.
e) Yes. By educational level, the percentage of women who read a newspaper at least once a week ranges from a low of 0.2% among those with no education to a high of 14.0% among those with a secondary education or higher.
f) Yes. By wealth quintile, the percentage of women who watch television at least once a week increases as wealth increases: 15.5% of women in the lowest wealth quintile watch television at least once a week, compared with 84.6% of women in the highest wealth quintile.

Example 2: Children with symptoms of ARI and care seeking for symptoms of ARI

A Question Asked of a Subgroup of Survey Respondents

Table 10.6 Children with symptoms of ARI and care seeking for symptoms of ARI 1

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Ghana DHS 2022

Background characteristic	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
	2 Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought[2]	Percentage for whom advice or treatment was sought the same or next day[2]	Number of children
Age in months					
<6	1.4	850	*	*	12
6–11	1.6	868	*	*	14
12–23	2.8	1,823	61.6	28.2	50
24–35	2.6	1,546	64.4	20.1	40
36–47	1.9	1,632	(46.0)	(25.4)	31
48–59	2.1	1,596	(37.9)	(10.7)	34
Sex					
Male	2.4	4,240	58.2	20.3	100
Female	2.0	4,075	48.9	22.8	81
Mother's smoking status					
Smokes cigarettes/tobacco	1.5	78	*	*	1
Does not smoke	2.2	8,237	53.8	21.5	180
Cooking fuels and technologies					
Clean fuel and technology[3]	1.4	1,774	*	*	25
Solid fuel[4]	2.4	6,522	57.5	23.0	156
No food cooked in household	*	18	*	*	0
Residence					
Urban	1.5	4,048	44.6	19.5	62
Rural	2.8	4,267	59.0	22.4	119
Region					
Western	1.9	515	*	*	10
Central	3.1	841	*	*	26
Greater Accra	0.9	1,057	*	*	9
Volta	4.5	313	*	*	14
Eastern	1.0	611	*	*	6
Ashanti	1.4	1,495	*	*	21
Western North	2.0	222	*	*	5
Ahafo	3.4	186	*	*	6
Bono	1.0	277	*	*	3
Bono East	2.7	437	*	*	12
Oti	1.7	276	*	*	5
Northern	4.1	923	(70.8)	(22.4)	38
Savannah	2.4	247	*	*	6
North East	5.3	267	(54.7)	(15.9)	14
Upper East	1.3	406	*	*	5
Upper West	0.7	242	*	*	2
Mother's education					
No education	3.6	1,922	60.2	22.5	69
Primary	2.6	1,250	(56.5)	(30.3)	33
Secondary	1.7	4,348	44.6	16.0	74
More than secondary	0.7	794	*	*	5
Wealth quintile					
Lowest	3.1	1,966	60.8	20.1	62
Second	3.0	1,690	66.8	30.7	50
Middle	1.2	1,614	*	*	19
Fourth	2.1	1,584	(38.7)	(15.9)	33
Highest	1.2	1,460	*	*	17
Total	3 2.2	8,315	54.1	21.4	181

a b 4

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
NGO = nongovernmental organisation
[1] Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.
[2] Includes advice or treatment from the following sources: public sector, private medical sector, NGO medical sector, shop, market, and medicines peddler. Excludes advice or treatment from a traditional practitioner.
[3] Includes stoves/cookers using electricity, liquefied petroleum gas (LPG)/natural gas/biogas, solar, and alcohol/ethanol
[4] Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crops, animal dung/waste, processed biomass (pellets) or woodchips, garbage/plastic, and sawdust

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: all children under age 5 (a) and children under age 5 with symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey (b).

Step 2: Identify the two panels. First, identify the columns that refer to all children under age 5 (a), and then isolate the columns that refer only to children under age 5 with symptoms of ARI in the 2 weeks before the survey (b).

Step 3: Look at the first panel. What percentage of children under age 5 had symptoms of ARI in the 2 weeks before the survey? It is 2.2%. Now look at the second panel. How many children under age 5 had symptoms of ARI in the 2 weeks before the survey? It's 181, or 2.2% of the 8,315 children under age 5 (with rounding). The second panel is a subset of the first panel.

Step 4: Only 2.2% of children under age 5 had symptoms of ARI in the 2 weeks before the survey. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- What percentage of children under age 5 with symptoms of ARI in the 2 weeks before the survey from Northern were taken for advice or treatment? 70.8%. This percentage is in parentheses because there are between 25 and 49 children (unweighted) in this category. Readers should use this number with caution—it may not be reliable. (For more information on weighted and unweighted numbers, see Example 3.)

- What percentage of children under age 5 with symptoms of ARI in the 2 weeks before the survey whose mothers have a secondary education or higher were taken for advice or treatment? There is no number in this cell—only an asterisk. This is because there are fewer than 25 unweighted cases. Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks in a table, you can proceed with confidence that enough cases were included in all categories that the data are reliable.

Example 3: Understanding Sampling Weights in GDHS Tables

A sample is a group of people who have been selected for a survey. In the GDHS, the sample is designed to represent the national population age 15–49. In addition to national data, most countries want to collect and report data on smaller geographical or administrative areas. However, doing so requires a large enough sample size in each area. For the 2022 GDHS, the survey sample is representative at the national and regional levels and for urban and rural areas.

Table 3.1 Background characteristics of respondents

Percent distribution of women age 15–49 by selected background characteristics, Ghana DHS 2022

Background characteristic	Women		
	3 Weighted percent	2 Weighted number	1 Unweighted number
Region			
Western	6.4	955	797
Central	11.3	1,703	979
Greater Accra	15.5	2,327	969
Volta	4.7	713	837
Eastern	8.1	1,220	854
Ashanti	19.5	2,928	1,131
Western North	2.7	411	792
Ahafo	2.1	317	849
Bono	3.8	567	835
Bono East	4.5	676	974
Oti	2.7	403	921
Northern	7.7	1,149	1,169
Savannah	2.1	319	999
North East	1.9	290	963
Upper East	4.3	640	987
Upper West	2.7	398	958
Total 15–49	100.0	15,014	15,014

To generate statistics that are representative of the country as a whole and the 16 regions, the number of women surveyed in each region should contribute to the size of the total (national) sample in proportion to size of the region. However, if some regions have small populations, then a sample allocated in proportion to each region's population may not include sufficient women from each region for analysis. To solve this problem, regions with small populations are oversampled. For example, let's say that you have enough money to interview 15,014 women and want to produce results that are representative of Ghana as a whole and its regions (as in Table 3.1). However, the total population of Ghana is not evenly distributed among the regions: some regions, such as Ashanti, are heavily populated while others, such as North East, are not. Thus, North East must be oversampled.

A sampling statistician determines how many women should be interviewed in each region in order to get reliable statistics. The **blue column (1)** in the table above shows the actual number of women interviewed in each region. Within the regions, the number of women interviewed ranges from 792 in Western North to 1,169 in Northern. The number of interviews is sufficient to get reliable results in each region.

With this distribution of interviews, some regions are overrepresented and some regions are underrepresented. For example, the population in Ashanti is 19.5% of the population in Ghana, while North East's population contributes only 1.9% of the country's population. But as the blue column shows, the number of women interviewed in Ashanti accounts for only about 7.5% of the total sample of women interviewed (1,131/15,014) and the number of women interviewed in North East accounts for 6.4% of the total sample of women interviewed (963/15,014). This unweighted distribution of women does not accurately represent the population.

In order to get statistics that are representative of Ghana, the distribution of the women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the country. Women from a small region, like North East, should contribute only a small amount to the national total. Women from a large region, like Ashanti, should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" that is used to adjust the number of women from each region so that each region's contribution to the total is proportional to the actual population of the region. The numbers in the **purple column (2)** represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at the regional level. The total national sample size of 15,014 women has not changed after weighting, but the distribution of the women in the regions has been changed to represent their contribution to the total population size.

How do statisticians weight each category? They take into account the probability that a woman was selected in the sample. If you were to compare the **green column (3)** to the actual population distribution of Ghana, you would see that women in each region are contributing to the total sample with the same

weight that they contribute to the population of the country. The weighted number of women in the survey now accurately represents the proportion of women who live in Ashanti and the proportion of women who live in North East.

With sampling and weighting, it is possible to interview enough women to provide reliable statistics at national and regional levels. In general, only the weighted numbers are shown in each of the GDHS tables, so don't be surprised if these numbers seem low: they may actually represent a larger number of women interviewed.

SUSTAINABLE DEVELOPMENT GOAL INDICATORS

Sustainable Development Goal Indicators, Ghana DHS 2022

Indicator	Residence		Total	DHS table number
	Urban	Rural		
1. No poverty				
1.4.1 Proportion of population living in households with access to basic services				
a) Access to basic drinking water services	94.9	71.6	83.8	16.2
b) Access to basic sanitation services	33.5	14.2	24.3	16.7
c) Access to basic hygiene services	52.8	33.3	43.5	16.11
d) Access to electricity[1]	94.6	68.1	82.0	2.3
e) Access to clean fuels and technologies[2]	37.8	7.9	23.6	2.4
	Sex			
2. Zero hunger	Male	Female	Total	
2.2.1 Prevalence of stunting among children under 5 years of age	19.4	15.3	17.4	11.1
2.2.2 Prevalence of malnutrition among children under 5 years of age	8.7	7.1	7.9	11.1
a) Prevalence of wasting among children under 5 years of age	6.7	5.2	6.0	11.1
b) Prevalence of overweight among children under 5 years of age	2.0	1.9	2.0	11.1
2.2.3 Prevalence of anaemia in women age 15 to 49 years, by pregnancy status				
a) Prevalence of anaemia in non-pregnant women age 15 to 49 years	na	40.4	na	11.17.1
b) Prevalence of anaemia in pregnant women age 15 to 49 years	na	51.4	na	11.17.1
3. Good health and well-being				
3.1.2 Proportion of births attended by skilled health personnel	na	na	87.6	9.9
3.2.1 Under-5 mortality rate[3]	43.0	36.0	40.0	8.1 and 8.2
3.2.2 Neonatal mortality rate[3]	20.0	14.0	17.0	8.1 and 8.2
3.7.1 Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	na	49.5	na	7.15.2
3.7.2 Adolescent birth rates per 1,000 women	na	na	na	
a) Girls aged 10–14 years[4]	na	2.0	na	5.1
b) Women aged 15–19 years[5]	na	63.0	na	5.1
3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older[6]	5.3	1.0	3.2[a]	3.12
3.b.1 Proportion of the target population covered by all vaccines included in their national programme				
a) Coverage of DPT containing vaccine (3rd dose)[7]	89.8	88.2	89.0	10.4
b) Coverage of measles containing vaccine (2nd dose)[8]	74.6	70.4	72.5	10.4
c) Coverage of pneumococcal conjugate vaccine (last dose in schedule)[9]	90.0	86.4	88.2	10.4
4. Quality education				
4.2.1 Participation rate in organized learning (one year before the official primary entry age)	89.0	87.8	88.4	2.13
5. Gender equality				
5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months[10,11]				
a) Physical violence	na	9.8	na	17.13
b) Sexual violence	na	6.1	na	17.13
c) Psychological violence	na	25.5	na	17.13
5.3.1 Proportion of women aged 20–24 years who were married or in a union before age 15 and before age 18	na	na	na	
a) before age 15	na	3.3	na	4.4
b) before age 18	2.4	16.1	na	4.4
5.6.1 Proportion of women aged 15–49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care[12]	na	51.7	na	15.12
5.b.1 Proportion of individuals who own a mobile telephone[13]	87.5	79.6	83.6[a]	15.6.1 and 15.6.2
	Residence			
6. Clean water and sanitation	Urban	Rural	Total	
6.1.1 Proportion of population using safely managed drinking water services				
a) Proportion with basic drinking water services	94.9	71.6	83.8	16.2
b) Proportion with water available when needed	80.2	81.7	80.9	16.4
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) hand-washing facility with soap and water				
a) Proportion using basic sanitation service	33.5	14.2	24.3	16.7
b) Proportion in which excreta are safely disposed of in situ or treated off site	73.2	42.2	58.4	16.9
c) Proportion using a hand-washing facility with soap and water	52.8	33.3	43.5	16.11
d) Proportion using open defecation	11.7	38.8	24.6	16.6

Continued...

Sustainable Development Goal Indicators—*Continued*

7. Partnerships for the goals	Sex		Total	DHS table number
	Male	Female		
7.1.1 Proportion of individuals using the internet[14]	61.6	43.3	54.5a	3.5.1 and 3.5.2

na = not applicable
[1] Persons living in households that report the primary source of lighting is electricity
[2] Persons living in households that report no cooking, no space heating, or no lighting are not excluded from the numerator.
[3] Expressed in term of deaths per 1,000 live births in the 5 years before the survey
[4] Equivalent to the age-specific fertility rate for girls age 10–14 for the 3-year period preceding the survey, expressed in terms of births per 1,000 girls age 10–14
[5] Equivalent to the age-specific fertility rate for women age 15–19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15–19
[6] Data are not age-standardized and are available for women and men age 15–49 only.
[7] The percentage of children age 12–23 months who received three doses of DPT-HepB-Hib vaccine
[8] The percentage of children age 24–35 months who received two doses of measles-rubella vaccine
[9] The percentage of children age 12–23 months who received three doses of pneumococcal vaccine
[10] Data are available for women age 15–49 who have ever been in union only.
[11] In the DHS, psychological violence is termed emotional violence.
[12] Data are available for currently married women only.
[13] Data are available for women and men age 15–49 only.
[14] Data are available for women and men age 15–49 who have used the internet in the last 12 months.
[a] The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females.

GHANA


BURKINA FASO
Upper East
Upper West
North East
Northern
BENIN
Savannah
TOGO
COTE
D'IVOIRE
Oti
Bono East
Bono
Ahafo
Ashanti
Eastern
Volta
Western
North
Central
Greater Accra
Western
N
0
75
150
300
Kilometers

INTRODUCTION AND SURVEY METHODOLOGY 1

The 2022 Ghana Demographic and Health Survey (GDHS) was implemented by the Ghana Statistical Service (GSS). Data collection took place from 17 October 2022 to 14 January 2023. ICF provided technical assistance through The Demographic and Health Surveys (DHS) Program, which is funded by the United States Agency for International Development (USAID) and the U.S. President's Malaria Initiative (PMI) and offers financial support and technical assistance for population and health surveys in countries worldwide. Other agencies and organisations that facilitated the successful implementation of the survey through technical or financial support were the Government of Ghana; the United Nations Population Fund (UNFPA); the United Nations Children's Fund (UNICEF); the World Bank; the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund); the Korean International Cooperation Agency (KOICA); the World Health Organization (WHO); and the Foreign, Commonwealth and Development Office (UK/FCDO).

1.1 SURVEY OBJECTIVES

The primary objective of the 2022 GDHS is to provide up-to-date estimates of basic demographic and health indicators. Specifically, the GDHS collected information on:

- Fertility levels and preferences, contraceptive use, antenatal and delivery care, maternal and child health, childhood mortality, childhood immunisation, breastfeeding and young child feeding practices, women's dietary diversity, violence against women, gender, nutritional status of adults and children, awareness regarding HIV/AIDS and other sexually transmitted infections, tobacco use, and other indicators relevant for the Sustainable Development Goals
- Haemoglobin levels of women and children
- Prevalence of malaria parasitaemia (rapid diagnostic testing and thick slides for malaria parasitaemia in the field and microscopy in the lab) among children age 6–59 months
- Use of treated mosquito nets
- Use of antimalarial drugs for treatment of fever among children under age 5

The information collected through the 2022 GDHS is intended to assist policymakers and programme managers in designing and evaluating programmes and strategies for improving the health of the country's population.

1.2 SAMPLE DESIGN

To achieve the objectives of the 2022 GDHS, a stratified representative sample of 18,450 households was selected in 618 clusters, which resulted in 15,014 interviewed women age 15–49 and 7,044 interviewed men age 15–59 (in one of every two households selected).

The sampling frame used for the 2022 GDHS is the updated frame prepared by the GSS based on the 2021 Population and Housing Census.[1] The sampling procedure used in the 2022 GDHS was stratified two-stage cluster sampling, designed to yield representative results at the national level, for urban and rural areas, and for each of the country's 16 regions for most DHS indicators. In the first stage, 618 target clusters were selected from the sampling frame using a probability proportional to size strategy for urban and rural

[1] The updated sampling frame was prepared by the GSS.

areas in each region. Then the number of targeted clusters were selected with equal probability systematic random sampling of the clusters selected in the first phase for urban and rural areas. In the second stage, after selection of the clusters, a household listing and map updating operation was carried out in all of the selected clusters to develop a list of households for each cluster. This list served as a sampling frame for selection of the household sample. The GSS organised a 5-day training course on listing procedures for listers and mappers with support from ICF. The listers and mappers were organised into 25 teams consisting of one lister and one mapper per team. The teams spent 2 months completing the listing operation. In addition to listing the households, the listers collected the geographical coordinates of each household using GPS dongles provided by ICF and in accordance with the instructions in the DHS listing manual. The household listing was carried out using tablet computers, with software provided by The DHS Program. A fixed number of 30 households in each cluster were randomly selected from the list for interviews.

Prior to training, the listing manual, adequate copies of all maps, listing forms, tablet computers, and GPS dongles were made available for use by the field staff. Each team worked in an average of 24–25 clusters.

The GSS provided all of the logistical arrangements for the listing staff, including planning for deployment to the various regions, distributing field supplies, and arranging for the distribution of allowances and salaries during training and fieldwork. To ensure a smooth field operation and an accurate and complete listing, four GSS personnel (three master trainers and a project coordinator) and 16 regional statisticians visited the team regularly to monitor data quality. The survey director and two deputies visited some of the teams. Data processing supervisors assigned to support the household listing on the tablets served as team backstops. When the field teams needed support from the local government, they contacted the regional officers.

Upon completion of the listing operation, the GSS verified that the results were complete and accurate and entered households into the household selection spreadsheet provided by the ICF sampling specialist for automatic selection of households for the main fieldwork. The spreadsheet, together with census maps, the listing database, and maps from field staff, facilitated the identification of households to be interviewed.

1.3 QUESTIONNAIRES

Four questionnaires were used in the 2022 GDHS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, and the Biomarker Questionnaire. The questionnaires, based on The DHS Program's model questionnaires, were adapted to reflect the population and health issues relevant to Ghana. In addition, a self-administered Fieldworker Questionnaire collected information about the survey's fieldworkers.

The GSS organised a questionnaire design workshop with support from ICF and obtained input from government and development partners expected to use the resulting data. The DHS Program optional modules on domestic violence, malaria, and social and behaviour change communication were incorporated into the Woman's Questionnaire. ICF provided technical assistance in adapting the modules to the questionnaires.

1.3.1 Household Questionnaire

The Household Questionnaire was used to collect indicators for the household and to list all members of the household. The respondent for this questionnaire was (1) the head of the household or (2) any adult living in the household. The questionnaire collected basic information on each household member (sex, age, marital status, education, orphanhood), information on household characteristics (source of drinking water, type of toilet facility, number of rooms for sleeping, type of cooking stove, household possessions, availability of electricity, means of transportation), and information on ownership and use of mosquito nets. Salt used for cooking by the household was tested for the presence of iodine.

1.3.2 Woman's Questionnaire

The Woman's Questionnaire was used to collect information on adult women (for example, contraceptive use, antenatal care, and pregnancy history[2]) and on children (for example, child health, vaccination coverage, breastfeeding, and infant and young child feeding practices). All women age 15–49 identified as household residents or as visitors who stayed in the household the night before the survey were interviewed. Because of the sensitivity of some questions, only female interviewers administered the Woman's Questionnaire. Women were asked questions on the following topics:

- Background characteristics (including age, education, and access to media)
- Reproduction (including pregnancy history and number of children)
- Family planning (including knowledge and use of contraception and sources of contraceptive methods)
- Maternal and newborn health care, child immunisation, and child health and nutrition
- Marriage and sexual activity
- Fertility preferences
- Husbands' background characteristics and women's work
- HIV/AIDS and other sexually transmitted infections
- Other health issues (including alcohol consumption and smoking)
- Domestic violence

1.3.3 Man's Questionnaire

The Man's Questionnaire collected much of the same information as the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health.

1.3.4 Biomarker Questionnaire

The Biomarker Questionnaire was used to record anthropometric measurements and the results of anaemia and malaria testing. In 50% of households, all children under age 5, all eligible women age 15–49, and all eligible men age 15–59 were weighed and measured to assess their nutritional status. A blood test was performed with eligible children age 6–59 months and eligible women age 15–49 to estimate the prevalence of anaemia. Children age 6–59 months were eligible for malaria testing with rapid diagnostic tests (RDTs) and slide preparation for laboratory microscopy. Informed consent and test outcomes were recorded in the questionnaire.

1.3.5 Fieldworker Questionnaire

The Fieldworker Questionnaire was used to collect background information on the persons collecting data in the field, including team supervisors, interviewers, and biomarker technicians.

1.3.6 Finalisation of the Questionnaires

ICF's data processing specialist checked all questionnaires for internal coherence. The English versions of the questionnaires were translated into four local languages: Twi, Ga, Dagbeni, and Ewe. Back translations into English were done by people other than the initial translators to verify the accuracy of the translations.

[2] The pregnancy history provided information for calculation of infant and child mortality. It was also used to calculate fertility rates.

All problems arising in the translations were resolved before the scheduled training of trainers and the pretest.

After finalisation of the questionnaires, ICF staff in collaboration with GSS staff developed the interviewer and supervisor/editor manuals and fieldwork control forms to be used to track the progress of the survey. The manuals provided instructions to the interviewers and supervisors/editors on how to do their jobs, explained the purpose behind various questions and sections of the questionnaires, and assisted the trainers in conducting the pretest and main survey training.

The GSS submitted the survey protocol to the Ethical Review Committee (ERC) of the Ghana Health Service to ensure that the survey procedures were in accordance with Ghana's ethical research standards. The ERC granted ethical clearance for the survey.

ICF submitted the GDHS survey protocol to the ICF Institutional Review Board (IRB) to obtain ethical clearance and ensure that the survey procedures were in accordance with U.S. and international ethical research standards. The IRB provided ethical clearance for the survey.

Tablet computers were used for data collection by the fieldworkers. The tablet computers were equipped with Bluetooth® technology to enable remote electronic transfer of files, such as assignments from the team supervisor to the interviewers, individual questionnaires to survey team members, and completed questionnaires from interviewers to team supervisors. The computer-assisted personal interviewing (CAPI) data collection system used in the GDHS was developed by The DHS Program with the mobile version of CSPro. The CSPro software was developed jointly by the U.S. Census Bureau, Serpro S.A., and The DHS Program.

1.4 Anthropometry, Anaemia Testing, and Malaria Testing

The 2022 GDHS biomarkers included anthropometric measurements, anaemia testing, and malaria testing. Biomarker data were collected in half of the households selected for the men's survey.

Anthropometry: Height and weight measurements were carried out for eligible women age 15–49 and children age 0–59 months. Similarly, anaemia testing was carried out for eligible women age 15–49, men age 15–59, and children age 6–59 months. Weight measurements were taken using SECA 874U scales with a digital display. Height was measured using a ShorrBoard® measuring board. Children younger than age 24 months were measured lying down (recumbent length), while older children and adults were measured standing (height).

To assess the precision of measurements, one child per cluster was randomly selected to be measured a second time. The DHS Program defines a difference of less than 1 centimetre between the two height measurements as an acceptable level of precision. Children with a *z* score of less than −3 or more than 3 for height-for-age, weight-for-height, or weight-for-age were flagged and measured a second time.

The remeasurement of flagged cases was performed to ensure accurate reporting of height. Following remeasurement, parents of children identified as having severe acute malnutrition (a weight-for-height *z* score of less than −3) were provided a referral form and instructed to take the child to a local health facility.

Anaemia: Blood specimens for anaemia testing were collected from women age 15–49 who consented to be tested. Blood specimens were also collected from children age 6–59 months whose parents or guardians had given consent to the testing. Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick in the case of children age 6–11 months) and collected in a microcuvette. Haemoglobin analysis was carried out on-site using a battery-operated portable HemoCue® 201+ device. Results were provided verbally and in writing. Parents or guardians of children with a haemoglobin level below 8 g/dl

were provided with a referral and instructed to take the child to a health facility for follow-up care. Likewise, adults were referred for follow-up care if their haemoglobin level was below 8 g/dl.

Malaria: Children age 6–59 months were tested for malaria using Abbott Bioline, a rapid diagnostic test. Testing was performed using 5 µl of blood from the same finger or heel prick used for anaemia testing. Results were available in 15 minutes and given to the child's parent/responsible adult. Children who tested positive for malaria by RDT were referred to a health facility or offered a full course of treatment if they fulfilled the following conditions: they were not severely anaemic, they had no other symptom of severe malaria, they had not been on any treatment for malaria in the last 2 weeks, and their parent/responsible adult accepted the medication. All treatment was administered according to Ghana's national malaria treatment guidelines. A blood sample was also collected on a microscope slide and used to prepare thick blood smears in the field. All of the blood smears were sent to the National Public Health and Reference Laboratory (NPHRL) in Accra. Using the Malaria Data Entry and Testing System (MADETS), 10% of the smears were randomly selected and sent to the Noguchi Memorial Institute for Medical Research (NMIMR) for external quality control.

1.5 Training of Trainers and Pretest

Twenty-seven individuals (17 supervisors/interviewers and 10 biomarker technicians) took part in the pretest training for the 2022 GDHS over a 4-week period from 27 June to 21 July 2022. The first 2 weeks featured classroom training focused on questionnaire content. Participants initially practised using paper questionnaires, and then they were trained on the CAPI system from 11–19 July 2022. Staff from The DHS Program and consultants co-facilitated the training with GSS personnel. The training consisted of classroom lectures and discussions, mock interviews, and interview practice in English and in local languages.

Tests and quizzes were given throughout the training to monitor progress and identify gaps in understanding. Four guest lecturers gave presentations on mosquito net programmes and malaria treatment, family planning methods, immunisation, and HIV/AIDS. Biomarker technician training was held 4–19 July 2022. Ten participants (six female and four male) and two biomarker coordinators (both male) were trained on the paper Biomarker Questionnaire and on biomarker collection procedures. The training utilised a variety of learning tools such as formal lectures on the technical aspects of biomarker collection, instruction on how to fill out the questionnaires, informal discussions using case scenarios, videos to demonstrate the process of biomarker collection, demonstrations using adults, and hands-on practice with children and adults. In addition to the training, the biomarker technicians participated in anthropometry standardisation exercises on 13 July (with adults) and 14 July (with children).

On 16 July 2022, children and mothers came to the venue and biomarker technicians practised the entire biomarker collection procedure from start to finish. After the practice there was group discussion, and feedback was provided to the technicians. In addition, interviewers and biomarker technicians conducted field practice to solidify the skills learned during the pretest training and to provide a simulated fieldwork experience to test the survey materials. Four teams composed of one supervisor, two female interviewers, one male interviewer, and two biomarker technicians practised data collection in three local communities in both urban and rural areas. Each team was assigned a cluster, returning to that same cluster each day. Teams were expected to complete interviews with 16 households, half of which were selected for the Man's Questionnaire and biomarkers. Feedback was provided to individuals and teams during this exercise and during the daily debriefs.

1.6 Training of Field Staff

The 2022 GDHS training was sequential, beginning with questionnaire training followed by CAPI training. Questionnaire training was initiated on 11 September 2022 and completed on 24 September. A total of 168 candidates participated in the main survey training: 42 team supervisors (31 male and 11 female), 84

female interviewers, and 42 male interviewers. A larger number of participants than needed was recruited and trained, enabling the GSS to select the best candidates at the end of the training and keep the others as backup fieldworkers. All candidates participated in the questionnaire training. Twenty-seven GSS trainers/coordinators and a DHS staff person conducted the training. The participants were recruited from regions across the country and were required to speak at least one of the five languages used in the 2022 GDHS interviews.

The training was conducted in English and focused on the four main questionnaires (Household Questionnaire, Woman's Questionnaire, Man's Questionnaire, and Biomarker Questionnaire). The training included practice in local languages other than English along with discussions of the different sections and modules of the questionnaires, mock interviews, role plays, group work, presentations, and in-class practice sessions.

The training also included training on selection of different subsamples and on the eligibility criteria for different survey components and modules. A design diagram and several examples were used to demonstrate how households are selected and how eligible respondents are identified.

In addition, examples were provided on how to record correct information during data collection. Mock interviews were organised at the end of the training. Each trainee completed three Household Questionnaires and three individual questionnaires. Data collected during the practice exercises were used in later training sessions to test the CAPI programmes and to practise collecting data on the tablets. Guest lecturers from the Ghana Health Service (GHS), the Ghana AIDS Commission, the National Malaria Control Programme and U.S. President's Malaria Initiative (PMI) visited the training sessions and conducted presentations.

1.6.1 Computer-assisted Personal Interviewing (CAPI) Training

From 20 to 24 September 2022, DHS staff conducted a training of trainers for 12 GSS and GHS coordinator/trainers (eight male and four female). Nine of the trainers had attended the pretest training in July 2022. The training was aimed at providing trainers with the competencies necessary to assist the DHS staff in the main CAPI training and equipping them with the skills to monitor and resolve issues during the main fieldwork. Topics included understanding the sampling design and subsamples, the 2022 GDHS directory structure, the key application files, an overview of interviewers' and supervisors' menus and applications, and the utilities required for data preparation and transfers. For practice purposes, the 12 trainers were grouped in two field teams (four persons per team). Each team practised in a cluster of six households. At the end of the training, trainers were divided into three groups, with each group responsible for training one of the three classrooms. DHS and GSS staff prepared a schedule for the three groups of trainers.

DHS staff and the GSS trainers conducted the CAPI training from 26 September to 7 October. A total of 168 participants were organised into 42 teams of four (one supervisor, two female interviewers, and one male interviewer) divided into three classrooms. Training focused on a series of presentations on the CAPI system, tablet basics, interviewer menus, supervisor menus, household assignments, data transfers, the Biomarker Questionnaire, selection of children for remeasurement, and troubleshooting error and warning messages. During in-classroom practice sessions, hypothetical clusters were created. Each cluster had six households and was assigned to a team. Under the supervision of DHS staff, the trainers led these sessions and made several presentations on topics such as data collection system features, different scenarios and potential technical issues that might encountered during fieldwork, and ways of resolving these issues. By the end of the training, all teams were able to successfully close many of their clusters, and supervisors had learned how to use an internet connection to access SyncCloud for the purposes of sending data to the central office and receiving updates to the CAPI system.

1.6.2 Anthropometry Training

The 2022 GDHS included the following biomarkers: anthropometry, anaemia testing, malaria rapid diagnostic testing, and thick smear preparation for malaria microscopy. During the pretest, 10 biomarker technicians were recruited to be trainers for this component. In this main training, 77 biomarker trainees (40 male and 37 female) joined the biomarker training. Biomarker training was led by a DHS staff person and supported by two consultants. The 10 biomarker technicians who successfully participated in the pretest were the biomarker trainers in breakout sessions during classroom practice and during the 3-day field practice when they monitored biomarker collection. The training started on 19 September 2022 and ended on 14 October with the conclusion of field practice, debriefing, and distribution of biomarker supplies to the various teams.

Following a general introduction to the survey, participants were given an overview of the biomarkers to be collected in the 2022 GDHS. This was followed by an exhaustive 2 days of training on the Biomarker Questionnaire and related documents, including the informational pamphlet, severe anaemia and malaria referral forms, and wasting referral form.

The training on the Biomarker Questionnaire and the collection of blood to test for malaria and anaemia and prepare thick blood smears included:

- Lectures on the technical components
- Videos illustrating the protocol and hands-on practice sessions focusing on respondent eligibility criteria and obtaining informed consent from parents or responsible adults to conduct anaemia and malaria testing with eligible children
- Procedures for recording data in the Biomarker Questionnaire and reporting forms
- Proper blood collection procedures
- Details on anaemia and malaria testing, including appropriate reporting of test results
- Procedures for filling out field forms

In each session ICF staff and other trainers used the integrated training approach, which included presentations and discussions of technical content from the biomarker manual and hands-on practical demonstrations followed by hands-on practice by participants. Over 200 children were brought to the training venue by their parents or guardians during class training. The in-class training included practice on testing children who were brought to the training venue. In addition to in-class training, participants visited communities and clinics where they practised the biomarker test protocol with eligible children whose parents or guardians consented to anaemia and malaria testing.

Training on anthropometry included measurement of the weight and height of children using SECA 874U scales with a digital display and ShorrBoard® measuring boards. Biomarker technicians received anthropometry training during 6 days of classroom practice, 2 days of community and clinic visits, and 3 days of field practice. Before starting field practice, eight anthropometry standardisation exercises and one restandardisation exercise were conducted. All 77 biomarker technicians were standardised as measurers. For each standardisation exercise, 10 stations were laid out. The stations were assigned numbers from one to 10, and children's numbers corresponded to the number of the station to which they were assigned. Depending on their age, children were measured standing or lying down. The height/length of each child was measured by DHS staff twice. Thereafter, each pair (measurer and assistant) measured every child once and recorded the measured values in the standardisation form designed for that purpose. This first round of measurements was collected by the DHS trainers, after which a second form was given and the

measurements were repeated for every child. Results of the first and second rounds of measurements by both the trainers and trainees were entered into an Excel sheet and evaluated for accuracy and precision.

Accuracy was evaluated by comparing the average value of each trainee's measurement with that of the DHS staff. Precision was determined by comparing the difference between each participant's first and second measurements of the same child. A technical error of measurement was used to determine whether a trainee passed the standardisation exercise. All 77 technicians who took part in the standardisation exercise passed during their first or second attempt.

On 13 October 2022, in a joint session of interviewers and biomarker technicians, there was a discussion of the measures The DHS Program has taken to improve data quality, including remeasurement procedures in anthropometry and use of checklists to monitor data collection for anthropometry, anaemia, and malaria testing.

1.6.3 Fieldwork Practice

Fieldwork practice was implemented from 12–14 October 2022 after the classroom training and on-site practice. The fieldwork exercise allowed the participants to practise the functionality of the CAPI system and the biomarkers. Each team was assigned a cluster of 20 households. These clusters were selected from actual 2021 Ghana Housing and Population Census (GHPC) enumeration areas (EAs). Fieldwork practice is helpful as it allows teams to proceed through the entire process, from household assignment to closing a cluster successfully and working through the most common error messages that can prevent closing a cluster. Together, these are the most important aspects of fieldwork practice, and they were accomplished by all of the teams. Data from the 42 clusters were sent to the central office via SyncCloud.

1.7 Fieldwork

The main fieldwork for the 2022 GDHS took place between 17 October 2022 and 14 January 2023. There were 37 teams, each including a team supervisor, two female interviewers, one male interviewer, and two biomarker technicians. The GSS coordinators created a WhatsApp group for all fieldworkers to post questions and issues that arose during data collection. For quality assurance, field monitoring was conducted throughout the period of data collection. DHS staff participated in fieldwork monitoring in the Accra, Central, Western, and Northern regions during the first 2 weeks. They continued to monitor field data collection via SyncCloud toward the end of fieldwork. Data were transmitted by every team to the central office daily, and field check tables were always available for review by DHS staff in SyncCloud. DHS staff reviewed the field check tables periodically, communicated their observations with the GSS coordinators to evaluate data quality and the performance of each team, and explained how to improve the quality of fieldwork.

1.8 Data Processing

1.8.1 Central Office Training and Secondary Editing

DHS staff installed all central office programmes, data structure checks, secondary editing, and field check tables from 17–20 October 2022. Central office training was implemented using the practice data to test the central office system and field check tables. Seven GSS staff members (four male and three female) were trained on the functionality of the central office menu, including accepting clusters from the field, data editing procedures, and producing reports to monitor fieldwork.

1.8.2 Data Cleaning and Finalisation

From 27 February to 17 March, DHS staff visited the Ghana Statistical Service office in Accra to work with the GSS central office staff on finishing the secondary editing and to clean and finalise all data received from the 618 clusters.

1.8.3 Malaria Microscopy

The National Public Health and Reference Laboratory received blood slides from the field and started malaria microscopy reading at the beginning of the third week of fieldwork. Ten percent of the blood slides were randomly selected and subsequently sent to Noguchi Laboratory for the external quality control checks. Microscopy at NPHRL was completed on 6 February 2023, and external quality control procedures at Noguchi Laboratory were completed on 20 February.

1.9 Response Rates

Table 1.1 shows the response rates for the 2022 GDHS. A total of 18,540 households were selected for the GDHS sample, of which 18,065 were found to be occupied. Of the occupied households, 17,933 were successfully interviewed, yielding a response rate of 99%. In the interviewed households, 15,317 women age 15–49 were identified as eligible for individual interviews. Interviews were completed with 15,014 women, yielding a response rate of 98%. In the subsample of households selected for the male survey, 7,263 men age 15–59 were identified as eligible for individual interviews and 7,044 were successfully interviewed.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Ghana DHS 2022

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	9,120	9,420	18,540
Households occupied	8,869	9,196	18,065
Households interviewed	8,795	9,138	17,933
Household response rate[1]	99.2	99.4	99.3
Interviews with women age 15–49			
Number of eligible women	7,502	7,815	15,317
Number of eligible women interviewed	7,362	7,652	15,014
Eligible women response rate[2]	98.1	97.9	98.0
Household interviews in subsample			
Households selected	4,560	4,709	9,269
Households occupied	4,442	4,595	9,037
Households interviewed	4,400	4,568	8,968
Household response rate in subsample[1]	99.1	99.4	99.2
Interviews with men age 15–59			
Number of eligible men	3,369	3,894	7,263
Number of eligible men interviewed	3,251	3,793	7,044
Eligible men response rate[2]	96.5	97.4	97.0

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION 2

Key Findings

- ***Electricity:*** 85% of households have electricity.
- ***Clean fuels and technologies:*** 29% of households use clean fuels and technologies for cooking.
- ***Household composition:*** 40% of the household population is under age 15.
- ***Birth registration:*** 75% of children under age 5 had their births registered.
- ***Early childhood education:*** 67% of children age 5 (1 year younger than the official primary school entry age) attend an early childhood education programme, and 21% attend primary school.

Information on the socioeconomic characteristics of the household population in the 2022 GDHS provides a context for interpreting demographic and health indicators and furnishes an approximate indication of the representativeness of the survey. The information also sheds light on the living conditions of the population.

This chapter presents information on housing characteristics and household possessions, use of clean fuels and technologies (related to cooking, heating, and lighting), wealth, household population and composition, children's living arrangements and orphanhood, birth registration, educational attainment, and school attendance.

2.1 HOUSING CHARACTERISTICS

The survey collected data on access to electricity, flooring materials, number of rooms used for sleeping, and frequency of smoking in the home. Overall, 85% of households in Ghana have electricity. The most common flooring materials are cement (61% of households) and ceramic tiles (17% of households). More than half of households have only one room for sleeping (55%); 27% have two rooms and 19% have three or more rooms. In 6% of households, someone smokes inside the house on a daily basis, and in 5% of households someone smokes inside on a weekly basis (**Table 2.1**).

2.1.1 Use of Clean Fuels and Technologies

Primary reliance on clean fuels and technologies

The percentage of the population using clean fuels and technologies for cooking, heating, and lighting, where each component is defined as follows:

Clean cooking fuels and technologies

Includes stoves/cookers using electricity, liquefied petroleum gas (LPG)/natural gas/biogas, solar, and alcohol/ethanol

Clean heating fuels and technologies

Includes central heating, electricity, LPG/natural gas/biogas, solar air heaters, and alcohol/ethanol

Clean lighting fuels and technologies

Includes electricity, solar lanterns, battery-powered or rechargeable flashlights/torches/lanterns, and biogas lamps

Sample: Households and de jure population

2.1.2 Cooking

Cooking is one of the major activities of most households. It contributes to energy consumption and, depending on the fuel type and cooking technology used, places the household at risk of exposure to smoke and injury due to accidental fire. In Ghana, 31% of households cook inside the home, 21% in a separate building, and 43% outdoors (in the open). Twenty-nine percent of Ghanaian households use clean fuels and technologies for cooking, primarily LPG/natural gas stoves (28%). Among households that rely on other fuels and technologies, the most common technologies are three-stone stoves/open fires (35%) and traditional solid fuel stoves (26%). The most common traditional solid fuel stoves used are stoves without chimneys (22%) (**Table 2.2**).

2.1.3 Heating and Lighting

In Ghana, space heating is uncommon among households; only 3% of households use one or more forms of heating technologies. Charcoal and wood are the most common fuels (2%) used for space heating (**Table 2.3**).

Ninety-nine percent of households use clean fuels and technologies for lighting; electricity is the most common clean fuel/technology used for lighting (84%).

2.1.4 Primary Reliance on Clean Fuels and Technologies

Twenty-three percent of the household population primarily relies on clean fuels and technologies for cooking, while 77% primarily relies on solid fuels. Use of solid fuels is predominant (93%) in the rural household population (**Table 2.4**).

2.2 HOUSEHOLD WEALTH

2.2.1 Household Durable Goods

Possession of household durable goods is a useful indicator of household socioeconomic status. Ninety-four percent of households own a mobile phone, 53% own a radio, and 66% own a television. Forty-two percent of households own a refrigerator, with the percentage being more than twice as high in urban households as in rural households (56% versus 22%). Bicycles are the most commonly owned means of transport among Ghanaian households (20%), followed by motorcycles/scooters (18%). One in 10 households (10%) own a car or truck. One-third of households own agricultural land, with rural households

more likely to own land (57%) than urban households (21%). Thirty-five percent of households possess farm animals (55% in rural areas and 20% in urban areas) (**Table 2.5**).

2.2.2 Wealth Index

Wealth index

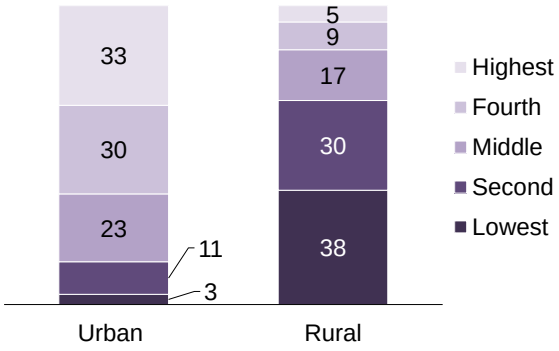
Households are given scores based on the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, and housing characteristics such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. National wealth quintiles are compiled by assigning the household score to each usual (de jure) household member, ranking each person in the household population by her or his score, and then dividing the distribution into five equal categories, each comprising 20% of the population.

Sample: Households

Table 2.6 shows the distribution of the de jure household population by wealth quintile, according to place of residence and region. Eighty-six percent of urban residents are distributed among the top three quintiles, as compared with just 32% of rural residents (**Figure 2.1**). At the regional level, 49% of the population in Greater Accra falls in the highest wealth quintile, as compared with only 1% of the population in North East, 2% in Savannah, and 3% in Oti. More than half of the population in the North East, Upper East, Savannah, and Upper West regions falls in the lowest wealth quintile (64%, 57%, 55%, and 52%, respectively) (**Table 2.6**).

Figure 2.1 **Household wealth by residence**

Percent distribution of de jure population by wealth quintiles



2.3 Household Population and Composition

Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

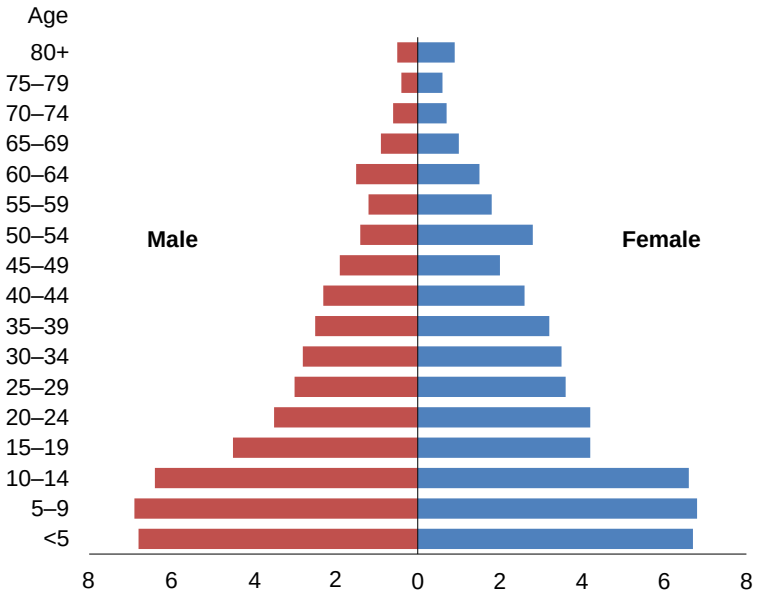
How data are calculated

All tables are based on the de facto population unless otherwise specified.

A total of 63,247 individuals stayed overnight in the 17,933 households interviewed in the 2022 GDHS. Forty-eight percent (29,948) of these individuals were male and 52% (33,299) were female (**Table 2.7**), yielding a sex ratio of 90 males per 100 females. The population pyramid in **Figure 2.2** illustrates the distribution of the de facto population by 5-year age groups and sex. Children under age 15 account for 40% of the population, while individuals age 65 and older make up only 6%. Most households in Ghana are male-headed (63%). The average household consists of 3.5 usual members; rural households are on average larger than urban households (4.0 and 3.2 persons per household, respectively) (**Table 2.8**).

Figure 2.2 **Population pyramid**

Percent distribution of the household population



2.4 CHILDREN'S LIVING ARRANGEMENTS AND PARENTAL SURVIVAL

Orphan

A child with one or both parents who are dead.

Sample: Children under age 18

The definition of orphanhood can vary, but in the 2022 GDHS it refers to the population of children age 0–17 with one or both parents dead. **Table 2.9** shows that 51% of children under age 18 live with both of their biological parents, 16% do not live with a biological parent, and 8% are orphans.

2.5 BIRTH REGISTRATION

Registered birth

Child has a birth certificate or child does not have a birth certificate, but the birth is registered with the civil authorities.

Sample: De jure children under age 5

Table 2.10 presents information on the percentage of children under age 5 who have a birth certificate and the percentage who do not have a birth certificate but whose birth has been registered with the civil authorities. Overall, 75% of children under age 5 had their births registered with the civil authorities (61% with a birth certificate and 13% without a birth certificate).

2.6 EDUCATION

2.6.1 Educational Attainment

Median educational attainment

Half of the population has completed less than the median number of years of schooling, and half of the population has completed more than the median number of years of schooling.

Sample: De facto household population age 6 and older

Table 2.11.1 presents information on educational attainment among the female de facto household population age 6 and over. Overall, 24% of female household members age 6 years and over have no education, 26% have attended some primary school, 4% have completed primary school but advanced no further, 33% have attended some secondary school, 8% have completed secondary school but advanced no further, and 6% have attained some education after secondary school. Female household members in the highest wealth quintile (21%) are much more likely than those in the lowest quintile (less than 1%) to have attained more than a secondary education.

Seventeen percent of male household members age 6 and over have no education, 26% have attended some primary school, 4% have completed primary school but advanced no further, 33% have attended some secondary school, 11% have completed secondary school but advanced no further, and 10% have attained some education after secondary school (**Table 2.11.2**). Male household members have completed a median of 6.3 years of schooling, 1.2 years more than female household members (5.1 years).

2.6.2 Primary and Secondary School Attendance

Net attendance ratio (NAR)

Percentage of the school-age population that attends primary or secondary school.

Sample: Children age 7–12 for primary school NAR and children age 13–18 for secondary school NAR

Gross attendance ratio (GAR)

The total number of children attending primary school divided by the official primary school-age population and the total number of children attending secondary school divided by the official secondary school-age population.

Sample: Children age 7–12 for primary school GAR and children age 13–18 for secondary school GAR

School attendance ratios are shown in **Table 2.12**. The net attendance ratio (NAR) in primary school for both girls and boys is 82%. The NAR drops in secondary school: 55% of girls and 56% of boys attend secondary school. The gross attendance ratio (GAR) for primary school is 108 for girls and 109 for boys; the GAR for secondary school is 75 for girls and 71 for boys (**Table 2.12**).

Gender parity index (GPI)

The ratio of female to male students attending primary school and the ratio of female to male students attending secondary school. The index reflects the magnitude of the gender gap.

Sample: Primary school students and secondary school students

The gender parity index (GPI) for the NAR at the primary school level is 1.00, indicating that in primary school there are the same number of female and male students. At the secondary school level, the GPI for

the NAR is 0.98, indicating that there are slightly more males than females attending secondary school (**Table 2.12**).

2.6.3 Participation Rate in Organised Learning among Children Age 5

Participation rate in organised learning: adjusted net attendance ratio (NAR)

The percentage of children 1 year younger than the official primary school entry age (at the beginning of the school year) who are attending an early childhood education programme or primary school. The ratio is termed adjusted since it includes children in primary school.

Sample: Children age 5 at the beginning of the school year

Early childhood education prepares children for primary school and provides for their physical, social, emotional, and intellectual needs in order to build a broad and solid foundation for their well-being. Sixty-seven percent of children age 5 (1 year younger than the official primary school entry age) are enrolled in an early childhood education programme, and 21% attend primary school (**Table 2.13**). However, 12% do not attend either an early childhood education programme or primary education.

LIST OF TABLES

For more information on household population and housing characteristics, see the following tables:

- **Table 2.1 Household characteristics**
- **Table 2.2 Household characteristics: Cooking**
- **Table 2.3 Household characteristics: Heating and lighting**
- **Table 2.4 Primary reliance on clean fuels and technologies**
- **Table 2.5 Household possessions**
- **Table 2.6 Wealth quintiles**
- **Table 2.7 Household population by age, sex, and residence**
- **Table 2.8 Household composition**
- **Table 2.9 Children's living arrangements and orphanhood**
- **Table 2.10 Birth registration of children under age 5**
- **Table 2.11.1 Educational attainment of the female household population**
- **Table 2.11.2 Educational attainment of the male household population**
- **Table 2.12 School attendance ratios**
- **Table 2.13 Participation rate in organised learning**

Table 2.1 Household characteristics

Percent distribution of households and de jure population by housing characteristics and percent distribution by frequency of smoking in the home, according to residence, Ghana DHS 2022

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Electricity						
Yes	95.0	71.6	85.1	95.2	69.3	82.9
No	5.0	28.4	14.9	4.8	30.7	17.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material						
Earth/sand	4.0	12.9	7.8	4.5	13.3	8.7
Dung	0.0	0.5	0.2	0.0	0.6	0.3
Wood/planks	0.5	0.0	0.3	0.4	0.0	0.2
Palm/bamboo	0.0	0.0	0.0	0.0	0.1	0.0
Parquet or polished wood	0.3	0.1	0.2	0.2	0.1	0.1
Vinyl or asphalt strips	0.0	0.1	0.1	0.0	0.1	0.0
Ceramic tiles	24.9	6.5	17.1	25.4	5.6	16.0
Cement	54.6	69.1	60.8	56.7	71.7	63.8
Woolen carpet/synthetic carpet	8.0	4.1	6.4	6.3	3.3	4.9
Linoleum/rubber carpet	7.7	6.6	7.2	6.5	5.3	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping						
One	57.2	50.8	54.5	42.4	34.5	38.6
Two	27.0	27.1	27.0	32.8	30.9	31.9
Three or more	15.9	22.1	18.5	24.8	34.7	29.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Frequency of smoking in the home						
Daily	4.8	6.6	5.6	5.0	8.3	6.6
Weekly	4.8	4.8	4.8	4.8	5.1	5.0
Monthly	1.2	1.3	1.2	1.6	1.4	1.5
Less than once a month	0.8	1.2	1.0	0.8	1.4	1.1
Never	88.4	86.0	87.4	87.7	83.8	85.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	10,320	7,613	17,933	33,294	30,317	63,611

Table 2.2 Household characteristics: Cooking

Percent distribution of households and de jure population by place for cooking, cooking technology, and cooking fuel, according to residence, Ghana DHS 2022

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Place for cooking						
In the house	39.9	19.8	31.4	39.3	19.1	29.7
Separate room/kitchen	30.4	13.4	23.2	31.2	13.2	22.7
No separate room/kitchen	9.6	6.4	8.2	8.0	5.9	7.0
In a separate building	15.9	28.6	21.3	16.3	28.7	22.2
Outdoors	39.7	48.5	43.4	42.9	51.1	46.8
Other	0.1	0.1	0.1	0.1	0.1	0.1
No food cooked in household	4.4	3.1	3.8	1.5	1.0	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Main cooking technology						
Clean fuels and technologies	**41.7**	**11.2**	**28.7**	**36.4**	**7.1**	**22.4**
Electric stove	1.2	0.6	0.9	1.0	0.4	0.8
Solar cooker	0.0	0.0	0.0	0.0	0.0	0.0
LPG/natural gas stove	40.3	10.5	27.7	35.2	6.6	21.5
Piped natural gas stove	0.1	0.0	0.0	0.1	0.0	0.1
Biogas stove	0.1	0.1	0.1	0.1	0.0	0.1
Other fuels and technologies	**53.9**	**85.8**	**67.4**	**62.0**	**91.9**	**76.3**
Manufactured solid fuel stove	8.5	4.7	6.9	9.0	4.1	6.7
With a chimney	1.5	0.4	1.1	1.6	0.3	1.0
Without a chimney	7.0	4.3	5.8	7.4	3.8	5.7
Traditional solid fuel stove	30.7	19.6	26.0	33.2	17.5	25.7
With a chimney	5.2	2.5	4.1	6.0	1.9	4.0
Without a chimney	25.5	17.1	21.9	27.2	15.6	21.7
Three-stone stove/open fire	14.7	61.5	34.6	19.9	70.2	43.9
No food cooked in household	**4.4**	**3.1**	**3.8**	**1.5**	**1.0**	**1.3**
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel						
Clean fuels and technologies[1]	**41.7**	**11.2**	**28.7**	**36.4**	**7.1**	**22.4**
Solid fuels for cooking	**53.9**	**85.8**	**67.4**	**62.0**	**91.9**	**76.2**
Coal/lignite	0.1	0.1	0.1	0.1	0.0	0.0
Charcoal	38.9	18.8	30.4	41.3	15.7	29.1
Wood	14.8	65.9	36.5	20.5	75.0	46.5
Straw/shrubs/grass	0.1	0.8	0.4	0.1	0.9	0.5
Agricultural crop	0.0	0.2	0.1	0.0	0.2	0.1
Animal dung/waste	0.0	0.0	0.0	0.0	0.0	0.0
Processed biomass (pellets) or woodchips	0.0	0.0	0.0	0.0	0.0	0.0
Garbage/plastic	0.0	0.0	0.0	0.0	0.0	0.0
Sawdust	0.0	0.0	0.0	0.0	0.0	0.0
Other fuels	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Gasoline/diesel	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene/paraffin	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0
No food cooked in household	4.4	3.1	3.8	1.5	1.0	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	10,320	7,613	17,933	33,294	30,317	63,611

LPG = liquefied petroleum gas
[1] Includes stoves/cookers using electricity, LPG/natural gas/biogas, solar, and alcohol/ethanol

Table 2.3 Household characteristics: Heating and lighting

Percent distribution of households and de jure population by heating technology, heating fuel, and main lighting fuel or technology, according to residence, Ghana DHS 2022

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Heating technology						
Central heating	0.0	0.0	0.0	0.0	0.0	0.0
Manufactured space heater	0.0	0.0	0.0	0.1	0.0	0.0
Without a chimney	0.0	0.0	0.0	0.1	0.0	0.0
Traditional space heater	0.0	0.0	0.0	0.0	0.0	0.0
With a chimney	0.0	0.0	0.0	0.0	0.0	0.0
Without a chimney	0.0	0.0	0.0	0.0	0.0	0.0
Manufactured cookstove	0.1	0.1	0.1	0.1	0.1	0.1
With a chimney	0.0	0.0	0.0	0.0	0.0	0.0
Without a chimney	0.1	0.1	0.1	0.1	0.1	0.1
Traditional cookstove	0.6	1.8	1.1	0.9	2.3	1.6
With a chimney	0.1	0.2	0.2	0.3	0.2	0.3
Without a chimney	0.5	1.6	0.9	0.6	2.1	1.3
Three-stone stove/open fire	0.3	1.7	0.9	0.4	2.1	1.2
No heating in household	99.0	96.4	97.9	98.5	95.5	97.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Heating fuel						
Clean fuels and technologies[1]	0.2	0.1	0.1	0.2	0.1	0.1
Central heating	0.0	0.0	0.0	0.0	0.0	0.0
Electricity	0.1	0.0	0.1	0.2	0.1	0.1
LPG/cooking gas	0.0	0.0	0.0	0.0	0.0	0.0
Alcohol/ethanol	0.0	0.0	0.0	0.0	0.0	0.0
Coal/lignite	0.0	0.0	0.0	0.0	0.0	0.0
Charcoal	0.7	1.7	1.1	1.0	2.3	1.6
Wood	0.2	1.7	0.8	0.2	2.0	1.1
Straw/shrubs/grass	0.0	0.1	0.0	0.0	0.1	0.1
Agricultural crop	0.0	0.0	0.0	0.0	0.0	0.0
Animal dung/waste	0.0	0.0	0.0	0.0	0.0	0.0
No heating in household	99.0	96.4	97.9	98.5	95.5	97.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Main lighting fuel or technology						
Clean fuels and technologies	99.0	98.8	98.9	98.9	99.1	99.0
Electricity	94.5	70.3	84.2	94.6	68.1	82.0
Solar lantern	0.2	8.3	3.6	0.3	10.2	5.0
Rechargeable flashlight/torch/lantern	1.5	7.1	3.9	1.3	7.4	4.2
Battery-powered flashlight/torch/lantern	2.8	13.2	7.2	2.8	13.4	7.8
Gasoline lamp	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene/paraffin lamp	0.1	0.1	0.1	0.2	0.1	0.1
Charcoal	0.2	0.1	0.2	0.3	0.0	0.2
Wood	0.0	0.2	0.1	0.1	0.1	0.1
Straw/shrubs/grass	0.0	0.0	0.0	0.1	0.0	0.0
Agricultural crop	0.1	0.1	0.1	0.1	0.0	0.1
Oil lamp	0.1	0.0	0.1	0.1	0.0	0.1
Candle	0.1	0.1	0.1	0.1	0.1	0.1
Other fuel	0.0	0.1	0.0	0.0	0.1	0.0
No lighting in household	0.3	0.5	0.4	0.2	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	10,320	7,613	17,933	33,294	30,317	63,611

LPG = liquefied petroleum gas

[1] Includes central heating, electricity, LPG/natural gas/biogas, solar air heater, and alcohol/ethanol

Table 2.4 Primary reliance on clean fuels and technologies

Percentage of de jure population relying on clean fuels and technologies for cooking, percentage relying on solid fuels for cooking, percentage relying on clean fuels and technologies for space heating, percentage relying on clean fuels and technologies for lighting, and percentage relying on clean fuels and technologies for cooking, space heating, and lighting, according to background characteristics, Ghana DHS 2022

Background characteristic	Primary reliance on clean fuels and technologies for cooking[1]	Primary reliance on solid fuels for cooking[2]	Number of persons in households that reported cooking	Primary reliance on clean fuels and technologies for space heating[3]	Number of persons in households that reported use of space heating	Primary reliance on clean fuels and technologies for lighting[4]	Number of persons in households that reported use of lighting	Primary reliance on clean fuels and technologies for cooking, space heating, and lighting[5]	Number of persons
Residence									
Urban	37.0	63.0	32,781	14.7	487	99.1	33,217	37.8	33,294
Rural	7.2	92.8	30,009	1.4	1,372	99.5	30,218	7.9	30,317
Region									
Western	29.7	70.2	3,882	0.0	23	100.0	3,940	30.9	3,944
Central	21.2	78.8	6,878	3.6	61	99.8	6,954	22.1	6,957
Greater Accra	56.8	43.2	9,090	60.7	9	98.8	9,190	57.3	9,217
Volta	22.5	77.5	2,884	23.8	9	99.0	2,895	23.0	2,902
Eastern	21.9	78.0	5,182	10.1	35	99.6	5,203	22.6	5,234
Ashanti	26.5	73.5	11,613	55.8	78	99.3	11,798	27.9	11,844
Western North	9.5	90.5	1,752	2.7	47	99.3	1,772	10.7	1,775
Ahafo	7.9	92.1	1,379	6.9	64	99.1	1,394	9.0	1,397
Bono	13.5	86.5	2,207	0.0	60	99.8	2,259	15.5	2,262
Bono East	6.7	93.3	2,795	1.1	303	99.1	2,826	7.4	2,831
Oti	4.7	95.3	1,929	13.8	71	99.4	1,936	4.7	1,937
Northern	7.9	92.1	5,452	0.1	623	98.8	5,472	8.2	5,493
Savannah	1.4	98.6	1,567	0.0	154	99.7	1,585	2.5	1,586
North East	2.0	97.9	1,546	4.7	86	99.4	1,548	2.3	1,552
Upper East	8.3	91.6	2,880	2.9	111	99.2	2,898	8.6	2,904
Upper West	3.3	96.7	1,753	5.9	125	99.4	1,765	4.2	1,774
Wealth quintile									
Lowest	0.5	99.5	12,646	1.3	1,386	98.7	12,650	0.7	12,721
Second	1.3	98.7	12,568	12.1	358	98.5	12,650	2.4	12,725
Middle	4.7	95.2	12,428	3.1	78	99.5	12,689	6.8	12,719
Fourth	28.5	71.5	12,478	71.0	29	99.9	12,726	29.8	12,726
Highest	78.3	21.7	12,670	100.0	8	99.9	12,719	78.2	12,719
Total	22.7	77.2	62,790	4.9	1,859	99.3	63,435	23.6	63,611

LPG = liquefied petroleum gas

[1] Includes stoves/cookers using electricity, LPG/natural gas/biogas, solar, and alcohol/ethanol

[2] Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crops, animal dung/waste, processed biomass (pellets) or woodchips, garbage/plastic, and sawdust

[3] Includes central heating, electricity, LPG/natural gas/biogas, solar air heater, and alcohol/ethanol

[4] Includes electricity, solar lantern, rechargeable flashlight/torch/lantern, battery-powered flashlight/torch/lantern, and biogas lamp

[5] In order to calculate SDG indicator 7.1.2, persons living in households that report no cooking, no space heating, or no lighting are included in the numerator.

Table 2.5 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals, according to residence, Ghana DHS 2022

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	56.9	48.0	53.1
Television	79.9	47.8	66.3
Mobile phone	96.9	90.2	94.0
Non-mobile telephone	1.5	0.5	1.1
Computer	22.8	6.5	15.9
Refrigerator	56.3	22.4	41.9
Freezer	19.9	7.9	14.8
Generator	2.6	1.0	1.9
Washing machine	5.9	1.2	3.9
Camera	2.4	0.7	1.7
Video/DVD/VCD	12.7	5.4	9.6
Sewing machine	15.9	14.2	15.2
Means of transportation			
Bicycle	15.9	25.9	20.2
Animal-drawn cart	0.3	1.4	0.7
Motorcycle/scooter	14.9	22.8	18.2
Car/truck	14.2	4.8	10.2
Boat with a motor	0.3	1.4	0.8
Ownership of agricultural land	20.7	56.7	36.0
Ownership of farm animals[1]	20.2	54.8	34.9
Number of households	10,320	7,613	17,933

[1] Cows, bulls, other cattle, horses, donkeys, mules, goats, sheep, chickens, or other poultry

Table 2.6 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles and the Gini coefficient, according to residence and region, Ghana DHS 2022

Residence/region	Wealth quintile					Total	Number of persons	Gini coefficient[1]
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	3.4	10.9	22.7	29.7	33.3	100.0	33,294	0.16
Rural	38.2	30.0	17.0	9.3	5.4	100.0	30,317	0.32
Region								
Western	9.0	16.2	20.3	24.6	29.8	100.0	3,944	0.23
Central	9.1	19.1	27.1	27.7	17.0	100.0	6,957	0.23
Greater Accra	2.4	4.1	13.3	31.0	49.1	100.0	9,217	0.12
Volta	13.9	26.8	25.9	17.8	15.7	100.0	2,902	0.27
Eastern	8.2	20.7	27.6	25.8	17.6	100.0	5,234	0.22
Ashanti	8.7	19.7	23.0	23.2	25.5	100.0	11,844	0.25
Western North	20.3	29.5	28.7	14.8	6.7	100.0	1,775	0.30
Ahafo	38.5	23.6	19.6	13.4	4.8	100.0	1,397	0.35
Bono	14.0	25.3	27.3	19.1	14.3	100.0	2,262	0.26
Bono East	35.5	23.9	21.6	12.8	6.2	100.0	2,831	0.35
Oti	30.2	39.9	19.7	7.5	2.7	100.0	1,937	0.28
Northern	43.6	25.8	14.2	9.4	7.1	100.0	5,493	0.36
Savannah	55.2	28.0	10.1	5.0	1.7	100.0	1,586	0.35
North East	64.1	24.5	7.5	2.5	1.3	100.0	1,552	0.30
Upper East	57.0	20.1	9.8	7.7	5.4	100.0	2,904	0.37
Upper West	52.0	27.2	8.5	6.3	5.9	100.0	1,774	0.30
Total	20.0	20.0	20.0	20.0	20.0	100.0	63,611	0.27

[1] The Gini coefficient indicates the level of concentration of wealth, with 0 representing an equal wealth distribution and 1 representing a totally unequal distribution.

Table 2.7 Household population by age, sex, and residence

Percent distributions of the de facto household population by various age groups and percentage of the de facto household population age 10–19, according to sex and residence, Ghana DHS 2022

	Urban			Rural					
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	13.4	11.6	12.5	15.5	13.9	14.7	14.4	12.7	13.5
5–9	13.8	11.9	12.8	15.4	14.1	14.7	14.6	12.9	13.7
10–14	12.7	11.9	12.3	14.5	13.5	14.0	13.6	12.6	13.1
15–19	9.1	8.3	8.7	10.1	7.7	8.8	9.6	8.0	8.7
20–24	7.9	8.4	8.2	6.7	7.3	7.0	7.3	7.9	7.6
25–29	7.0	7.6	7.4	5.6	6.1	5.9	6.4	6.9	6.7
30–34	6.7	6.9	6.8	5.3	6.2	5.7	6.0	6.6	6.3
35–39	6.0	6.7	6.4	4.7	5.2	5.0	5.4	6.0	5.7
40–44	5.6	5.1	5.3	4.2	4.7	4.4	4.9	4.9	4.9
45–49	4.2	4.1	4.1	3.7	3.5	3.6	4.0	3.8	3.9
50–54	3.1	5.6	4.4	3.0	5.1	4.1	3.1	5.3	4.3
55–59	2.5	3.2	2.9	2.5	3.5	3.0	2.5	3.3	2.9
60–64	2.9	2.7	2.8	3.3	2.8	3.0	3.1	2.8	2.9
65–69	1.9	2.2	2.1	2.1	1.8	1.9	2.0	2.0	2.0
70–74	1.4	1.3	1.3	1.3	1.5	1.4	1.4	1.4	1.4
75–79	0.6	1.0	0.8	1.0	1.3	1.2	0.8	1.1	1.0
80+	0.8	1.5	1.2	1.2	1.8	1.5	1.0	1.7	1.3
Don't know/missing	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age groups									
0–14	40.0	35.3	37.5	45.4	41.5	43.4	42.6	38.2	40.3
15–64	55.2	58.7	57.1	48.9	52.1	50.5	52.1	55.6	54.0
65+	4.8	5.9	5.4	5.6	6.4	6.0	5.2	6.2	5.7
Don't know/missing	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0–17	45.6	40.5	42.9	52.0	46.5	49.2	48.7	43.3	45.9
18+	54.3	59.5	57.1	48.0	53.5	50.8	51.2	56.7	54.1
Don't know/missing	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adolescents 10–19	21.8	20.1	20.9	24.6	21.2	22.8	23.2	20.6	21.8
Number of persons	15,336	17,770	33,106	14,612	15,530	30,141	29,948	33,299	63,247

Table 2.8 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of households, and percentage of households with orphans and children under age 18 not living with a biological parent, according to residence, Ghana DHS 2022

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	60.6	67.3	63.4
Female	39.4	32.7	36.6
Total	100.0	100.0	100.0
Number of usual members			
0	0.0	0.0	0.0
1	27.6	20.7	24.6
2	15.9	13.2	14.7
3	17.3	15.1	16.4
4	14.3	13.8	14.1
5	11.0	12.2	11.5
6	6.5	9.4	7.8
7	3.6	6.3	4.7
8	1.8	4.0	2.8
9+	1.8	5.4	3.4
Total	100.0	100.0	100.0
Mean size of households	3.2	4.0	3.5
Percentage of households with children under age 18 who are orphans or not living with a biological parent			
Double orphans	0.6	0.6	0.6
Single orphans[1]	6.4	8.4	7.3
Children not living with a biological parent[2]	14.8	19.1	16.6
Orphans and/or children not living with a biological parent	18.2	22.9	20.2
Number of households	10,320	7,613	17,933

Note: Table is based on de jure household members, i.e., usual residents.
[1] Includes children with one dead parent and an unknown survival status of the other parent
[2] Children not living with a biological parent are those under age 18 living in households with neither their mother nor their father present.

Table 2.9 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, percentage of children not living with a biological parent, and percentage of children with one or both parents dead, according to background characteristics, Ghana DHS 2022

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only mother alive	Only father alive	Both dead	Missing information on father/ mother				
Age														
0–4	60.2	29.3	1.6	1.9	0.1	6.2	0.3	0.3	0.1	0.0	100.0	6.8	2.3	8,508
<2	62.0	34.3	1.1	0.6	0.1	1.6	0.0	0.2	0.0	0.0	100.0	1.9	1.4	3,443
2–4	59.0	25.9	1.9	2.8	0.1	9.3	0.4	0.3	0.2	0.1	100.0	10.2	3.0	5,064
5–9	51.8	22.6	3.5	4.4	0.3	14.7	1.3	0.8	0.3	0.1	100.0	17.2	6.3	8,650
10–14	44.2	20.6	5.6	6.4	1.0	17.7	2.1	1.5	0.8	0.1	100.0	22.0	11.0	8,318
15–17	39.5	20.7	7.8	6.3	1.4	17.7	3.9	1.7	0.9	0.2	100.0	24.2	15.6	3,536
Sex														
Male	51.3	23.5	4.2	5.1	0.7	12.5	1.4	0.7	0.5	0.1	100.0	15.2	7.5	14,627
Female	49.9	24.1	4.0	3.8	0.4	14.4	1.7	1.1	0.5	0.1	100.0	17.6	7.7	14,384
Residence														
Urban	47.0	27.2	4.2	4.1	0.6	13.8	1.4	1.0	0.6	0.1	100.0	16.8	7.8	14,164
Rural	54.0	20.5	3.9	4.9	0.6	13.1	1.6	0.9	0.4	0.2	100.0	16.0	7.4	14,848
Region														
Western	50.4	24.7	2.7	4.2	0.4	13.7	1.6	1.2	0.9	0.2	100.0	17.4	6.8	1,741
Central	38.5	32.7	4.0	4.2	0.5	16.5	1.5	1.5	0.5	0.1	100.0	20.0	8.0	3,187
Greater Accra	51.7	25.8	4.3	5.7	0.6	10.3	0.9	0.5	0.2	0.1	100.0	11.9	6.4	3,679
Volta	41.1	28.4	4.0	4.0	0.3	17.8	2.1	1.4	0.4	0.4	100.0	21.7	8.5	1,284
Eastern	39.6	29.3	3.8	3.4	0.7	19.4	1.4	1.7	0.6	0.1	100.0	23.1	8.2	2,286
Ashanti	43.6	29.5	4.9	3.1	0.5	15.4	1.7	0.8	0.3	0.2	100.0	18.2	8.3	5,272
Western North	50.6	21.1	3.1	6.5	0.6	13.8	2.5	1.0	0.6	0.1	100.0	18.0	7.9	827
Ahafo	53.0	22.2	3.5	4.4	0.4	13.9	1.3	0.8	0.4	0.1	100.0	16.4	6.4	644
Bono	40.5	33.5	4.2	3.3	0.3	15.3	1.5	0.9	0.4	0.2	100.0	18.0	7.2	990
Bono East	56.7	20.6	4.0	3.4	0.7	12.4	1.6	0.7	0.1	0.0	100.0	14.8	7.1	1,335
Oti	55.4	18.0	3.1	5.4	0.5	14.7	1.6	1.0	0.2	0.1	100.0	17.5	6.5	959
Northern	77.2	6.0	3.2	4.2	0.9	5.6	1.3	0.5	1.1	0.0	100.0	8.5	6.9	2,907
Savannah	62.3	13.7	3.3	6.3	0.4	10.2	2.1	1.3	0.3	0.1	100.0	13.9	7.4	804
North East	63.9	13.5	2.5	7.9	0.7	9.8	1.0	0.4	0.2	0.0	100.0	11.5	4.8	871
Upper East	53.1	16.5	7.3	7.5	0.5	12.5	1.8	0.5	0.2	0.0	100.0	15.0	10.3	1,360
Upper West	53.9	19.3	5.1	4.1	0.2	12.8	2.8	1.2	0.4	0.2	100.0	17.3	9.8	865
Wealth quintile														
Lowest	61.4	14.9	4.1	4.8	0.7	11.7	1.4	0.7	0.4	0.0	100.0	14.2	7.3	6,665
Second	46.9	25.3	5.0	4.2	0.6	14.0	2.0	1.2	0.6	0.2	100.0	17.8	9.4	6,362
Middle	42.9	28.8	4.4	3.6	0.5	16.4	1.7	1.1	0.4	0.2	100.0	19.6	8.2	5,729
Fourth	46.0	28.7	3.9	4.7	0.7	13.4	1.2	0.9	0.4	0.1	100.0	15.9	7.1	5,243
Highest	54.6	22.8	2.7	5.2	0.3	11.8	1.2	0.9	0.5	0.1	100.0	14.4	5.6	5,012
Total <15	52.1	24.2	3.6	4.2	0.4	12.8	1.2	0.8	0.4	0.1	100.0	15.3	6.5	25,475
Total <18	50.6	23.8	4.1	4.5	0.6	13.4	1.5	0.9	0.5	0.1	100.0	16.4	7.6	29,011

Note: Table is based on de jure members, i.e., usual residents.
[1] Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent

Table 2.10 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of children whose births are registered and who:		Total percentage of children whose births are registered	Number of children
	Had a birth certificate	Did not have a birth certificate		
Age				
<1	41.6	19.4	61.1	1,651
1–4	66.2	11.6	77.7	6,857
Sex				
Male	61.6	12.8	74.4	4,301
Female	61.2	13.4	74.6	4,206
Residence				
Urban	65.4	12.1	77.5	4,093
Rural	57.7	14.0	71.7	4,415
Region				
Western	72.1	13.5	85.6	526
Central	59.7	16.5	76.2	887
Greater Accra	59.8	12.5	72.3	1,063
Volta	64.1	6.8	70.9	320
Eastern	56.6	9.0	65.6	616
Ashanti	63.4	11.3	74.7	1,518
Western North	58.4	11.8	70.2	227
Ahafo	56.6	18.5	75.1	185
Bono	61.2	7.2	68.4	279
Bono East	46.4	36.3	82.7	426
Oti	53.5	7.0	60.5	281
Northern	66.4	10.5	76.9	957
Savannah	50.6	14.5	65.1	255
North East	58.0	16.1	74.1	296
Upper East	72.7	10.7	83.4	420
Upper West	66.3	11.7	78.0	253
Wealth quintile				
Lowest	50.6	15.3	65.8	2,043
Second	61.6	12.6	74.2	1,748
Middle	63.2	12.1	75.3	1,650
Fourth	64.2	12.3	76.5	1,573
Highest	71.0	12.7	83.7	1,494
Total	61.4	13.1	74.5	8,508

Table 2.11.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Ghana DHS 2022

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know	Total	Number	Median years completed
Age										
6–9	35.9	63.6	0.0	0.4	0.0	0.0	0.0	100.0	3,487	a
10–14	5.9	69.3	7.1	17.7	0.0	0.1	0.0	100.0	4,205	3.6
15–19	4.4	9.8	5.2	68.3	11.5	0.9	0.0	100.0	2,663	8.0
20–24	6.6	7.3	3.1	39.8	32.7	10.4	0.1	100.0	2,630	8.9
25–29	11.4	8.3	2.7	38.4	22.7	16.3	0.2	100.0	2,308	8.7
30–34	19.5	9.5	4.6	38.1	10.6	17.8	0.0	100.0	2,183	8.3
35–39	24.7	10.2	4.5	38.4	10.0	12.2	0.0	100.0	2,007	8.1
40–44	30.1	11.9	5.1	39.7	5.7	7.6	0.0	100.0	1,636	6.6
45–49	30.1	12.7	6.1	40.7	5.8	4.5	0.2	100.0	1,269	6.1
50–54	42.4	12.6	3.3	36.7	1.6	3.4	0.0	100.0	1,780	3.8
55–59	44.9	11.0	5.1	35.2	1.0	2.7	0.2	100.0	1,115	2.7
60–64	41.4	10.6	4.0	38.7	1.8	3.3	0.3	100.0	919	4.2
65+	57.3	10.1	2.7	25.9	0.3	3.6	0.1	100.0	2,050	a
Don't know/missing	(91.4)	(1.1)	(2.2)	(0.0)	(5.3)	(0.0)	(0.0)	100.0	18	a
Residence										
Urban	16.2	23.3	4.1	35.9	11.3	9.1	0.1	100.0	15,323	7.0
Rural	32.4	28.0	3.9	28.6	4.8	2.2	0.0	100.0	12,946	2.9
Region										
Western	17.7	24.6	6.1	37.6	8.2	5.7	0.1	100.0	1,754	6.1
Central	19.8	26.0	4.1	38.9	6.6	4.6	0.0	100.0	3,193	5.6
Greater Accra	10.0	22.6	4.2	38.7	13.4	10.9	0.1	100.0	4,104	8.2
Volta	17.2	26.4	6.2	36.7	7.5	5.9	0.1	100.0	1,416	5.8
Eastern	15.7	27.3	5.3	39.2	7.0	5.4	0.1	100.0	2,467	6.0
Ashanti	16.1	25.3	4.2	38.0	9.7	6.7	0.1	100.0	5,410	6.3
Western North	20.9	28.4	2.8	36.8	6.9	4.1	0.1	100.0	750	5.1
Ahafo	23.9	25.5	5.0	35.4	7.0	3.2	0.0	100.0	599	5.1
Bono	21.1	23.3	4.4	36.6	8.5	6.1	0.1	100.0	1,064	5.9
Bono East	32.7	27.6	3.0	25.4	7.3	3.9	0.1	100.0	1,223	3.1
Oti	35.1	31.6	3.2	24.1	3.5	2.5	0.0	100.0	792	1.9
Northern	51.2	23.0	2.0	12.3	6.1	5.3	0.0	100.0	2,162	a
Savannah	56.7	24.1	1.7	11.7	4.1	1.6	0.0	100.0	641	a
North East	53.8	26.0	1.8	12.7	4.1	1.6	0.0	100.0	603	a
Upper East	36.4	27.3	3.0	19.5	9.1	4.6	0.1	100.0	1,274	2.5
Upper West	43.4	27.9	2.4	16.2	5.7	4.4	0.0	100.0	819	0.9
Wealth quintile										
Lowest	47.6	28.9	3.5	16.7	3.0	0.2	0.0	100.0	5,211	a
Second	31.6	29.4	4.8	29.5	4.1	0.5	0.0	100.0	5,661	3.0
Middle	20.2	27.7	4.6	38.5	7.4	1.7	0.0	100.0	5,815	5.3
Fourth	13.9	22.4	3.9	41.7	12.0	5.8	0.2	100.0	5,743	7.6
Highest	7.4	19.3	3.3	34.7	14.5	20.8	0.0	100.0	5,839	8.8
Total	23.6	25.5	4.0	32.6	8.3	6.0	0.1	100.0	28,269	5.1

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level
a = omitted because more than 50% of girls or women completed 0 years of education

Table 2.11.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Ghana DHS 2022

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know	Total	Number	Median years completed
Age										
6–9	41.4	58.3	0.1	0.1	0.0	0.0	0.0	100.0	3,574	a
10–14	6.6	71.0	6.5	15.8	0.1	0.1	0.0	100.0	4,077	3.3
15–19	4.4	13.6	4.9	66.0	9.9	1.2	0.0	100.0	2,870	7.5
20–24	6.1	7.9	2.9	29.0	40.7	13.3	0.1	100.0	2,187	11.1
25–29	7.7	6.9	3.0	30.8	30.9	20.6	0.0	100.0	1,904	11.1
30–34	11.0	6.3	3.8	33.3	21.8	23.3	0.4	100.0	1,802	9.4
35–39	14.8	7.3	3.6	38.0	15.6	20.5	0.1	100.0	1,606	8.6
40–44	16.5	7.4	4.4	42.2	12.7	16.6	0.2	100.0	1,468	8.5
45–49	19.3	9.0	3.5	43.9	9.5	14.7	0.0	100.0	1,184	8.5
50–54	23.7	7.3	3.7	49.8	3.7	11.4	0.4	100.0	914	8.9
55–59	24.2	6.6	3.5	53.0	2.9	9.8	0.0	100.0	748	9.1
60–64	29.8	4.7	3.5	48.4	1.8	11.4	0.4	100.0	931	9.0
65+	34.0	7.9	2.8	42.5	0.9	11.5	0.3	100.0	1,555	7.8
Don't know/missing	*	*	*	*	*	*	*	100.0	12	*
Residence										
Urban	10.4	22.7	3.5	34.2	14.7	14.4	0.2	100.0	12,900	8.3
Rural	24.6	29.1	3.7	30.8	7.6	4.2	0.0	100.0	11,932	4.3
Region										
Western	11.4	24.4	3.7	37.9	12.3	10.2	0.2	100.0	1,547	8.1
Central	11.1	27.5	3.8	38.3	12.0	7.3	0.0	100.0	2,605	6.8
Greater Accra	6.2	20.7	3.5	36.4	15.4	17.7	0.2	100.0	3,870	8.7
Volta	10.9	28.1	4.5	36.2	10.4	9.8	0.1	100.0	1,122	7.1
Eastern	12.5	23.1	5.0	41.6	9.7	8.0	0.2	100.0	2,072	7.6
Ashanti	10.4	25.0	3.6	38.9	13.9	8.2	0.2	100.0	4,453	8.0
Western North	14.2	29.1	2.7	37.3	9.0	7.5	0.1	100.0	729	6.2
Ahafo	19.6	25.5	5.2	33.6	10.3	5.8	0.0	100.0	563	5.7
Bono	15.9	22.9	4.2	33.9	12.0	10.9	0.1	100.0	879	7.6
Bono East	27.9	25.6	2.5	26.4	10.1	7.2	0.2	100.0	1,105	4.2
Oti	26.1	31.1	3.0	26.5	8.4	4.8	0.0	100.0	773	3.6
Northern	38.8	27.9	3.0	14.5	6.9	8.7	0.1	100.0	2,107	1.2
Savannah	48.4	25.9	1.8	12.8	6.9	4.2	0.1	100.0	625	0.0
North East	42.9	29.5	2.1	14.9	6.1	4.4	0.0	100.0	598	0.4
Upper East	23.6	34.3	4.1	21.1	8.2	8.6	0.2	100.0	1,134	3.9
Upper West	33.1	31.8	3.3	18.1	6.4	7.3	0.0	100.0	651	2.4
Wealth quintile										
Lowest	39.0	31.9	3.4	20.5	4.3	0.9	0.1	100.0	5,011	1.2
Second	21.4	31.5	4.6	32.3	7.8	2.2	0.0	100.0	4,831	4.5
Middle	13.7	27.2	4.4	38.4	11.1	5.1	0.1	100.0	4,901	6.4
Fourth	8.0	21.3	3.6	41.2	16.7	9.1	0.2	100.0	4,981	8.4
Highest	4.3	17.4	2.1	30.5	16.3	29.3	0.2	100.0	5,107	9.8
Total	17.2	25.8	3.6	32.5	11.3	9.5	0.1	100.0	24,832	6.3

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level
a = omitted because more than 50% of boys completed 0 years of education

Table 2.12 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling, and the gender parity index (GPI), according to background characteristics, Ghana DHS 2022

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
				PRIMARY SCHOOL				
Residence								
Urban	85.9	83.6	84.7	0.97	111.6	108.7	110.1	0.97
Rural	77.7	80.0	78.8	1.03	107.2	106.5	106.9	0.99
Region								
Western	90.9	90.5	90.7	1.00	122.0	121.4	121.7	1.00
Central	87.0	85.1	86.1	0.98	111.9	112.9	112.4	1.01
Greater Accra	88.8	78.5	83.5	0.88	117.5	105.1	111.1	0.89
Volta	89.4	85.6	87.4	0.96	121.1	113.5	117.2	0.94
Eastern	84.4	90.3	87.5	1.07	110.2	112.6	111.5	1.02
Ashanti	85.9	87.4	86.7	1.02	108.3	108.0	108.1	1.00
Western North	83.7	81.8	82.7	0.98	113.2	104.1	108.7	0.92
Ahafo	79.0	76.3	77.7	0.97	99.6	101.4	100.5	1.02
Bono	86.7	84.2	85.4	0.97	113.2	114.6	113.9	1.01
Bono East	68.6	74.0	71.3	1.08	92.1	98.9	95.5	1.07
Oti	76.7	78.3	77.5	1.02	115.0	104.7	109.7	0.91
Northern	65.0	67.9	66.4	1.04	93.2	94.9	94.0	1.02
Savannah	52.8	57.1	54.8	1.08	78.8	86.0	82.2	1.09
North East	61.6	66.1	63.7	1.07	93.7	89.0	91.6	0.95
Upper East	87.6	85.8	86.7	0.98	127.5	113.7	120.6	0.89
Upper West	82.1	85.4	83.8	1.04	116.3	125.2	120.8	1.08
Wealth quintile								
Lowest	67.2	71.4	69.2	1.06	94.8	96.4	95.6	1.02
Second	83.9	82.2	83.0	0.98	116.5	111.0	113.7	0.95
Middle	85.4	86.8	86.1	1.02	113.5	111.1	112.3	0.98
Fourth	89.8	88.2	89.0	0.98	112.6	115.3	114.0	1.02
Highest	86.5	81.8	83.9	0.95	112.3	105.7	108.7	0.94
Total	81.6	81.8	81.7	1.00	109.3	107.6	108.5	0.98
				SECONDARY SCHOOL				
Residence								
Urban	63.4	61.9	62.7	0.98	82.9	86.5	84.7	1.04
Rural	49.0	47.7	48.4	0.97	60.2	62.1	61.1	1.03
Region								
Western	51.7	55.2	53.4	1.07	64.9	66.4	65.6	1.02
Central	64.8	67.4	66.1	1.04	84.4	84.6	84.5	1.00
Greater Accra	62.4	60.8	61.6	0.97	80.7	86.7	83.7	1.07
Volta	57.5	68.2	63.1	1.19	75.4	86.2	81.1	1.14
Eastern	68.0	61.3	65.0	0.90	83.7	82.2	83.0	0.98
Ashanti	68.2	57.5	63.3	0.84	84.4	88.7	86.4	1.05
Western North	53.7	50.6	52.2	0.94	63.1	65.1	64.0	1.03
Ahafo	51.0	54.3	52.6	1.07	63.9	68.7	66.3	1.07
Bono	57.6	61.0	59.4	1.06	74.9	82.8	79.1	1.10
Bono East	37.7	39.9	38.8	1.06	49.9	53.0	51.5	1.06
Oti	36.8	43.6	39.8	1.19	50.9	52.0	51.4	1.02
Northern	33.4	34.7	34.0	1.04	44.4	49.3	46.5	1.11
Savannah	27.8	26.4	27.1	0.95	39.5	32.9	36.2	0.83
North East	35.4	33.1	34.4	0.94	46.8	43.7	45.4	0.93
Upper East	55.2	53.8	54.6	0.97	68.8	72.0	70.3	1.05
Upper West	46.9	44.7	45.8	0.95	56.1	60.1	58.1	1.07
Wealth quintile								
Lowest	36.1	33.1	34.8	0.92	45.1	43.5	44.4	0.97
Second	54.6	48.9	52.0	0.90	65.4	66.9	66.1	1.02
Middle	57.2	60.1	58.7	1.05	73.7	80.4	77.1	1.09
Fourth	67.4	64.7	66.1	0.96	84.7	84.5	84.6	1.00
Highest	71.6	68.9	70.2	0.96	98.7	99.5	99.1	1.01
Total	56.0	55.1	55.6	0.98	71.2	74.9	73.0	1.05

[1] The NAR for primary school is the percentage of the primary school-age (7–12 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school-age (13–18 years) population that is attending secondary school. By definition, the NAR cannot exceed 100.0.
[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0.
[3] The gender parity index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The gender parity index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

Table 2.13 Participation rate in organised learning

Percent distribution of children 1 year younger than the official primary school entry age at the beginning of the school year by attendance at an early childhood education programme or primary school, and the adjusted net attendance ratio (NAR), according to background characteristics, Ghana DHS 2022

Background characteristic	Percent distribution of children attending				Adjusted NAR[1]	Number of children age 5 at the beginning of the school year
	An early childhood education programme	Primary school	Neither an early childhood education programme nor primary school	Total		
Sex						
Male	67.9	21.1	11.0	100.0	89.0	923
Female	66.1	21.7	12.2	100.0	87.8	880
Residence						
Urban	72.6	23.0	4.4	100.0	95.6	861
Rural	61.9	20.0	18.1	100.0	81.9	942
Region						
Western	68.8	21.2	10.0	100.0	90.0	104
Central	73.1	18.9	8.1	100.0	91.9	197
Greater Accra	72.3	24.2	3.5	100.0	96.5	223
Volta	79.3	17.7	3.0	100.0	97.0	68
Eastern	79.2	16.5	4.4	100.0	95.6	133
Ashanti	80.1	16.3	3.5	100.0	96.5	337
Western North	61.7	24.3	14.1	100.0	85.9	56
Ahafo	55.0	24.0	21.0	100.0	79.0	42
Bono	73.6	22.7	3.7	100.0	96.3	53
Bono East	62.5	15.0	22.5	100.0	77.5	86
Oti	54.9	20.9	24.2	100.0	75.8	64
Northern	44.5	30.3	25.1	100.0	74.9	207
Savannah	45.3	14.3	40.4	100.0	59.6	58
North East	38.5	32.9	28.6	100.0	71.4	55
Upper East	60.7	30.3	8.9	100.0	91.1	68
Upper West	69.0	22.9	8.1	100.0	91.9	54
Wealth quintile						
Lowest	49.2	18.4	32.4	100.0	67.6	424
Second	65.7	24.7	9.6	100.0	90.4	402
Middle	76.2	18.6	5.3	100.0	94.7	358
Fourth	76.7	20.7	2.6	100.0	97.4	337
Highest	72.5	25.7	1.8	100.0	98.2	281
Total	67.0	21.4	11.6	100.0	88.4	1,803

[1] The adjusted net attendance ratio (NAR) to organised learning is the percentage of children of 1 year younger than the official primary school entry age (at the beginning of the school year) who are attending early childhood education or primary school.

CHARACTERISTICS OF RESPONDENTS 3

Key Findings

- ***Age:*** One in five respondents (18% of women and 23% of men) are age 15–19.
- ***Marital status:*** 55% of women are currently married or living together with a partner as if married.
- ***Education:*** The percentage of women with no education has declined over time, from 19% in 2014 to 16% in 2022.
- ***Internet usage:*** 58% of women and 74% of men in urban areas used the internet in the past 12 months, as compared with 24% of women and 46% of men in rural areas.
- ***Employment:*** The percentage of women who were paid in cash only for their work in the past 12 months decreased from 64% in 2014 to 58% in 2022.
- ***Health insurance:*** 10% of women and 27% of men age 15–49 are neither registered nor covered under any health insurance scheme.
- ***Migration:*** 24% of women and 31% of men migrated from urban to rural areas, while 9% of women and 6% of men migrated from rural to urban areas.

This chapter presents information on the demographic and socioeconomic characteristics of the survey respondents such as age, education, literacy, marital status, employment, occupation, wealth, health insurance coverage, residence at birth, current place of residence, and recent migration. The chapter also presents information on respondents' use of alcohol and tobacco. Together, this information is useful for understanding the factors that affect use of reproductive health services, contraceptive use, and other health behaviours.

3.1 BASIC CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 shows that 15,014 women and 6,277 men age 15–49 were interviewed in the 2022 GDHS. The percentage of women interviewed declines with increasing age, from 18% among those age 15–24 to 9% among those age 45–49. Similarly, the percentage of male respondents falls from 23% among those age 15–19 to 9% among those age 45–49.

Seventy-seven percent of both women and men reported their health status as good or very good. Most respondents are Christian (77% of women and 70% of men). More than 4 in 10 women (42%) and more than 3 in 10 men (35%) are Pentecostal/Charismatic, while 35% of both women and men are Catholic, Anglican, Methodist, Presbyterian, or other Christian. Nineteen percent of women and 21% of men are Muslim.

Akans are the predominant ethnic group in Ghana (46% of both women and men), followed by Mole-Dagbanis (19% of women and 18% of men) and Ewes (12% of women and 11% of men). Over half of men (51%) and more than one-third of women (35%) have never been married. Women are more likely to be married or living together with a partner (i.e., in union) than men (55% versus 45%). Also, a higher

proportion of women than men are divorced or separated (8% versus 4%) or widowed (2% versus less than 1%).

More than half of the survey respondents reside in urban areas (57% of women and 55% of men).

3.2 EDUCATION AND LITERACY

Literacy

Respondents who had attended higher than secondary school were assumed to be literate. All other respondents were considered literate if they could read aloud all or part of a sentence shown to them.

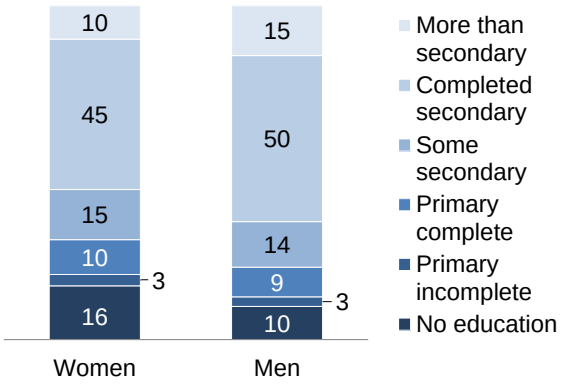
Sample: Women and men age 15–49

Overall, 3% of both women and men age 15–49 have some primary education, 10% of women and 9% of men have completed primary school but gone no further, 15% of women and 14% men have some secondary education, 45% of women and 50% of men have completed secondary education and gone no further, and 10% of women and 15% of men have more than a secondary education (**Table 3.2.1**, **Table 3.2.2**, and **Figure 3.1**). Sixteen percent of women and 10% of men have no formal education.

Trends: The median number of years of schooling has increased since the 2014 GDHS, from 7.8 years among women and 8.5 years among men to 11.1 years among women and 11.3 years among men. Literacy, although remaining high among both women (61%) and men (71%), has decreased since 2014 (**Table 3.3.1** and **Table 3.3.2**).

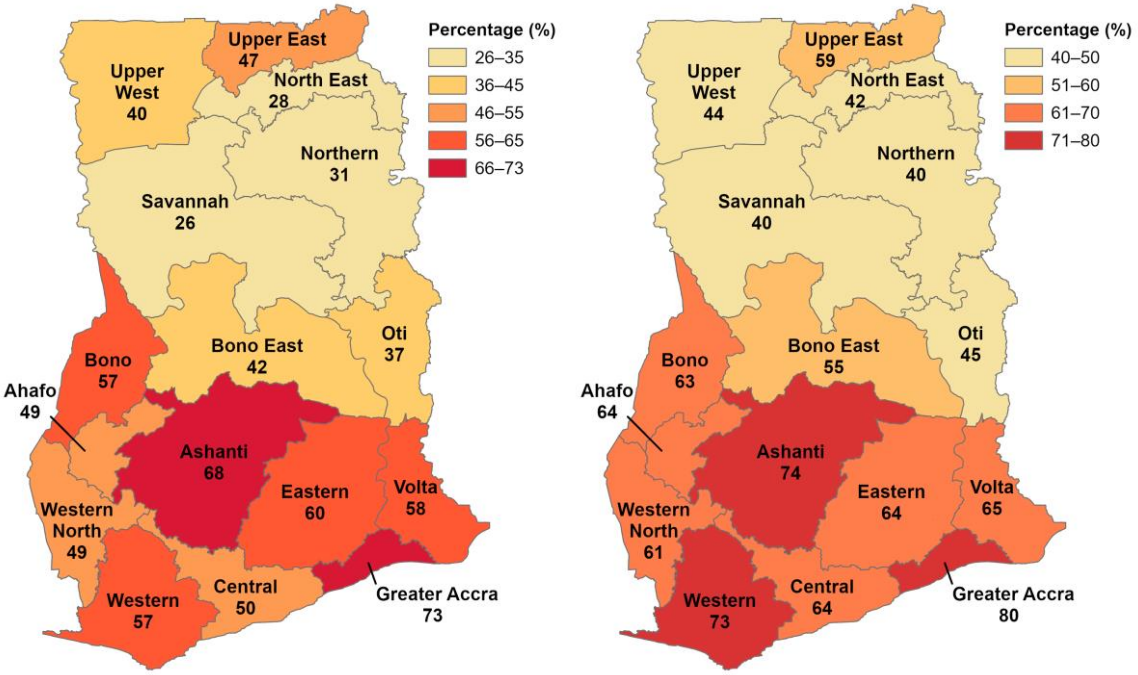
Figure 3.1 **Education of survey respondents**

Percent distribution of women and men age 15–49 by highest level of schooling attended or completed



Maps 3.1 and 3.2 Secondary education by region

Percentage of women and men age 15–49 with secondary education complete or higher



3.3 Mass Media Exposure and Internet Usage

Exposure to mass media

Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who responded *at least once a week* are considered regularly exposed to that form of media.

Sample: Women and men age 15–49

Use of the internet

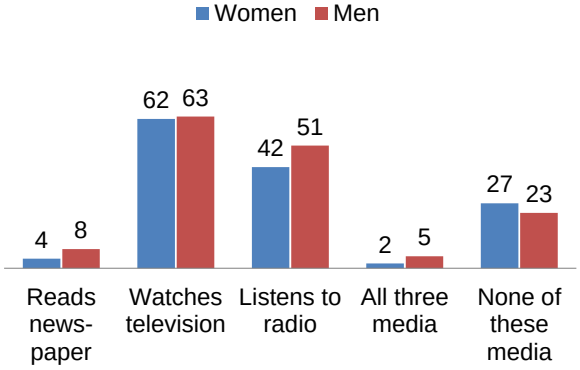
Respondents were asked if they have ever used the internet from any device, if they used the internet in the last 12 months, and, if so, how often they used it during the last month.

Sample: Women and men age 15–49

Data on women's and men's exposure to mass media are essential in the development of educational programs and the dissemination of all types of information, particularly information about family planning and other important health topics. In Ghana, television is the most common form of mass media to which men and women are exposed. Sixty-two percent of women and 63% of men watch television at least once a week. One-fourth of women and men reported not accessing any of the three media (27% of women and 23% of men); only 2% of women and 5% of men accessed all three forms of mass media in the last week (**Figure 3.2**, **Table 3.4.1**, and **Table 3.4.2**).

Figure 3.2 Exposure to mass media

Percentage of women and men age 15–49 who are exposed to media on a weekly basis

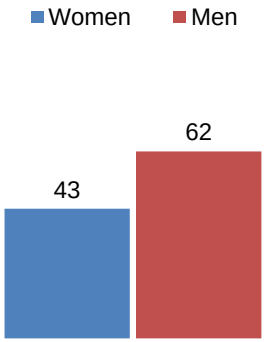


The internet is a critical tool through which information is shared. Internet use includes accessing web pages, email, and social media. Close to 5 in 10 women (47%) and about 6 out of 10 men (65%) have used the internet at least once, and 43% of women and 62% of men used it in the last 12 months. Among those who used the internet in the last 12 months, most used it almost every day (64% of women and 75% of men) (**Figure 3.3**, **Table 3.5.1**, and **Table 3.5.2**).

Trends: Women's exposure to all three types of media (newspaper, television, and radio) declined from 5% in 2014 to 2% in 2022. The percentage of women who accessed none of the three types of media also declined, from 31% to 27%. With the exception of television (51% in 2014 and 62% in 2022), exposure to media decreased between 2014 and 2022.

Figure 3.3 **Internet usage by sex**

Percentage of women and men age 15–49 who used the internet in the last 12 months



3.4 EMPLOYMENT

Currently employed

Respondents who were employed in the 7 days before the survey.

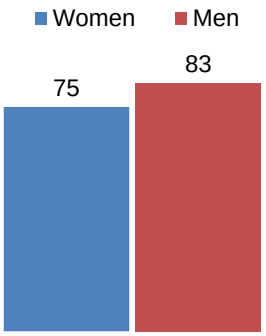
Sample: Women and men age 15–49

Seventy-five percent of women and 83% of men age 15–49 are currently employed; 4% of women and 3% of men were employed in the last 12 months but are not currently employed, and 22% of women and 14% of men were not employed in the last 12 months (**Figure 3.4**, **Table 3.6.1**, and **Table 3.6.2**).

Trends: The percentage of respondents who are currently employed has increased slightly since 2014, from 73% to 75% among women and from 82% to 83% among men.

Figure 3.4 **Employment status by sex**

Percentage of women and men age 15–49 who are currently employed



3.5 OCCUPATION

Occupation

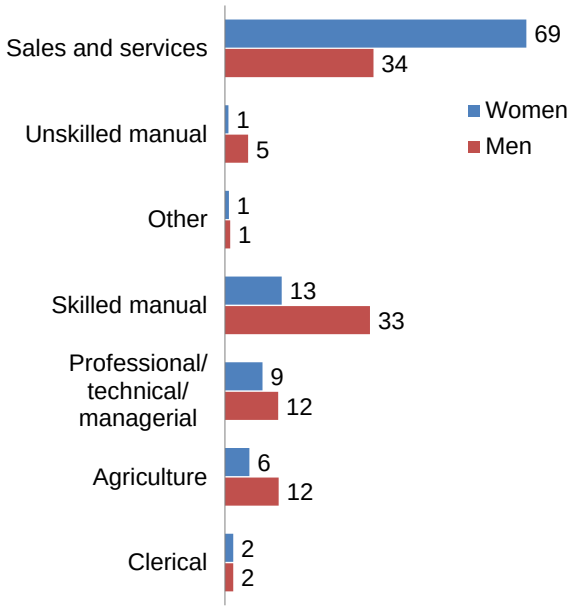
Categorized as professional/technical/managerial, clerical, sales and services, skilled manual, unskilled manual, domestic service, agriculture, and other.

Sample: Women and men age 15–49 who were currently employed or had worked in the 12 months before the survey

Among those who worked in the 12 months preceding the survey, 9% of women and 12% of men are employed in professional, technical, or managerial positions; 2% of both women and men are engaged in clerical work; 69% of women and 34% of men work in sales and services; 13% of women and 33% of men are engaged in skilled manual work; and 6% of women and 12% of men are employed in agricultural work (**Figure 3.5**, **Table 3.7.1**, and **Table 3.7.2**).

Figure 3.5 Occupation

Percentage of women and men age 15–49 employed in the 12 months before the survey by occupation



Fifty-seven percent of women and 73% of men who worked in the 12 months preceding the survey reported being paid in cash only; 17% and 9%, respectively, are not paid for their work (**Table 3.8.1** and **Table 3.8.2**). Women and men engaged in agricultural work are much more likely (33% and 30%, respectively) than those working in nonagricultural occupations (16% and 6%, respectively) to not be paid for their work.

In addition, 61% of women are self-employed, 25% are employed by a non-family member, and 14% are employed by a family member. Most women (79%) are employed year-round (**Table 3.8.1**).

Trends: Sales and services has been the dominant occupation among women in Ghana since 1998. Forty-six percent of women worked in that sector in 1998, and the percentage subsequently increased to 51% in 2008 and 2014 and 69% in 2022.

3.6 HEALTH INSURANCE COVERAGE

The National Health Insurance Scheme (NHIS) was introduced in 2003 through the National Health Insurance Act (Act 650), which was repealed and replaced by Act 852 in 2012 with the goal of removing financial barriers to health care access among the residents of Ghana.

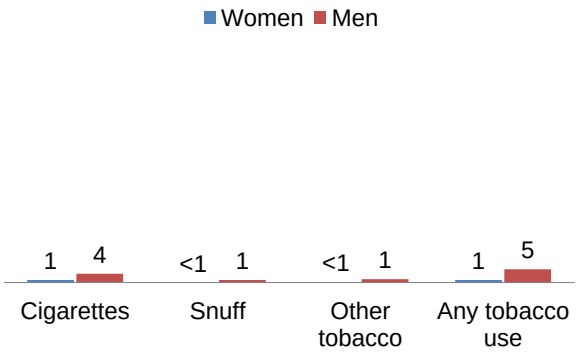
National/district health insurance is the most common type of health insurance, covering 90% of women and 73% of men. One percent of both women and men have other employer-based insurance, less than 1% of women and men have mutual health organization/community-based insurance, and less than 1% of women and 1% of men have private insurance. Ten percent of women and 27% of men are neither registered nor covered under any scheme (**Table 3.9.1** and **Table 3.9.2**).

3.7 TOBACCO USE

Smoking is a risk factor for cardiovascular diseases and multiple forms of cancer. It contributes to the severity of pneumonia, emphysema, and chronic bronchitis symptoms. Through secondhand smoke, tobacco use affects the health status of all household members.

Figure 3.6 **Use of tobacco among women and men**

Percentage of women and men age 15–49 who use tobacco products



Overall, 1% of women and 4% of men age 15–49 smoke cigarettes or any type of tobacco, and less than 1% of women and 1% of men smoke other forms of tobacco (**Figure 3.6**, **Table 3.10.1**, and **Table 3.10.2**). Sixty-four percent of men smoke less than five cigarettes per day, while 18% smoke five to nine cigarettes per day (**Table 3.11**). Use of any form of smokeless tobacco is also low (less than 1% among women and 1% among men) (**Table 3.12**). Overall, 1% of women and 5% of men age 15–49 use any type of tobacco (**Table 3.13**).

Trends: The percentage of men who use any type of tobacco declined from 8% in 2003 to 5% in 2014 and 2022.

3.8 ALCOHOL CONSUMPTION

Alcohol intake in large amounts is associated with an increased risk of alcoholism, malnutrition, chronic pancreatitis, alcohol liver disease, and cancer. Maternal alcohol use in the prenatal period is also of concern as it may cause miscarriage and stillbirth and contribute to a range of lifelong physical, behavioural, and intellectual disabilities. These disabilities are known as foetal alcohol spectrum disorders (CDC 2018).

Fourteen percent of women and 30% of men age 15–49 consumed any alcohol in the last month. Eighty percent of women and 64% of men who consumed alcohol did so 1–5 days during the preceding month. Only 6% of women and 12% of men consumed alcohol every day or almost every day (**Table 3.14.1** and **Table 3.14.2**).

Among respondents who drank any alcohol in the previous month, 58% of women and 43% of men consumed one drink on days when alcohol was consumed, 20% of women and 23% of men consumed two drinks, and 9% of women and 14% of men consumed six or more drinks (**Table 3.15.1** and **Table 3.15.2**).

3.9 PLACE OF BIRTH AND RECENT MIGRATION

Recent migration

Percentage of respondents who were born outside of their current place of residence and moved to their current place of residence in the 5 years preceding the survey.

Sample: Women and men age 15–49 who were born outside their current place of residence

Migration is linked with global issues including economic growth, poverty, and human rights. Thirty-two percent of women and 48% of men report that they have always lived in their current place of residence. Among the 66% of women and 50% of men who were born in Ghana but outside of their current place of residence, 40% of women and 34% of men moved to their current place of residence in the last 5 years (**Table 3.16.1** and **Table 3.16.2**).

3.9.1 Type of Migration

Table 3.17 shows that most women and men who moved to their current place of residence in the 5 years before the survey moved from an urban area to another urban area (53% and 56%, respectively). The next most common type of migration is urban to rural (24% and 31%, respectively).

3.9.2 Reason for Migration

Women and men mostly migrate for family-related reasons (45% and 46%, respectively). Twenty-eight percent of women migrate because of marriage, and 37% of men migrate for employment-related reasons (**Table 3.18.1** and **Table 3.18.2**).

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Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15–49 by selected background characteristics, Ghana DHS 2022

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15–19	17.9	2,682	2,835	22.7	1,424	1,430
20–24	17.9	2,695	2,669	16.5	1,033	1,023
25–29	15.6	2,340	2,386	14.1	888	882
30–34	15.0	2,252	2,228	13.6	853	899
35–39	13.7	2,059	2,021	12.9	809	806
40–44	11.2	1,675	1,646	11.4	713	711
45–49	8.7	1,312	1,229	8.9	557	542
Self-reported health status						
Very good	31.2	4,680	4,879	31.3	1,965	1,788
Good	45.7	6,862	6,934	46.0	2,887	3,075
Moderate	19.7	2,957	2,648	19.4	1,216	1,187
Bad	3.0	451	480	3.1	192	222
Very bad	0.4	63	73	0.3	18	21
Religion						
Catholic	9.1	1,367	1,669	8.1	508	676
Anglican	0.8	125	110	0.8	52	38
Methodist	5.0	751	567	5.5	346	244
Presbyterian	5.6	840	707	5.5	347	283
Pentecostal/Charismatic	41.6	6,251	5,366	35.0	2,199	1,793
Other Christian	14.6	2,197	2,011	15.4	965	856
Islam	19.4	2,906	3,994	21.1	1,322	1,808
Traditional/spiritualist	1.8	277	305	3.7	235	289
No religion	1.9	280	268	4.8	300	302
Other	0.1	20	17	0.1	4	4
Ethnic group						
Akan	46.1	6,917	5,217	46.0	2,887	2,146
Ga/Dangme	6.5	976	593	7.3	456	288
Ewe	11.6	1,746	1,641	10.9	687	662
Guan	3.2	476	697	3.5	223	314
Mole-Dagbani	18.6	2,789	4,024	18.4	1,155	1,646
Grusi	3.5	533	747	3.3	209	318
Gurma	6.7	1,013	1,484	6.7	422	615
Mande	3.0	445	479	2.6	161	212
Other	0.8	119	132	1.2	77	92
Marital status						
Never married	35.1	5,268	4,916	51.1	3,208	3,024
Married	40.0	6,008	6,884	37.8	2,374	2,603
Living together	14.6	2,197	1,927	7.2	454	417
Divorced/separated	7.8	1,175	960	3.6	224	229
Widowed	2.4	367	327	0.3	18	20
Residence						
Urban	57.0	8,557	7,362	54.8	3,442	2,925
Rural	43.0	6,457	7,652	45.2	2,835	3,368
Region						
Western	6.4	955	797	6.6	414	345
Central	11.3	1,703	979	10.9	686	396
Greater Accra	15.5	2,327	969	17.2	1,076	438
Volta	4.7	713	837	3.7	235	285
Eastern	8.1	1,220	854	7.4	466	325
Ashanti	19.5	2,928	1,131	18.8	1,179	438
Western North	2.7	411	792	2.9	181	351
Ahafo	2.1	317	849	2.1	133	359
Bono	3.8	567	835	3.5	222	324
Bono East	4.5	676	974	5.0	316	461
Oti	2.7	403	921	3.0	187	411
Northern	7.7	1,149	1,169	7.7	484	491
Savannah	2.1	319	999	2.5	155	490
North East	1.9	290	963	1.9	119	386
Upper East	4.3	640	987	4.3	267	415
Upper West	2.7	398	958	2.5	155	378
Education						
No education	16.1	2,411	3,357	10.0	628	938
Primary	13.8	2,071	2,245	11.5	725	833
Secondary	59.9	8,999	8,111	63.6	3,990	3,652
More than secondary	10.2	1,533	1,301	14.9	935	870
Wealth quintile						
Lowest	16.3	2,447	3,666	17.3	1,089	1,635
Second	18.1	2,712	3,366	18.0	1,133	1,391
Middle	20.8	3,121	3,008	18.1	1,137	1,176
Fourth	22.5	3,379	2,686	23.4	1,466	1,119
Highest	22.3	3,355	2,288	23.1	1,453	972

Continued…

Table 3.1—*Continued*

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Total 15–49	100.0	15,014	15,014	100.0	6,277	6,293
50–59	na	na	na	na	767	751
Total 15–59	na	na	na	na	7,044	7,044

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.
na = not applicable

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15–49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Ghana DHS 2022

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15–24	5.5	3.1	9.1	21.7	54.9	5.8	100.0	11.2	5,376
15–19	3.7	3.9	11.1	29.1	51.0	1.1	100.0	11.0	2,682
20–24	7.2	2.2	7.0	14.2	58.8	10.5	100.0	11.3	2,695
25–29	11.2	2.5	8.9	12.3	48.4	16.6	100.0	11.3	2,340
30–34	19.0	3.3	10.2	10.0	39.8	17.6	100.0	11.2	2,252
35–39	25.1	4.7	10.1	11.1	36.5	12.4	100.0	10.7	2,059
40–44	28.7	4.3	13.2	10.6	35.9	7.3	100.0	9.4	1,675
45–49	32.7	3.7	15.1	11.5	32.6	4.4	100.0	5.9	1,312
Residence									
Urban	9.2	2.5	8.8	15.3	49.4	14.9	100.0	11.3	8,557
Rural	25.2	4.6	12.5	14.4	39.3	4.0	100.0	9.8	6,457
Region									
Western	9.7	2.6	10.8	19.9	49.1	7.8	100.0	11.1	955
Central	7.4	5.1	10.9	26.2	42.6	7.8	100.0	11.0	1,703
Greater Accra	4.4	2.1	8.9	11.7	54.8	18.0	100.0	11.4	2,327
Volta	6.7	5.5	11.5	18.7	47.6	10.1	100.0	11.2	713
Eastern	7.8	4.7	11.9	15.7	50.3	9.5	100.0	11.2	1,220
Ashanti	9.0	2.3	8.9	12.3	56.0	11.5	100.0	11.3	2,928
Western North	14.0	4.8	10.2	21.8	41.7	7.6	100.0	10.9	411
Ahafo	17.5	3.3	8.6	21.9	43.7	5.1	100.0	10.9	317
Bono	11.8	2.9	7.9	20.9	46.3	10.2	100.0	11.1	567
Bono East	24.0	5.2	13.0	16.0	35.6	6.3	100.0	9.7	676
Oti	28.2	6.5	16.5	12.4	32.6	3.9	100.0	5.9	403
Northern	53.4	2.1	6.7	6.7	21.6	9.4	100.0	a	1,149
Savannah	46.9	4.2	17.1	6.0	22.5	3.3	100.0	3.9	319
North East	55.1	1.7	10.0	5.7	24.5	3.0	100.0	a	290
Upper East	25.9	3.7	13.6	9.6	38.0	9.1	100.0	10.1	640
Upper West	34.6	4.4	13.7	7.7	31.0	8.5	100.0	5.8	398
Wealth quintile									
Lowest	43.3	6.3	14.4	10.0	25.5	0.5	100.0	5.0	2,447
Second	24.6	4.7	13.9	16.6	39.1	1.1	100.0	9.6	2,712
Middle	11.7	4.1	12.6	18.6	50.2	2.8	100.0	11.1	3,121
Fourth	7.4	2.6	7.9	15.6	57.1	9.4	100.0	11.3	3,379
Highest	2.0	0.6	4.9	12.9	47.2	32.4	100.0	11.6	3,355
Total	16.1	3.4	10.4	14.9	45.0	10.2	100.0	11.1	15,014

[1] Completed 6 grade at the primary level
[2] Completed 6 grade at the secondary level
a = Omitted because more than 50% of the women completed 0 years of education

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15–49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Ghana DHS 2022

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15–24	4.5	3.9	9.0	21.0	53.7	7.9	100.0	11.2	2,458
15–19	3.7	4.7	10.6	27.2	52.5	1.3	100.0	11.1	1,424
20–24	5.6	2.9	6.9	12.4	55.3	17.0	100.0	11.4	1,033
25–29	8.0	1.9	7.0	10.4	52.0	20.7	100.0	11.4	888
30–34	12.1	2.2	9.6	7.4	45.7	23.0	100.0	11.4	853
35–39	15.0	2.1	8.7	11.0	43.6	19.6	100.0	11.3	809
40–44	16.2	1.7	8.4	9.2	49.2	15.3	100.0	11.3	713
45–49	19.0	3.4	8.4	10.3	42.0	16.9	100.0	11.2	557
Residence									
Urban	4.7	1.8	6.0	14.1	51.7	21.6	100.0	11.5	3,442
Rural	16.4	4.2	11.9	13.9	46.9	6.8	100.0	11.1	2,835
Region									
Western	5.0	1.7	9.9	10.9	61.3	11.3	100.0	11.4	414
Central	3.7	5.9	5.8	21.2	50.6	13.0	100.0	11.3	686
Greater Accra	1.8	1.1	6.1	11.5	53.2	26.3	100.0	11.6	1,076
Volta	3.5	1.4	10.6	19.8	48.2	16.5	100.0	11.3	235
Eastern	3.7	4.9	8.8	18.6	50.7	13.4	100.0	11.3	466
Ashanti	4.1	0.8	7.4	13.6	63.6	10.5	100.0	11.4	1,179
Western North	4.9	1.9	12.2	19.9	50.8	10.3	100.0	11.2	181
Ahafo	9.3	1.4	8.6	16.2	53.4	11.0	100.0	11.3	133
Bono	7.6	3.2	8.1	17.8	45.1	18.3	100.0	11.3	222
Bono East	24.2	2.0	10.7	7.8	43.0	12.3	100.0	11.1	316
Oti	18.7	9.2	11.1	16.6	35.4	9.1	100.0	10.0	187
Northern	34.2	5.2	8.9	11.8	25.1	14.9	100.0	8.5	484
Savannah	38.1	2.4	12.7	6.8	30.9	9.1	100.0	5.7	155
North East	33.8	6.7	8.9	8.9	31.3	10.4	100.0	8.3	119
Upper East	12.7	2.9	16.4	9.0	42.9	16.0	100.0	11.2	267
Upper West	25.6	3.6	14.3	12.3	30.9	13.3	100.0	9.4	155
Wealth quintile									
Lowest	31.7	7.1	15.3	12.4	31.6	1.8	100.0	5.7	1,089
Second	14.3	4.2	12.8	18.1	46.1	4.5	100.0	11.0	1,133
Middle	6.1	3.3	10.4	16.8	55.1	8.3	100.0	11.2	1,137
Fourth	2.5	1.1	6.3	13.9	62.7	13.4	100.0	11.4	1,466
Highest	0.9	0.1	1.6	10.0	47.9	39.5	100.0	11.8	1,453
Total 15–49	10.0	2.9	8.7	14.0	49.5	14.9	100.0	11.3	6,277
50–59	22.5	2.8	10.5	10.8	43.4	10.1	100.0	11.1	767
Total 15–59	11.4	2.9	8.9	13.7	48.8	14.4	100.0	11.3	7,044

[1] Completed 6 grade at the primary level
[2] Completed 6 grade at the secondary level

Table 3.3.1 Literacy: Women

Percent distribution of women age 15–49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Ghana DHS 2022

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/ visually impaired	Total	Percent-age literate[1]	Number of women
Age									
15–24	5.8	58.8	14.2	20.9	0.2	0.0	100.0	78.9	5,376
15–19	1.1	66.2	15.1	17.3	0.2	0.0	100.0	82.4	2,682
20–24	10.5	51.4	13.3	24.4	0.2	0.0	100.0	75.3	2,695
25–29	16.6	38.1	13.0	31.9	0.4	0.0	100.0	67.7	2,340
30–34	17.6	27.0	12.8	42.2	0.4	0.0	100.0	57.4	2,252
35–39	12.4	24.8	10.9	51.5	0.4	0.0	100.0	48.1	2,059
40–44	7.3	18.0	11.5	62.9	0.0	0.3	100.0	36.8	1,675
45–49	4.4	17.3	9.0	69.0	0.1	0.1	100.0	30.7	1,312
Residence									
Urban	14.9	44.2	12.4	28.1	0.3	0.1	100.0	71.5	8,557
Rural	4.0	29.8	12.9	53.1	0.2	0.0	100.0	46.6	6,457
Region									
Western	7.8	41.5	16.0	34.6	0.0	0.0	100.0	65.4	955
Central	7.8	50.0	15.0	26.9	0.3	0.0	100.0	72.9	1,703
Greater Accra	18.0	50.0	11.2	20.5	0.2	0.1	100.0	79.2	2,327
Volta	10.1	51.5	10.4	26.3	1.4	0.3	100.0	72.0	713
Eastern	9.5	40.9	16.3	33.2	0.1	0.0	100.0	66.7	1,220
Ashanti	11.5	37.3	12.8	38.3	0.2	0.0	100.0	61.5	2,928
Western North	7.6	28.0	12.2	52.2	0.0	0.0	100.0	47.8	411
Ahafo	5.1	28.5	14.7	51.7	0.0	0.0	100.0	48.3	317
Bono	10.2	36.7	14.6	38.1	0.2	0.1	100.0	61.5	567
Bono East	6.3	28.6	10.1	54.7	0.4	0.0	100.0	44.9	676
Oti	3.9	26.4	10.4	57.8	1.0	0.4	100.0	40.8	403
Northern	9.4	15.7	9.0	65.9	0.0	0.0	100.0	34.1	1,149
Savannah	3.3	17.6	9.9	68.4	0.7	0.0	100.0	30.9	319
North East	3.0	15.8	8.4	72.0	0.8	0.0	100.0	27.2	290
Upper East	9.1	33.8	12.3	44.7	0.1	0.1	100.0	55.2	640
Upper West	8.5	29.7	12.8	48.6	0.3	0.1	100.0	51.0	398
Wealth quintile									
Lowest	0.5	18.2	10.0	71.0	0.3	0.0	100.0	28.7	2,447
Second	1.1	28.9	13.8	56.0	0.1	0.1	100.0	43.7	2,712
Middle	2.8	41.0	15.8	40.0	0.2	0.2	100.0	59.6	3,121
Fourth	9.4	49.6	13.2	27.5	0.3	0.0	100.0	72.1	3,379
Highest	32.4	45.1	10.1	12.0	0.4	0.0	100.0	87.7	3,355
Total	10.2	38.0	12.6	38.9	0.3	0.1	100.0	60.8	15,014

[1] Refers to women who attended schooling higher than the secondary level and women with less schooling who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15–49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Ghana DHS 2022

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/ visually impaired	Total	Percent-age literate[1]	Number of men
Age									
15–24	7.9	55.1	17.2	19.8	0.1	0.0	100.0	80.1	2,458
15–19	1.3	57.4	20.5	20.7	0.1	0.0	100.0	79.2	1,424
20–24	17.0	51.9	12.6	18.5	0.0	0.1	100.0	81.4	1,033
25–29	20.7	42.3	15.3	21.4	0.3	0.1	100.0	78.3	888
30–34	23.0	35.0	16.4	25.5	0.0	0.0	100.0	74.5	853
35–39	19.6	27.2	23.4	29.8	0.1	0.0	100.0	70.1	809
40–44	15.3	25.8	21.2	37.5	0.2	0.0	100.0	62.3	713
45–49	16.9	22.0	19.3	41.6	0.1	0.2	100.0	58.1	557
Residence									
Urban	21.6	44.9	18.7	14.7	0.1	0.0	100.0	85.2	3,442
Rural	6.8	35.5	17.7	39.8	0.1	0.0	100.0	60.0	2,835
Region									
Western	11.3	40.9	23.9	24.0	0.0	0.0	100.0	76.0	414
Central	13.0	45.6	15.6	25.9	0.0	0.0	100.0	74.1	686
Greater Accra	26.3	42.4	25.2	5.8	0.4	0.0	100.0	93.9	1,076
Volta	16.5	56.2	14.1	12.7	0.5	0.0	100.0	86.8	235
Eastern	13.4	46.0	13.4	27.2	0.0	0.0	100.0	72.8	466
Ashanti	10.5	49.3	17.1	23.2	0.0	0.0	100.0	76.8	1,179
Western North	10.3	35.7	28.6	25.5	0.0	0.0	100.0	74.5	181
Ahafo	11.0	45.0	14.1	29.9	0.0	0.0	100.0	70.1	133
Bono	18.3	37.2	20.7	23.9	0.0	0.0	100.0	76.1	222
Bono East	12.3	29.7	22.4	35.7	0.0	0.0	100.0	64.3	316
Oti	9.1	37.4	11.0	41.6	0.7	0.2	100.0	57.5	187
Northern	14.9	24.7	12.8	47.3	0.0	0.2	100.0	52.4	484
Savannah	9.1	26.4	15.5	48.6	0.0	0.4	100.0	51.0	155
North East	10.4	25.0	15.2	49.4	0.0	0.0	100.0	50.6	119
Upper East	16.0	31.7	15.7	36.3	0.0	0.2	100.0	63.5	267
Upper West	13.3	26.9	11.2	48.7	0.0	0.0	100.0	51.3	155
Wealth quintile									
Lowest	1.8	24.3	16.3	57.3	0.1	0.1	100.0	42.5	1,089
Second	4.5	36.7	18.1	40.6	0.0	0.1	100.0	59.3	1,133
Middle	8.3	44.5	22.2	24.7	0.1	0.1	100.0	75.1	1,137
Fourth	13.4	50.8	20.8	15.0	0.1	0.0	100.0	84.9	1,466
Highest	39.5	42.8	14.2	3.4	0.2	0.0	100.0	96.4	1,453
Total 15–49	14.9	40.7	18.3	26.0	0.1	0.0	100.0	73.8	6,277
50–59	10.1	24.4	19.6	45.1	0.0	0.9	100.0	54.0	767
Total 15–59	14.4	38.9	18.4	28.1	0.1	0.1	100.0	71.7	7,044

[1] Refers to men who attended schooling higher than the secondary level and men with less schooling who can read a whole sentence or part of a sentence

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15–49 who are exposed to specific media on a weekly basis, according to background characteristics, Ghana DHS 2022

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15–19	5.0	61.9	34.7	1.9	29.1	2,682
20–24	3.8	60.4	38.5	1.7	28.0	2,695
25–29	3.8	66.8	41.1	2.3	23.8	2,340
30–34	3.9	65.7	44.7	2.5	24.5	2,252
35–39	2.2	62.7	47.4	1.4	25.7	2,059
40–44	2.8	59.0	48.9	2.1	28.4	1,675
45–49	2.6	48.8	46.8	1.9	34.6	1,312
Residence						
Urban	5.0	73.0	45.3	2.8	19.1	8,557
Rural	1.7	46.4	38.3	0.9	38.3	6,457
Region						
Western	3.5	69.3	51.2	1.7	19.3	955
Central	5.3	73.5	46.0	2.1	17.7	1,703
Greater Accra	7.6	82.8	47.6	4.7	13.4	2,327
Volta	4.1	56.8	50.3	2.8	27.0	713
Eastern	3.0	71.3	47.6	1.8	17.9	1,220
Ashanti	1.8	62.4	47.6	1.0	24.0	2,928
Western North	3.4	57.6	38.3	1.5	28.4	411
Ahafo	1.1	43.5	33.4	1.0	39.7	317
Bono	1.8	61.4	40.2	0.9	27.5	567
Bono East	3.7	51.8	32.3	1.9	37.3	676
Oti	2.2	53.0	44.3	1.1	30.0	403
Northern	1.8	41.0	19.1	1.0	53.8	1,149
Savannah	1.0	37.9	30.0	0.6	44.7	319
North East	1.3	38.7	28.6	0.7	45.3	290
Upper East	3.5	30.8	36.2	1.7	49.4	640
Upper West	1.8	29.3	29.2	1.0	53.1	398
Education						
No education	0.2	33.1	29.2	0.1	52.2	2,411
Primary	0.7	54.7	38.0	0.1	32.6	2,071
Secondary	3.4	67.8	45.3	1.8	21.7	8,999
More than secondary	14.0	79.4	50.8	8.3	14.0	1,533
Wealth quintile						
Lowest	1.1	15.5	31.0	0.5	61.9	2,447
Second	1.8	46.7	36.7	0.5	38.1	2,712
Middle	1.4	67.4	40.3	0.7	22.8	3,121
Fourth	4.1	78.7	47.7	2.5	14.9	3,379
Highest	8.5	84.6	51.4	4.9	10.2	3,355
Total	3.6	61.6	42.3	2.0	27.3	15,014

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15–49 who are exposed to specific media on a weekly basis, according to background characteristics, Ghana DHS 2022

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15–19	5.5	62.1	34.3	3.4	29.0	1,424
20–24	8.6	61.1	48.2	5.8	25.2	1,033
25–29	9.0	64.9	51.8	5.0	22.4	888
30–34	8.7	67.4	54.4	5.5	18.7	853
35–39	7.8	66.7	61.6	5.9	17.6	809
40–44	8.1	62.7	59.2	5.8	18.4	713
45–49	8.0	57.8	66.0	6.4	21.0	557
Residence						
Urban	9.2	71.7	51.6	6.0	18.2	3,442
Rural	6.0	53.2	50.1	4.1	28.0	2,835
Region						
Western	36.1	86.3	76.3	31.9	6.5	414
Central	4.3	65.4	47.5	2.0	18.8	686
Greater Accra	7.2	74.2	58.7	4.4	14.3	1,076
Volta	9.3	69.6	60.6	4.8	16.6	235
Eastern	4.5	75.9	46.4	3.3	15.0	466
Ashanti	7.1	65.3	52.8	4.2	21.9	1,179
Western North	2.6	53.0	54.3	2.3	27.0	181
Ahafo	3.0	43.5	54.3	0.9	29.6	133
Bono	8.3	66.1	47.4	4.1	19.4	222
Bono East	2.6	46.6	31.2	2.3	44.0	316
Oti	5.2	56.7	50.5	2.5	25.7	187
Northern	6.4	49.5	42.8	3.2	31.6	484
Savannah	3.6	42.1	35.1	1.5	41.5	155
North East	4.9	43.4	37.8	3.6	41.6	119
Upper East	4.4	47.2	42.4	2.0	31.0	267
Upper West	2.6	30.0	34.5	0.9	49.5	155
Education						
No education	0.5	33.1	40.5	0.0	44.8	628
Primary	0.7	48.9	48.4	0.4	32.2	725
Secondary	7.0	68.1	52.3	5.1	19.8	3,990
More than secondary	21.5	74.4	54.4	12.7	12.7	935
Wealth quintile						
Lowest	1.5	24.3	42.6	0.5	46.6	1,089
Second	5.5	58.4	46.2	4.0	27.6	1,133
Middle	5.9	69.4	54.1	3.2	17.6	1,137
Fourth	9.4	76.6	57.1	6.4	13.6	1,466
Highest	14.0	78.3	52.1	9.9	14.0	1,453
Total 15–49	7.8	63.3	50.9	5.2	22.7	6,277
50–59	7.7	52.7	64.5	6.3	24.0	767
Total 15–59	7.7	62.2	52.4	5.3	22.8	7,044

Table 3.5.1 Internet usage: Women

Percentage of women age 15–49 who have ever used the internet and percentage who have used the internet in the last 12 months, and among women who have used the internet in the last 12 months, percent distribution by frequency of internet use in the last month, according to background characteristics, Ghana DHS 2022

Background characteristic	Ever used the internet	Used the internet in the last 12 months	Number	Among respondents who have used the internet in the last 12 months, percentage who, in the last month, used the internet: Almost every day	At least once a week	Less than once a week	Not at all	Total	Number
Age									
15–19	40.1	35.7	2,682	56.0	27.6	12.1	4.3	100.0	957
20–24	62.9	58.9	2,695	69.6	21.0	6.2	3.2	100.0	1,588
25–29	58.1	54.9	2,340	67.7	21.7	6.7	3.9	100.0	1,284
30–34	49.9	47.6	2,252	67.4	24.1	5.7	2.8	100.0	1,073
35–39	41.4	38.4	2,059	62.4	24.6	10.6	2.4	100.0	790
40–44	32.2	29.8	1,675	56.4	28.6	10.0	5.0	100.0	500
45–49	26.1	23.8	1,312	51.6	30.7	14.0	3.8	100.0	313
Residence									
Urban	60.7	57.8	8,557	67.0	23.1	6.8	3.0	100.0	4,950
Rural	27.8	24.1	6,457	54.9	27.3	12.9	4.9	100.0	1,555
Region									
Western	50.9	47.7	955	58.4	23.6	13.5	4.5	100.0	455
Central	51.4	46.7	1,703	62.7	20.5	10.2	6.7	100.0	794
Greater Accra	69.3	67.8	2,327	72.3	21.7	3.9	2.2	100.0	1,578
Volta	38.8	36.4	713	65.3	24.5	7.0	3.2	100.0	259
Eastern	42.0	40.0	1,220	75.9	15.2	5.8	3.0	100.0	488
Ashanti	57.2	52.0	2,928	60.1	29.6	7.4	2.9	100.0	1,522
Western North	32.1	28.5	411	57.0	25.5	11.7	5.7	100.0	117
Ahafo	34.6	31.1	317	40.0	39.4	19.9	0.7	100.0	98
Bono	45.3	41.7	567	63.6	24.3	8.1	4.0	100.0	237
Bono East	32.7	30.5	676	64.0	26.9	8.1	0.9	100.0	206
Oti	18.8	17.8	403	61.4	30.9	5.9	1.8	100.0	72
Northern	31.5	28.1	1,149	54.0	20.6	20.7	4.8	100.0	323
Savannah	16.8	15.3	319	52.4	32.2	13.6	1.8	100.0	49
North East	13.5	11.7	290	57.3	35.9	6.8	0.0	100.0	34
Upper East	33.0	30.1	640	64.0	20.4	10.6	5.0	100.0	192
Upper West	22.4	20.3	398	46.5	37.6	8.5	7.3	100.0	81
Education									
No education	12.2	11.0	2,411	29.2	38.0	26.4	6.4	100.0	264
Primary	20.8	17.9	2,071	44.8	31.6	17.5	6.1	100.0	370
Secondary	53.0	48.9	8,999	59.8	27.4	8.8	4.0	100.0	4,396
More than secondary	97.0	96.2	1,533	88.0	10.0	1.3	0.8	100.0	1,474
Wealth quintile									
Lowest	11.3	8.8	2,447	39.7	28.2	21.9	10.3	100.0	215
Second	24.2	21.1	2,712	48.5	32.9	13.7	5.0	100.0	571
Middle	39.5	35.6	3,121	51.5	31.0	12.0	5.5	100.0	1,112
Fourth	60.5	56.8	3,379	61.9	26.0	9.2	2.9	100.0	1,918
Highest	82.7	80.1	3,355	76.2	17.7	3.9	2.2	100.0	2,689
Total	46.5	43.3	15,014	64.1	24.1	8.3	3.5	100.0	6,505

Table 3.5.2 Internet usage: Men

Percentage of men age 15–49 who have ever used the internet and percentage who have used the internet in the last 12 months, and among men who have used the internet in the last 12 months, percent distribution by frequency of internet use in the last month, according to background characteristics, Ghana DHS 2022

Background characteristic	Ever used the internet	Used the internet in the last 12 months	Number	Among respondents who have used the internet in the last 12 months, percentage who, in the last month, used the internet: Almost every day	At least once a week	Less than once a week	Not at all	Total	Number
Age									
15–19	56.8	50.2	1,424	61.1	26.2	10.0	2.7	100.0	715
20–24	81.7	79.2	1,033	76.8	14.0	7.6	1.6	100.0	818
25–29	79.5	76.3	888	83.3	12.0	3.6	1.1	100.0	677
30–34	71.4	68.3	853	78.7	16.3	2.7	2.3	100.0	582
35–39	61.9	59.6	809	78.9	16.0	4.0	1.0	100.0	482
40–44	52.3	50.7	713	70.1	23.9	4.9	1.1	100.0	362
45–49	43.2	40.9	557	71.5	20.9	5.8	1.9	100.0	228
Residence									
Urban	77.2	74.4	3,442	81.2	13.7	4.2	0.9	100.0	2,560
Rural	50.3	46.0	2,835	61.8	26.1	8.8	3.2	100.0	1,304
Region									
Western	69.8	66.4	414	84.0	11.0	2.6	2.4	100.0	275
Central	60.0	57.9	686	66.8	25.4	6.7	1.0	100.0	398
Greater Accra	84.7	82.1	1,076	89.0	9.2	1.8	0.0	100.0	884
Volta	68.4	66.3	235	73.1	17.9	2.0	7.0	100.0	156
Eastern	59.7	59.2	466	70.1	14.8	15.1	0.0	100.0	276
Ashanti	75.0	68.6	1,179	71.6	22.4	6.0	0.0	100.0	809
Western North	60.5	59.1	181	51.2	28.2	20.7	0.0	100.0	107
Ahafo	50.0	46.6	133	71.5	20.0	3.7	4.7	100.0	62
Bono	66.6	62.0	222	72.3	18.1	9.0	0.6	100.0	138
Bono East	54.8	52.8	316	76.6	20.5	1.5	1.3	100.0	167
Oti	53.9	49.4	187	50.7	29.9	8.5	10.9	100.0	92
Northern	44.7	39.6	484	70.9	18.0	5.4	5.7	100.0	192
Savannah	41.2	38.1	155	63.8	21.1	5.3	9.8	100.0	59
North East	37.9	37.1	119	86.2	11.6	0.4	1.8	100.0	44
Upper East	58.7	54.2	267	67.9	21.5	5.4	5.3	100.0	145
Upper West	42.8	39.5	155	52.0	23.6	18.5	5.9	100.0	61
Education									
No education	24.4	22.0	628	54.8	32.0	7.5	5.7	100.0	138
Primary	36.3	31.5	725	62.4	21.4	14.5	1.8	100.0	229
Secondary	69.2	65.0	3,990	70.7	20.8	6.6	2.0	100.0	2,593
More than secondary	97.0	96.8	935	92.2	6.3	1.1	0.4	100.0	905
Wealth quintile									
Lowest	31.4	27.8	1,089	50.2	30.6	13.2	6.0	100.0	303
Second	49.0	43.9	1,133	60.0	25.7	11.0	3.4	100.0	497
Middle	62.7	59.0	1,137	67.0	22.2	8.5	2.3	100.0	670
Fourth	77.8	74.7	1,466	76.7	17.4	4.8	1.0	100.0	1,095
Highest	91.7	89.3	1,453	88.1	10.0	1.5	0.4	100.0	1,298
Total 15–49	65.0	61.6	6,277	74.7	17.9	5.8	1.7	100.0	3,864
50–59	30.8	29.0	767	62.9	22.1	14.0	1.0	100.0	223
Total 15–59	61.3	58.0	7,044	74.0	18.1	6.2	1.7	100.0	4,087

Table 3.6.1 Employment status: Women

Percent distribution of women age 15–49 by employment status, according to background characteristics, Ghana DHS 2022

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed[1]	Not currently employed			
Age					
15–19	37.5	3.0	59.4	100.0	2,682
20–24	65.0	5.1	29.9	100.0	2,695
25–29	80.3	4.5	15.1	100.0	2,340
30–34	87.6	3.9	8.6	100.0	2,252
35–39	89.3	3.0	7.7	100.0	2,059
40–44	92.4	2.2	5.5	100.0	1,675
45–49	92.1	2.0	5.9	100.0	1,312
Marital status					
Never married	54.9	3.7	41.3	100.0	5,268
Married or living together	84.6	3.4	12.0	100.0	8,205
Divorced/separated/ widowed	88.9	4.0	7.1	100.0	1,542
Number of living children					
0	53.9	3.6	42.4	100.0	4,925
1–2	78.9	4.4	16.7	100.0	4,598
3–4	88.7	3.0	8.2	100.0	3,391
5+	91.0	2.5	6.5	100.0	2,100
Residence					
Urban	73.0	3.6	23.4	100.0	8,557
Rural	76.8	3.5	19.7	100.0	6,457
Region					
Western	76.7	2.7	20.7	100.0	955
Central	75.8	4.4	19.8	100.0	1,703
Greater Accra	70.1	4.0	25.9	100.0	2,327
Volta	74.9	3.7	21.4	100.0	713
Eastern	73.2	2.1	24.7	100.0	1,220
Ashanti	79.4	2.4	18.3	100.0	2,928
Western North	79.5	4.3	16.2	100.0	411
Ahafo	64.9	7.9	27.2	100.0	317
Bono	75.3	3.1	21.7	100.0	567
Bono East	71.2	3.2	25.5	100.0	676
Oti	80.0	4.4	15.6	100.0	403
Northern	74.6	3.5	21.8	100.0	1,149
Savannah	64.0	5.3	30.6	100.0	319
North East	70.7	5.6	23.6	100.0	290
Upper East	78.7	3.2	18.1	100.0	640
Upper West	67.3	6.9	25.8	100.0	398
Education					
No education	84.2	3.1	12.7	100.0	2,411
Primary	79.3	3.7	17.0	100.0	2,071
Secondary	70.5	3.5	26.0	100.0	8,999
More than secondary	77.7	4.4	17.9	100.0	1,533
Wealth quintile					
Lowest	75.9	3.9	20.2	100.0	2,447
Second	74.2	4.1	21.7	100.0	2,712
Middle	73.8	3.5	22.7	100.0	3,121
Fourth	74.8	3.7	21.5	100.0	3,379
Highest	74.7	2.9	22.4	100.0	3,355
Total	74.6	3.6	21.8	100.0	15,014

[1] Currently employed is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.6.2 Employment status: Men

Percent distribution of men age 15–49 by employment status, according to background characteristics, Ghana DHS 2022

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed[1]	Not currently employed			
Age					
15–19	49.2	6.1	44.7	100.0	1,424
20–24	77.3	5.2	17.5	100.0	1,033
25–29	93.9	1.8	4.3	100.0	888
30–34	95.7	2.4	1.9	100.0	853
35–39	98.6	0.7	0.7	100.0	809
40–44	98.6	0.2	1.3	100.0	713
45–49	97.1	0.8	2.1	100.0	557
Marital status					
Never married	67.8	5.0	27.2	100.0	3,208
Married or living together	98.6	0.9	0.5	100.0	2,828
Divorced/separated/ widowed	93.3	1.2	5.5	100.0	242
Number of living children					
0	68.3	5.0	26.7	100.0	3,270
1–2	98.0	1.1	1.0	100.0	1,356
3–4	98.8	0.7	0.4	100.0	1,014
5+	98.2	0.7	1.1	100.0	636
Residence					
Urban	80.3	3.5	16.2	100.0	3,442
Rural	85.6	2.4	12.0	100.0	2,835
Region					
Western	73.5	4.6	21.9	100.0	414
Central	75.5	2.7	21.8	100.0	686
Greater Accra	82.9	3.4	13.6	100.0	1,076
Volta	78.0	3.6	18.4	100.0	235
Eastern	85.3	0.9	13.8	100.0	466
Ashanti	83.2	4.0	12.8	100.0	1,179
Western North	85.5	2.0	12.5	100.0	181
Ahafo	82.3	1.1	16.6	100.0	133
Bono	77.0	2.8	20.2	100.0	222
Bono East	90.5	0.9	8.6	100.0	316
Oti	89.2	5.6	5.2	100.0	187
Northern	89.4	2.3	8.3	100.0	484
Savannah	84.7	4.5	10.8	100.0	155
North East	91.5	0.4	8.2	100.0	119
Upper East	81.2	1.7	17.1	100.0	267
Upper West	86.3	4.6	9.1	100.0	155
Education					
No education	96.2	1.3	2.5	100.0	628
Primary	85.5	2.2	12.3	100.0	725
Secondary	80.0	3.2	16.8	100.0	3,990
More than secondary	82.9	3.8	13.3	100.0	935
Wealth quintile					
Lowest	89.0	1.5	9.5	100.0	1,089
Second	81.6	3.0	15.3	100.0	1,133
Middle	82.9	4.1	13.0	100.0	1,137
Fourth	81.7	3.0	15.3	100.0	1,466
Highest	79.7	3.2	17.1	100.0	1,453
Total 15–49	82.7	3.0	14.3	100.0	6,277
50–59	96.4	1.8	1.8	100.0	767
Total 15–59	84.2	2.9	13.0	100.0	7,044

[1] Currently employed is defined as having done work in the last 7 days. Includes persons who did not work in the last 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.7.1 Occupation: Women

Percent distribution of women age 15–49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Ghana DHS 2022

Background characteristic	Profes-sional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Other	Total	Number of women
Age									
15–19	3.0	1.0	57.6	15.8	1.0	18.3	3.4	100.0	1,088
20–24	7.4	3.7	58.0	22.0	1.3	6.2	1.5	100.0	1,889
25–29	11.3	3.8	63.4	16.4	0.8	4.0	0.3	100.0	1,986
30–34	12.4	1.2	68.7	11.6	0.9	4.2	0.9	100.0	2,059
35–39	10.5	1.3	73.6	9.7	0.6	3.9	0.5	100.0	1,901
40–44	5.6	0.5	81.4	8.3	0.3	3.6	0.3	100.0	1,583
45–49	5.1	0.5	83.8	5.6	0.8	3.9	0.3	100.0	1,235
Marital status									
Never married	11.1	4.1	56.2	16.4	1.0	8.9	2.3	100.0	3,090
Married or living together	8.1	1.2	72.6	12.5	0.5	4.8	0.4	100.0	7,218
Divorced/separated/ widowed	5.4	0.7	79.7	9.0	1.9	2.9	0.5	100.0	1,433
Number of living children									
0	13.7	3.9	51.4	18.0	1.0	9.4	2.6	100.0	2,835
1–2	10.3	2.2	66.4	15.7	0.9	4.0	0.6	100.0	3,830
3–4	6.2	0.8	77.6	10.5	0.8	3.9	0.2	100.0	3,113
5+	1.4	0.2	86.7	5.0	0.3	6.0	0.4	100.0	1,963
Residence									
Urban	11.6	2.7	67.9	13.7	0.7	2.2	1.2	100.0	6,553
Rural	4.7	0.8	70.7	12.3	0.9	10.0	0.6	100.0	5,188
Region									
Western	8.9	1.8	69.3	14.7	1.1	4.1	0.2	100.0	757
Central	6.8	1.3	73.6	12.9	1.0	3.1	1.2	100.0	1,365
Greater Accra	13.1	2.5	70.0	11.1	1.1	1.2	1.0	100.0	1,725
Volta	10.4	1.3	70.6	13.7	0.3	2.7	1.0	100.0	560
Eastern	10.5	1.6	72.4	14.4	0.3	0.4	0.3	100.0	919
Ashanti	8.6	2.9	71.4	11.8	1.5	3.0	0.8	100.0	2,393
Western North	5.8	1.2	60.2	14.4	0.8	17.3	0.3	100.0	344
Ahafo	4.4	1.6	70.6	11.7	0.9	9.8	1.1	100.0	231
Bono	9.7	2.3	63.5	13.2	0.5	7.6	3.1	100.0	444
Bono East	6.2	2.4	60.6	11.9	0.0	18.5	0.4	100.0	503
Oti	4.7	0.6	81.9	7.9	0.0	4.5	0.4	100.0	340
Northern	6.5	0.9	62.9	13.0	0.2	15.7	0.8	100.0	898
Savannah	3.1	0.8	64.8	14.3	0.7	16.1	0.2	100.0	222
North East	2.3	0.7	77.4	12.6	0.1	6.5	0.3	100.0	221
Upper East	8.8	1.5	58.5	20.7	0.1	7.6	2.8	100.0	524
Upper West	7.0	1.6	64.2	19.8	0.2	6.6	0.6	100.0	295
Education									
No education	0.6	0.0	80.7	8.0	0.4	10.0	0.2	100.0	2,104
Primary	0.2	0.0	78.7	12.7	1.3	6.5	0.6	100.0	1,719
Secondary	3.8	2.2	71.2	16.2	0.9	4.7	0.9	100.0	6,660
More than secondary	58.1	5.9	25.9	5.6	0.1	1.7	2.6	100.0	1,259
Wealth quintile									
Lowest	0.7	0.1	71.1	11.1	0.5	15.9	0.5	100.0	1,952
Second	1.5	0.6	75.0	12.7	0.4	9.0	0.8	100.0	2,124
Middle	4.5	1.3	72.1	16.3	1.8	3.4	0.6	100.0	2,412
Fourth	8.2	3.2	71.9	13.3	0.8	1.8	0.8	100.0	2,652
Highest	24.3	3.5	57.4	11.7	0.4	1.2	1.7	100.0	2,602
Total	8.6	1.9	69.1	13.1	0.8	5.6	0.9	100.0	11,741

Table 3.7.2 Occupation: Men

Percent distribution of men age 15–49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Ghana DHS 2022

Background characteristic	Profes-sional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Other	Total	Number of men
Age									
15–19	2.2	0.1	35.3	27.2	8.9	23.9	2.4	100.0	787
20–24	9.2	2.8	30.9	34.5	7.6	13.2	1.7	100.0	852
25–29	17.0	3.0	25.7	36.6	6.5	10.1	1.1	100.0	849
30–34	16.2	2.3	31.1	36.0	4.0	9.6	0.9	100.0	837
35–39	14.3	2.2	36.2	34.4	3.6	8.1	1.1	100.0	803
40–44	10.9	1.9	40.9	32.5	2.4	10.9	0.6	100.0	704
45–49	16.0	0.5	41.3	29.5	2.7	9.6	0.4	100.0	545
Marital status									
Never married	12.0	2.5	30.6	32.0	6.9	14.0	2.0	100.0	2,337
Married or living together	12.8	1.5	35.8	34.8	3.8	10.8	0.5	100.0	2,813
Divorced/separated/ widowed	6.2	1.4	44.8	26.0	7.2	12.9	1.5	100.0	228
Number of living children									
0	12.2	2.3	30.3	32.7	6.5	14.6	1.6	100.0	2,396
1–2	13.7	3.0	30.4	36.3	5.5	9.3	1.8	100.0	1,343
3–4	13.3	0.8	37.6	36.8	3.2	7.9	0.3	100.0	1,010
5+	7.0	0.3	49.4	23.0	3.1	17.1	0.1	100.0	629
Residence									
Urban	16.6	2.7	25.5	43.3	4.8	5.4	1.7	100.0	2,883
Rural	7.0	1.1	43.6	21.6	5.8	20.2	0.7	100.0	2,496
Region									
Western	10.3	1.5	35.9	36.2	10.0	5.1	1.0	100.0	324
Central	11.0	2.8	27.3	42.7	7.4	8.5	0.5	100.0	537
Greater Accra	18.1	1.8	24.2	47.6	5.4	1.2	1.8	100.0	930
Volta	14.3	4.5	36.4	33.3	0.6	8.7	2.1	100.0	192
Eastern	9.9	4.3	30.9	29.4	4.6	17.9	3.1	100.0	401
Ashanti	13.0	1.9	33.0	40.1	8.2	3.4	0.5	100.0	1,028
Western North	7.7	1.1	29.7	21.7	5.9	33.3	0.7	100.0	158
Ahafo	7.1	1.8	50.7	30.3	2.5	7.1	0.4	100.0	111
Bono	14.9	1.8	43.2	26.3	2.4	7.2	4.2	100.0	177
Bono East	9.7	1.5	44.7	16.6	2.1	24.3	1.1	100.0	289
Oti	8.4	1.0	39.9	17.7	0.7	31.2	1.1	100.0	177
Northern	9.4	0.9	28.9	20.7	0.7	39.1	0.3	100.0	444
Savannah	7.8	0.7	53.3	17.2	2.0	17.8	1.2	100.0	139
North East	8.9	0.7	39.8	11.5	1.8	37.1	0.4	100.0	109
Upper East	13.3	1.2	41.4	25.9	8.3	8.8	1.1	100.0	221
Upper West	8.8	1.2	61.9	17.5	5.1	5.5	0.0	100.0	141
Education									
No education	0.4	0.0	50.9	14.5	2.6	31.5	0.1	100.0	612
Primary	1.0	0.1	41.8	33.4	6.0	16.8	0.8	100.0	636
Secondary	5.8	1.5	32.9	41.3	6.7	10.5	1.2	100.0	3,320
More than secondary	55.8	6.7	19.0	14.0	0.7	1.7	2.2	100.0	810
Wealth quintile									
Lowest	1.4	0.6	53.2	10.0	3.2	31.2	0.4	100.0	985
Second	4.2	0.5	42.2	27.2	5.1	19.8	1.0	100.0	959
Middle	7.0	1.4	31.2	41.9	9.3	7.6	1.5	100.0	989
Fourth	12.8	3.0	24.6	46.3	6.8	5.3	1.2	100.0	1,241
Highest	30.9	3.4	23.4	36.4	2.1	1.9	1.8	100.0	1,204
Total 15–49	12.2	1.9	33.9	33.2	5.3	12.3`	1.2	100.0	5,378
50–59	9.2	0.9	54.7	22.6	3.5	8.8	0.4	100.0	754
Total 15–59	11.8	1.8	36.5	31.9	5.0	11.9	1.1	100.0	6,132

Table 3.8.1 Type of employment: Women

Percent distribution of women age 15–49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Ghana DHS 2022

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	22.8	59.1	57.0
Cash and in-kind	19.0	20.2	20.1
In-kind only	24.9	4.6	5.8
Not paid	33.3	16.2	17.1
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	55.9	11.7	14.2
Employed by non-family member	20.7	24.9	24.7
Self-employed	23.4	63.4	61.1
Total	100.0	100.0	100.0
Continuity of employment			
All year	49.5	81.1	79.3
Seasonal	31.2	14.3	15.2
Occasional	19.3	4.6	5.4
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	661	11,081	11,741

Note: Total includes women with missing information on type of employment who are not shown separately.

Table 3.8.2 Type of employment: Men

Percent distribution of men age 15–49 employed in the 12 months preceding the survey by type of earnings and continuity of employment, according to type of employment (agricultural or nonagricultural), Ghana DHS 2022

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	32.7	78.8	73.3
Cash and in-kind	29.5	12.5	14.5
In-kind only	7.6	2.5	3.1
Not paid	30.2	6.2	9.1
Total	100.0	100.0	100.0
Continuity of employment			
All year	44.2	72.9	69.5
Seasonal	42.6	20.0	22.7
Occasional	13.2	7.1	7.9
Total	100.0	100.0	100.0
Number of men employed during the last 12 months	727	5,405	6,132

Note: Total includes men with missing information on type of employment who are not shown separately.

Table 3.9.1 Health insurance coverage: Women

Percentage of women age 15–49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Ghana DHS 2022

Background characteristic	National/ district health insurance	Other employer-based insurance	Mutual health organization/ community-based insurance	Privately purchased commercial insurance	None	Any health insurance	Number of women
Age							
15–19	85.8	0.5	0.1	0.1	14.1	85.9	2,682
20–24	90.6	0.3	0.0	0.2	9.4	90.6	2,695
25–29	91.2	1.0	0.6	0.3	8.2	91.8	2,340
30–34	91.9	1.7	0.4	0.8	7.7	92.3	2,252
35–39	91.3	1.5	0.2	0.6	7.9	92.1	2,059
40–44	90.5	1.5	0.2	0.4	8.9	91.1	1,675
45–49	86.5	1.1	0.2	0.4	13.2	86.8	1,312
Residence							
Urban	90.3	1.5	0.3	0.5	9.2	90.8	8,557
Rural	89.1	0.4	0.1	0.2	10.8	89.2	6,457
Region							
Western	88.2	0.9	0.4	0.3	11.6	88.4	955
Central	83.3	0.3	0.1	0.2	16.5	83.5	1,703
Greater Accra	85.2	3.7	0.6	0.3	13.4	86.6	2,327
Volta	93.2	0.1	0.5	0.2	6.8	93.2	713
Eastern	93.1	1.0	0.4	0.6	6.7	93.3	1,220
Ashanti	92.3	1.0	0.1	0.7	7.5	92.5	2,928
Western North	91.2	0.3	0.0	0.5	8.7	91.3	411
Ahafo	94.9	0.6	0.0	0.7	4.7	95.3	317
Bono	98.5	0.3	0.0	0.9	1.5	98.5	567
Bono East	93.2	0.0	0.2	0.0	6.8	93.2	676
Oti	84.1	0.2	0.0	0.1	15.9	84.1	403
Northern	86.6	0.6	0.2	0.3	12.7	87.3	1,149
Savannah	85.8	0.0	0.0	0.0	14.2	85.8	319
North East	92.7	0.0	0.0	0.0	7.3	92.7	290
Upper East	96.8	0.2	0.0	0.1	3.2	96.8	640
Upper West	93.3	0.1	0.1	0.4	6.7	93.3	398
Education							
No education	87.1	0.0	0.1	0.1	12.8	87.2	2,411
Primary	86.7	0.1	0.2	0.1	13.1	86.9	2,071
Secondary	90.7	0.8	0.1	0.1	9.1	90.9	8,999
More than secondary	92.7	5.2	1.2	2.9	5.5	94.5	1,533
Wealth quintile							
Lowest	87.1	0.0	0.0	0.1	12.8	87.2	2,447
Second	89.1	0.0	0.0	0.0	10.9	89.1	2,712
Middle	89.3	0.2	0.0	0.0	10.4	89.6	3,121
Fourth	90.3	0.6	0.2	0.3	9.4	90.6	3,379
Highest	92.1	3.8	0.8	1.3	6.9	93.1	3,355
Total	89.8	1.0	0.2	0.4	9.9	90.1	15,014

Table 3.9.2 Health insurance coverage: Men

Percentage of men age 15–49 with specific types of health insurance coverage, and percentage with any health insurance, according to background characteristics, Ghana DHS 2022

Background characteristic	National/ district health insurance	Other employer-based insurance	Mutual health organization/ community-based insurance	Privately purchased commercial insurance	None	Any health insurance	Number of men
Age							
15–19	84.5	0.0	0.0	0.2	15.5	84.5	1,424
20–24	79.2	0.2	0.2	0.2	20.5	79.5	1,033
25–29	67.4	1.2	0.1	1.1	32.3	67.7	888
30–34	66.6	0.4	0.4	0.9	32.5	67.5	853
35–39	63.8	2.9	0.1	2.0	33.0	67.0	809
40–44	61.7	1.1	0.4	1.8	37.4	62.6	713
45–49	73.6	3.3	0.0	1.1	25.3	74.7	557
Residence							
Urban	75.8	1.8	0.1	1.5	22.8	77.2	3,442
Rural	68.6	0.1	0.2	0.2	31.2	68.8	2,835
Region							
Western	75.1	0.1	0.0	0.3	24.8	75.2	414
Central	59.5	0.3	0.0	0.5	40.2	59.8	686
Greater Accra	65.0	3.6	0.2	3.7	32.2	67.8	1,076
Volta	80.1	1.6	0.0	0.0	19.9	80.1	235
Eastern	75.0	0.3	0.0	0.6	24.8	75.2	466
Ashanti	76.9	1.2	0.0	0.4	22.2	77.8	1,179
Western North	82.1	0.7	0.5	0.4	17.9	82.1	181
Ahafo	78.3	0.5	0.2	1.2	21.2	78.8	133
Bono	75.9	0.8	0.9	0.8	22.5	77.5	222
Bono East	81.6	0.2	0.0	0.2	18.2	81.8	316
Oti	64.0	0.0	0.0	0.0	36.0	64.0	187
Northern	70.9	0.2	0.3	0.2	28.9	71.1	484
Savannah	67.2	0.1	0.3	0.0	32.8	67.2	155
North East	87.7	0.0	0.0	0.0	12.3	87.7	119
Upper East	85.7	0.0	0.9	0.0	13.9	86.1	267
Upper West	71.3	0.0	0.0	0.2	28.5	71.5	155
Education							
No education	58.5	0.0	0.2	0.5	41.3	58.7	628
Primary	61.8	0.0	0.1	0.0	38.2	61.8	725
Secondary	74.3	0.5	0.1	0.5	25.2	74.8	3,990
More than secondary	82.9	4.7	0.4	3.8	13.8	86.2	935
Wealth quintile							
Lowest	64.8	0.0	0.2	0.0	35.1	64.9	1,089
Second	71.4	0.0	0.1	0.0	28.6	71.4	1,133
Middle	73.5	0.2	0.1	0.6	26.2	73.8	1,137
Fourth	73.8	0.9	0.1	0.3	25.8	74.2	1,466
Highest	77.3	3.5	0.2	3.2	19.9	80.1	1,453
Total 15–49	72.6	1.0	0.2	0.9	26.6	73.4	6,277
50–59	72.4	2.3	0.6	1.4	26.5	73.5	767
Total 15–59	72.5	1.2	0.2	1.0	26.6	73.4	7,044

Table 3.10.1 Tobacco smoking: Women

Percentage of women age 15–49 who smoke various tobacco products, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who smoke:[1]			Number of women
	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	
Age				
15–19	0.7	0.1	0.7	2,682
20–24	1.0	0.5	1.1	2,695
25–29	1.0	0.1	1.1	2,340
30–34	1.1	0.1	1.1	2,252
35–39	1.3	0.1	1.3	2,059
40–44	0.6	0.1	0.7	1,675
45–49	0.2	0.1	0.2	1,312
Residence				
Urban	1.1	0.2	1.1	8,557
Rural	0.6	0.2	0.7	6,457
Region				
Western	0.4	0.1	0.4	955
Central	0.7	0.1	0.8	1,703
Greater Accra	0.6	0.3	0.6	2,327
Volta	0.4	0.3	0.4	713
Eastern	0.4	0.0	0.4	1,220
Ashanti	1.8	0.0	1.8	2,928
Western North	0.4	0.0	0.4	411
Ahafo	1.0	0.0	1.0	317
Bono	0.3	0.0	0.3	567
Bono East	0.5	0.0	0.5	676
Oti	0.1	0.0	0.1	403
Northern	1.5	0.7	2.1	1,149
Savannah	0.4	0.0	0.4	319
North East	0.4	0.1	0.4	290
Upper East	1.3	0.6	1.3	640
Upper West	0.6	0.1	0.6	398
Education				
No education	1.1	0.4	1.3	2,411
Primary	0.7	0.1	0.7	2,071
Secondary	0.9	0.1	0.9	8,999
More than secondary	0.8	0.1	0.8	1,533
Wealth quintile				
Lowest	0.9	0.4	1.1	2,447
Second	0.6	0.1	0.6	2,712
Middle	0.9	0.0	0.9	3,121
Fourth	0.9	0.1	0.9	3,379
Highest	1.1	0.2	1.2	3,355
Total	0.9	0.2	0.9	15,014

[1] Includes daily and occasional (less than daily) use
[2] Includes kreteks
[3] Includes pipes full of tobacco, cigars, cheroots, cigarillos, and water pipes

Table 3.10.2 Tobacco smoking: Men

Percentage of men age 15–49 who smoke various tobacco products, and percent distribution of men by smoking frequency, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who smoke:[1]			Smoking frequency			Total	Number of men
	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	Daily smoker	Occasional smoker[4]	Nonsmoker		
Age								
15–19	0.8	0.7	1.2	0.2	1.1	98.7	100.0	1,424
20–24	2.3	1.2	2.9	1.1	1.9	97.0	100.0	1,033
25–29	4.4	1.9	6.1	3.7	2.5	93.7	100.0	888
30–34	4.2	2.5	5.7	2.7	3.0	94.2	100.0	853
35–39	4.9	1.8	6.2	3.4	3.2	93.4	100.0	809
40–44	4.9	0.3	5.0	2.8	2.2	95.0	100.0	713
45–49	5.9	0.6	6.0	4.0	2.2	93.7	100.0	557
Residence								
Urban	2.5	1.6	3.6	1.6	2.2	96.2	100.0	3,442
Rural	4.6	1.0	5.1	3.0	2.2	94.8	100.0	2,835
Region								
Western	2.4	0.0	2.4	0.9	1.7	97.4	100.0	414
Central	3.0	1.8	3.0	0.5	2.9	96.7	100.0	686
Greater Accra	2.4	3.9	5.7	2.0	3.8	94.2	100.0	1,076
Volta	2.4	0.3	2.4	0.4	1.9	97.6	100.0	235
Eastern	1.6	0.9	2.2	1.1	1.2	97.8	100.0	466
Ashanti	3.5	0.5	4.1	2.4	1.6	95.9	100.0	1,179
Western North	7.8	1.8	9.3	2.8	6.5	90.7	100.0	181
Ahafo	4.6	0.9	4.9	2.6	2.3	95.1	100.0	133
Bono	2.7	0.6	3.3	2.5	0.8	96.7	100.0	222
Bono East	2.0	0.0	2.0	1.2	0.8	98.0	100.0	316
Oti	3.8	0.7	3.8	2.2	1.6	96.2	100.0	187
Northern	7.5	1.1	7.9	6.6	1.4	92.0	100.0	484
Savannah	7.1	0.6	7.2	4.3	2.9	92.8	100.0	155
North East	4.4	0.3	4.4	3.0	1.3	95.6	100.0	119
Upper East	3.0	1.0	3.6	3.7	0.8	95.6	100.0	267
Upper West	3.9	0.0	3.9	2.8	1.5	95.7	100.0	155
Education								
No education	7.3	1.2	7.8	5.8	2.3	91.9	100.0	628
Primary	5.3	1.4	6.4	4.0	2.5	93.5	100.0	725
Secondary	3.0	1.3	3.9	1.7	2.3	96.0	100.0	3,990
More than secondary	1.5	1.1	1.9	0.9	1.2	98.0	100.0	935
Wealth quintile								
Lowest	6.4	0.9	6.7	4.1	2.8	93.1	100.0	1,089
Second	3.5	0.7	4.0	2.4	1.6	96.0	100.0	1,133
Middle	3.8	2.0	5.4	3.2	2.1	94.6	100.0	1,137
Fourth	3.1	1.8	4.5	1.8	3.0	95.2	100.0	1,466
Highest	1.3	1.0	1.8	0.5	1.4	98.1	100.0	1,453
Total 15–49	3.5	1.3	4.3	2.2	2.2	95.6	100.0	6,277
50–59	6.6	0.8	6.6	4.6	2.1	93.3	100.0	767
Total 15–59	3.8	1.2	4.6	2.5	2.2	95.3	100.0	7,044

[1] Includes daily and occasional (less than daily) use
[2] Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks
[3] Includes pipes full of tobacco, cigars, cheroots, cigarillos, and water pipes
[4] Occasional refers to less often than daily use.

Table 3.11 Average number of cigarettes smoked daily: Men

Among men age 15–49 who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, Ghana DHS 2022

Background characteristic	Average number of cigarettes smoked per day[1]						Total	Number of respondents who smoke cigarettes daily[1]
	<5	5–9	10–14	15–24	≥25	Don't know/ missing		
Total 15–49	64.0	17.7	13.1	4.4	0.7	0.0	100.0	106
50–59	(41.1)	(36.3)	(20.7)	(0.0)	(1.9)	(0.0)	100.0	30
Total 15–59	58.9	21.9	14.8	3.4	1.0	0.0	100.0	136

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] Includes manufactured cigarettes, hand-rolled cigarettes, and kreteks

Table 3.12 Smokeless tobacco use and any tobacco use

Percentage of women and men age 15–49 who currently use smokeless tobacco, according to type of tobacco product, and percentage who use any type of tobacco, Ghana DHS 2022

Tobacco product	Women	Men
Snuff by mouth	0.1	0.3
Snuff by nose	0.0	1.0
Chewing tobacco	0.0	0.1
Betel quid with tobacco	0.0	0.1
Other type of smokeless tobacco	0.0	0.0
Any type of smokeless tobacco[1]	0.1	1.2
Any type of tobacco[2]	1.0	5.3
Number	15,014	6,277

Note: Table includes women and men who use smokeless tobacco daily or occasionally (less than daily).
[1] Includes snuff by mouth, snuff by nose, chewing tobacco, and betel quid with tobacco
[2] Includes all types of smokeless tobacco shown in this table plus cigarettes, kreteks, pipes, cigars, cheroots, cigarillos, and water pipes

Table 3.13 Any tobacco use by background characteristics

Percentage of women and men age 15–49 who are currently using any type of tobacco, according to background characteristics, Ghana DHS 2022

Background characteristic	Women		Men	
	Percentage using any type of tobacco	Number of women	Percentage using any type of tobacco	Number of men
Age				
15–19	0.7	2,682	1.9	1,424
20–24	1.1	2,695	3.5	1,033
25–29	1.1	2,340	7.4	888
30–34	1.1	2,252	7.4	853
35–39	1.4	2,059	7.6	809
40–44	0.8	1,675	6.2	713
45–49	0.7	1,312	6.5	557
Residence				
Urban	1.2	8,557	4.2	3,442
Rural	0.8	6,457	6.7	2,835
Region				
Western	0.4	955	2.6	414
Central	0.8	1,703	3.8	686
Greater Accra	0.6	2,327	5.8	1,076
Volta	0.8	713	2.4	235
Eastern	0.4	1,220	2.6	466
Ashanti	1.8	2,928	5.9	1,179
Western North	0.4	411	14.1	181
Ahafo	1.0	317	6.2	133
Bono	0.3	567	4.1	222
Bono East	0.5	676	2.1	316
Oti	0.3	403	4.6	187
Northern	2.1	1,149	9.8	484
Savannah	0.4	319	7.7	155
North East	0.4	290	4.8	119
Upper East	1.3	640	5.0	267
Upper West	2.3	398	6.7	155
Education				
No education	1.5	2,411	9.6	628
Primary	0.8	2,071	7.3	725
Secondary	0.9	8,999	5.0	3,990
More than secondary	0.8	1,533	2.2	935
Wealth quintile				
Lowest	1.4	2,447	8.6	1,089
Second	0.7	2,712	4.8	1,133
Middle	0.9	3,121	6.7	1,137
Fourth	0.9	3,379	5.4	1,466
Highest	1.2	3,355	2.1	1,453
Total 15–49	1.0	15,014	5.3	6,277
50–59	na	na	8.6	767
Total 15–59	na	na	5.7	7,044

na = not applicable

Table 3.14.1 Alcohol consumption: Women

Percentage of women age 15–49 who have consumed any alcohol in the last month, and among women who have consumed any alcohol in the last month, percent distribution by frequency of drinking (number of days alcohol was consumed), according to background characteristics, Ghana DHS 2022

Background characteristic	Consumed any alcohol in the last month	Number of women	Among women who have consumed any alcohol in the last month, percent distribution by frequency of drinking:					Number of women who consumed any alcohol in the last month
			1–5 days	6–10 days	11–24 days	Every day/almost every day[1]	Total	
Age								
15–19	9.6	2,682	91.6	3.0	2.9	2.5	100.0	256
20–24	12.2	2,695	91.2	3.7	2.7	2.4	100.0	328
25–29	13.0	2,340	80.3	11.3	4.4	3.9	100.0	304
30–34	15.1	2,252	80.1	12.5	2.4	5.0	100.0	339
35–39	13.9	2,059	75.0	13.3	3.5	8.2	100.0	287
40–44	18.5	1,675	66.7	15.5	9.8	8.0	100.0	310
45–49	16.3	1,312	74.1	7.6	7.1	11.1	100.0	214
Residence								
Urban	13.3	8,557	79.6	10.7	5.6	4.1	100.0	1,137
Rural	13.9	6,457	80.5	8.6	3.3	7.6	100.0	901
Region								
Western	11.7	955	73.7	12.1	7.6	6.6	100.0	112
Central	16.7	1,703	76.3	8.8	8.9	5.9	100.0	284
Greater Accra	16.6	2,327	75.4	15.4	5.8	3.4	100.0	387
Volta	17.9	713	82.3	3.6	2.3	11.8	100.0	127
Eastern	10.1	1,220	83.8	11.9	0.0	4.4	100.0	123
Ashanti	13.0	2,928	85.5	9.4	3.8	1.3	100.0	381
Western North	12.2	411	92.3	2.1	1.1	4.6	100.0	50
Ahafo	7.6	317	80.1	1.5	4.6	13.8	100.0	24
Bono	17.4	567	82.8	10.8	3.2	3.2	100.0	98
Bono East	15.7	676	85.0	8.5	2.3	4.2	100.0	106
Oti	10.1	403	65.0	5.3	15.7	14.1	100.0	41
Northern	10.8	1,149	81.7	9.9	0.0	8.4	100.0	124
Savannah	8.9	319	95.3	1.6	0.0	3.0	100.0	28
North East	4.3	290	(48.1)	(2.3)	(0.0)	(49.6)	100.0	13
Upper East	6.3	640	81.8	1.7	3.9	12.5	100.0	40
Upper West	24.8	398	75.6	8.7	4.7	11.0	100.0	99
Education								
No education	14.0	2,411	72.5	11.5	4.3	11.6	100.0	338
Primary	15.9	2,071	79.6	6.0	7.0	7.3	100.0	329
Secondary	13.0	8,999	81.4	10.3	4.3	4.1	100.0	1,173
More than secondary	12.9	1,533	85.3	9.8	2.8	2.1	100.0	198
Wealth quintile								
Lowest	15.0	2,447	80.0	7.6	2.8	9.7	100.0	366
Second	11.9	2,712	78.2	7.3	6.2	8.3	100.0	323
Middle	13.1	3,121	80.0	9.1	5.6	5.3	100.0	409
Fourth	13.5	3,379	81.2	12.6	2.7	3.5	100.0	457
Highest	14.4	3,355	80.1	10.9	5.8	3.2	100.0	482
Total	13.6	15,014	80.0	9.8	4.6	5.7	100.0	2,038

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] The respondent reported that she drank alcohol every day, almost every day, or 25 or more days in the last month.

Table 3.14.2 Alcohol consumption: Men

Percentage of men age 15–49 who have consumed any alcohol in the last month, and among men who have consumed any alcohol in the last month, percent distribution by frequency of drinking (number of days alcohol was consumed), according to background characteristics, Ghana DHS 2022

Background characteristic	Consumed any alcohol in the last month	Number of men	Among men who have consumed any alcohol in the last month, percent distribution by frequency of drinking:					Number of men who consumed any alcohol in the last month
			1–5 days	6–10 days	11–24 days	Every day/almost every day[1]	Total	
Age								
15–19	11.5	1,424	84.1	6.1	5.6	4.1	100.0	164
20–24	25.7	1,033	76.9	11.6	5.9	5.6	100.0	266
25–29	30.3	888	69.7	16.6	6.4	7.3	100.0	269
30–34	37.5	853	63.3	14.6	9.0	13.1	100.0	319
35–39	42.9	809	54.8	15.4	12.5	17.3	100.0	347
40–44	38.9	713	56.9	16.6	8.8	17.7	100.0	278
45–49	43.0	557	50.8	19.6	12.4	17.2	100.0	240
Residence								
Urban	29.8	3,442	68.0	13.4	7.7	10.8	100.0	1,024
Rural	30.2	2,835	58.9	16.4	10.4	14.3	100.0	857
Region								
Western	30.5	414	39.0	14.5	10.5	36.1	100.0	126
Central	31.6	686	57.9	17.1	10.2	14.7	100.0	217
Greater Accra	40.5	1,076	75.2	16.1	5.9	2.7	100.0	436
Volta	52.7	235	58.6	23.6	6.9	10.9	100.0	124
Eastern	36.0	466	66.7	21.5	5.7	6.1	100.0	168
Ashanti	22.9	1,179	75.4	9.7	4.7	10.1	100.0	270
Western North	36.4	181	49.9	19.4	19.7	11.0	100.0	66
Ahafo	34.4	133	44.5	8.7	11.8	35.0	100.0	46
Bono	33.2	222	59.1	4.8	16.5	19.7	100.0	74
Bono East	20.0	316	57.3	13.6	13.0	16.2	100.0	63
Oti	28.9	187	77.2	8.5	7.0	7.3	100.0	54
Northern	19.3	484	74.6	10.9	4.6	9.9	100.0	93
Savannah	6.0	155	(59.6)	(5.7)	(1.6)	(33.0)	100.0	9
North East	18.2	119	50.2	13.7	16.6	19.4	100.0	22
Upper East	21.9	267	49.6	17.9	18.6	14.0	100.0	58
Upper West	35.9	155	37.6	6.0	26.5	30.0	100.0	56
Education								
No education	27.7	628	54.7	9.0	9.9	26.4	100.0	174
Primary	33.8	725	55.2	15.7	12.8	16.3	100.0	245
Secondary	30.0	3,990	66.0	16.0	7.7	10.4	100.0	1,196
More than secondary	28.6	935	68.3	12.3	10.5	9.0	100.0	268
Wealth quintile								
Lowest	28.9	1,089	53.2	14.1	11.2	21.5	100.0	315
Second	27.2	1,133	56.9	17.0	9.1	17.0	100.0	308
Middle	30.5	1,137	63.8	14.8	9.9	11.6	100.0	347
Fourth	34.2	1,466	67.3	16.2	9.0	7.4	100.0	501
Highest	28.3	1,453	73.0	11.9	6.2	8.9	100.0	411
Total 15–49	30.0	6,277	63.8	14.8	8.9	12.4	100.0	1,881
50–59	45.5	767	51.8	16.2	10.7	21.2	100.0	349
Total 15–59	31.7	7,044	62.0	15.0	9.2	13.8	100.0	2,231

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] The respondent reported that he drank alcohol every day, almost every day, or 25 or more days in the last month.

Table 3.15.1 Usual number of alcoholic drinks consumed: Women

Among women age 15–49 who have consumed any alcohol in the last month, percent distribution of usual number of drinks consumed on days when alcohol was consumed, according to background characteristics, Ghana DHS 2022

Background characteristic	Percent distribution of usual number of drinks consumed on days when alcohol was consumed								Number of women who consumed any alcohol in the last month
	<1	1	2	3	4	5	6 or more	Total	
Age									
15–19	0.0	72.4	16.1	3.3	2.7	1.6	3.9	100.0	256
20–24	0.0	63.9	19.7	7.9	2.0	1.9	4.6	100.0	328
25–29	0.0	54.4	21.3	9.3	6.4	0.8	7.8	100.0	304
30–34	0.0	56.8	20.9	7.7	1.2	2.7	10.7	100.0	339
35–39	0.0	53.2	21.7	8.8	2.7	5.8	7.8	100.0	287
40–44	0.0	52.1	18.5	4.0	5.2	3.3	17.0	100.0	310
45–49	0.0	48.8	19.3	13.2	7.4	2.9	8.5	100.0	214
Frequency of drinking in last month									
1–5 days	0.0	61.7	19.3	8.4	4.2	2.9	3.5	100.0	1,631
6–10 days	0.0	35.0	14.0	5.6	2.0	3.6	39.8	100.0	199
11–24 days	0.0	36.2	39.6	0.6	0.0	0.0	23.6	100.0	93
Every day/almost every day[1]	0.0	54.1	19.0	5.6	3.5	0.3	17.4	100.0	115
Residence									
Urban	0.0	57.4	19.4	7.1	3.4	2.7	9.9	100.0	1,137
Rural	0.0	57.6	20.1	8.2	4.2	2.6	7.3	100.0	901
Region									
Western	0.0	47.8	18.9	6.8	9.4	3.2	13.8	100.0	112
Central	0.0	66.8	15.3	6.1	1.1	1.8	8.9	100.0	284
Greater Accra	0.0	53.1	19.6	6.0	3.4	3.1	14.8	100.0	387
Volta	0.0	58.9	18.3	7.3	6.7	2.2	6.6	100.0	127
Eastern	0.0	43.9	21.3	9.8	9.8	2.5	12.5	100.0	123
Ashanti	0.0	57.1	18.4	10.9	2.6	4.0	7.0	100.0	381
Western North	0.0	50.7	28.9	8.4	4.5	2.0	5.5	100.0	50
Ahafo	0.0	54.9	18.2	11.2	2.7	2.7	10.1	100.0	24
Bono	0.0	63.1	18.9	8.7	3.7	0.7	5.0	100.0	98
Bono East	0.0	58.1	22.7	6.5	2.5	2.0	8.3	100.0	106
Oti	0.0	62.6	11.9	5.9	9.7	4.5	5.5	100.0	41
Northern	0.0	67.1	29.7	1.8	0.0	0.0	1.4	100.0	124
Savannah	0.0	65.7	22.5	6.0	2.0	1.9	1.9	100.0	28
North East	(0.0)	(49.3)	(24.4)	(9.3)	(3.7)	(5.1)	(8.4)	100.0	13
Upper East	0.0	55.2	24.1	11.0	5.1	1.7	2.9	100.0	40
Upper West	0.0	59.1	19.5	9.6	2.7	4.8	4.3	100.0	99
Education									
No education	0.0	56.9	20.6	6.0	4.8	4.7	7.0	100.0	338
Primary	0.0	59.9	18.7	6.1	3.1	4.0	8.2	100.0	329
Secondary	0.0	55.2	19.8	8.9	4.1	1.9	10.1	100.0	1,173
More than secondary	0.0	68.0	19.4	4.8	1.3	1.9	4.6	100.0	198
Wealth quintile									
Lowest	0.0	55.9	23.1	8.8	3.8	3.4	5.0	100.0	366
Second	0.0	56.8	19.4	7.7	3.0	5.5	7.7	100.0	323
Middle	0.0	56.2	18.7	8.5	4.0	1.8	10.7	100.0	409
Fourth	0.0	63.5	15.6	5.2	3.0	2.2	10.5	100.0	457
Highest	0.0	54.6	22.2	8.1	4.7	1.5	8.9	100.0	482
Total	0.0	57.5	19.7	7.6	3.8	2.7	8.7	100.0	2,038

Note: One drink of alcohol corresponds to one can or bottle of beer, one glass of wine, one shot of spirits, one shot of akpeteshie, or a calabash of palm wine or pito. Respondents who reported that they drank a few sips of an alcoholic drink were recorded as having consumed less than one standard drink. Figures in parentheses are based on 25–49 unweighted cases.

[1] The respondent reported that she drank alcohol every day, almost every day, or 25 or more days in the last month.

Table 3.15.2 Usual number of alcoholic drinks consumed: Men

Among men age 15–49 who have consumed any alcohol in the last month, percent distribution of usual number of drinks consumed on days when alcohol was consumed, according to background characteristics, Ghana DHS 2022

Background characteristic	Percent distribution of usual number of drinks consumed on days when alcohol was consumed								Number of men who consumed any alcohol in the last month
	<1	1	2	3	4	5	6 or more	Total	
Age									
15–19	0.0	73.7	9.3	9.8	1.7	1.0	4.5	100.0	164
20–24	0.0	49.2	26.6	10.8	5.9	3.5	4.0	100.0	266
25–29	0.0	40.2	23.7	12.1	6.7	3.7	13.7	100.0	269
30–34	0.0	43.1	23.3	11.1	4.6	3.0	14.9	100.0	319
35–39	0.0	40.0	20.8	7.9	10.0	4.0	17.1	100.0	347
40–44	0.0	34.5	29.7	12.6	7.6	3.5	12.1	100.0	278
45–49	0.0	32.9	19.4	9.0	3.9	7.7	27.2	100.0	240
Frequency of drinking in last 1 month									
1–5 days	0.0	49.9	22.2	11.4	6.7	5.2	4.6	100.0	1,201
6–10 days	0.0	25.6	23.6	7.2	3.6	1.0	39.0	100.0	278
11–24 days	0.0	31.5	22.7	9.7	6.2	1.6	28.4	100.0	168
Every day/almost every day[1]	0.0	37.2	23.5	9.9	6.5	1.9	21.0	100.0	234
Residence									
Urban	0.0	40.1	22.7	11.3	6.6	4.9	14.4	100.0	1,024
Rural	0.0	46.6	22.4	9.4	5.6	2.7	13.2	100.0	857
Region									
Western	0.0	48.4	24.6	8.0	10.5	2.5	6.0	100.0	126
Central	0.0	42.8	15.3	13.7	8.9	3.4	15.9	100.0	217
Greater Accra	0.0	28.4	26.5	10.5	9.3	3.6	21.6	100.0	436
Volta	0.0	50.3	19.1	7.0	5.2	4.4	14.0	100.0	124
Eastern	0.0	57.3	23.7	9.8	2.4	3.6	3.2	100.0	168
Ashanti	0.0	49.2	17.0	12.3	3.6	8.0	9.9	100.0	270
Western North	0.0	39.7	27.9	16.8	5.7	1.5	8.4	100.0	66
Ahafo	0.0	56.6	25.6	8.9	2.3	3.3	3.3	100.0	46
Bono	0.0	51.2	29.4	6.1	4.3	0.8	8.2	100.0	74
Bono East	0.0	18.8	14.1	16.5	9.4	7.5	33.6	100.0	63
Oti	0.0	67.5	19.6	6.3	2.7	0.8	3.0	100.0	54
Northern	0.0	49.8	23.7	6.8	5.0	0.8	13.9	100.0	93
Savannah	(0.0)	(57.9)	(18.5)	(14.1)	(4.3)	(0.0)	(5.1)	100.0	9
North East	0.0	16.9	8.7	9.6	2.8	4.5	57.4	100.0	22
Upper East	0.0	30.7	35.4	10.1	1.1	3.0	19.7	100.0	58
Upper West	0.0	54.4	32.5	6.5	1.9	2.0	2.7	100.0	56
Education									
No education	0.0	39.4	23.8	10.7	6.7	4.5	14.9	100.0	174
Primary	0.0	41.6	19.5	13.9	5.2	4.4	15.4	100.0	245
Secondary	0.0	43.3	23.4	9.5	6.2	4.1	13.5	100.0	1,196
More than secondary	0.0	46.0	21.1	11.3	6.6	1.7	13.3	100.0	268
Wealth quintile									
Lowest	0.0	41.0	24.5	9.9	5.3	2.9	16.5	100.0	315
Second	0.0	48.4	20.2	8.0	4.3	1.4	17.8	100.0	308
Middle	0.0	47.1	20.2	12.4	6.3	5.9	8.1	100.0	347
Fourth	0.0	40.6	23.6	10.0	6.5	5.9	13.5	100.0	501
Highest	0.0	40.4	23.8	11.7	7.8	2.2	14.2	100.0	411
Total 15–49	0.0	43.1	22.6	10.5	6.2	3.9	13.8	100.0	1,881
50–59	0.0	37.8	21.1	13.5	6.2	5.4	16.0	100.0	349
Total 15–59	0.0	42.3	22.4	10.9	6.2	4.1	14.2	100.0	2,231

Note: One drink of alcohol corresponds to one can or bottle of beer, one glass of wine, one shot of spirits, one shot of akpeteshie, or a calabash of palm wine or pito. Respondents who reported that they drank a few sips of an alcoholic drink were recorded as having consumed less than one standard drink. Figures in parentheses are based on 25–49 unweighted cases.

[1] The respondent reported that he drank alcohol every day, almost every day, or 25 or more days in the last month.

Table 3.16.1 Place of birth and recent migration: Women

Percent distribution of women age 15–49 who have always lived in their current place of residence, who were born in Ghana but outside of their current place of residence, and who were born in another country, and among women who were born outside of their current place of residence, percentage who moved to their current place of residence in the last 5 years, according to background characteristics, Ghana DHS 2022

	Percent distribution by residence and place of birth					Among women who were born outside of their current place of residence	
Background characteristic	Always lived in current place of residence[1]	Born in Ghana but outside of current place of residence	Born outside of Ghana	Total	Number of women	Percentage who moved to current place of residence in the last 5 years	Number of women[2]
Age							
15–19	49.4	49.1	1.5	100.0	2,668	48.8	1,350
20–24	36.6	61.4	2.0	100.0	2,671	56.6	1,695
25–29	28.4	69.2	2.4	100.0	2,314	51.5	1,657
30–34	23.9	72.6	3.5	100.0	2,232	40.2	1,700
35–39	24.2	73.3	2.5	100.0	2,047	26.6	1,552
40–44	27.5	70.9	1.7	100.0	1,672	21.7	1,213
45–49	28.1	70.7	1.3	100.0	1,308	17.1	941
Residence							
Urban	29.5	68.2	2.3	100.0	8,506	41.0	5,997
Rural	35.8	62.2	2.0	100.0	6,407	37.3	4,111
Region							
Western	28.0	68.4	3.6	100.0	944	39.5	679
Central	26.0	72.2	1.8	100.0	1,680	43.2	1,244
Greater Accra	22.0	74.8	3.1	100.0	2,324	42.6	1,813
Volta	32.7	61.6	5.7	100.0	709	41.4	478
Eastern	28.8	70.4	0.8	100.0	1,211	41.2	863
Ashanti	29.0	70.1	1.0	100.0	2,900	45.9	2,061
Western North	40.7	58.1	1.3	100.0	410	28.6	243
Ahafo	32.5	66.6	0.9	100.0	317	20.8	214
Bono	49.1	50.1	0.8	100.0	558	34.7	284
Bono East	36.9	61.2	2.0	100.0	671	35.5	424
Oti	30.3	63.7	6.0	100.0	402	38.1	280
Northern	38.2	59.8	2.0	100.0	1,147	18.8	709
Savannah	33.5	63.4	3.2	100.0	319	35.6	212
North East	65.2	33.3	1.5	100.0	289	36.9	101
Upper East	62.5	36.5	1.0	100.0	638	39.5	239
Upper West	32.7	63.9	3.4	100.0	394	40.3	265
Education							
No education	29.8	65.8	4.3	100.0	2,404	22.6	1,686
Primary	31.7	65.2	3.1	100.0	2,064	37.9	1,410
Secondary	34.5	64.0	1.6	100.0	8,925	43.4	5,848
More than secondary	23.5	75.3	1.1	100.0	1,520	46.3	1,163
Wealth quintile							
Lowest	40.2	57.5	2.3	100.0	2,431	29.8	1,455
Second	38.8	59.1	2.2	100.0	2,697	35.0	1,652
Middle	35.9	62.3	1.9	100.0	3,097	41.2	1,986
Fourth	28.2	69.5	2.3	100.0	3,355	43.0	2,408
Highest	21.8	76.0	2.2	100.0	3,333	43.3	2,608
Total	32.2	65.6	2.2	100.0	14,913	39.5	10,108

Note: Respondents who are visitors in the household are excluded from this table.
[1] May include respondents who were born elsewhere in Ghana but moved to their current place of residence when very young
[2] Includes respondents who reported that they were born outside of Ghana and that they always lived in their current place of residence. Such respondents are assumed not to have moved in the last 5 years.

Table 3.16.2 Place of birth and recent migration: Men

Percent distribution of men age 15–49 who have always lived in their current place of residence, who were born in Ghana but outside of their current place of residence, and who were born in another country, and among men who were born outside of their current place of residence, percentage who moved to their current place of residence in the last 5 years, according to background characteristics, Ghana DHS 2022

	Percent distribution by residence and place of birth					Among men who were born outside of their current place of residence	
Background characteristic	Always lived in current place of residence[1]	Born in Ghana but outside of current place of residence	Born outside of Ghana	Total	Number of men	Percentage who moved to current place of residence in the last 5 years	Number of men[2]
Age							
15–19	64.5	34.4	1.1	100.0	1,420	36.0	504
20–24	48.6	50.4	1.0	100.0	1,033	39.4	531
25–29	43.7	53.7	2.6	100.0	877	47.1	494
30–34	40.4	58.4	1.2	100.0	851	39.9	507
35–39	44.9	53.2	1.9	100.0	808	30.7	445
40–44	37.6	61.0	1.4	100.0	713	21.1	445
45–49	45.1	53.8	1.1	100.0	556	16.3	305
Residence							
Urban	42.9	55.6	1.4	100.0	3,438	34.6	1,963
Rural	55.0	43.5	1.5	100.0	2,820	33.7	1,269
Region							
Western	44.2	54.8	1.0	100.0	413	32.9	230
Central	50.2	49.8	0.0	100.0	686	37.1	342
Greater Accra	17.4	80.3	2.3	100.0	1,076	36.6	889
Volta	68.4	28.3	3.3	100.0	234	31.5	74
Eastern	50.4	48.8	0.7	100.0	464	29.2	230
Ashanti	49.4	50.2	0.4	100.0	1,165	35.2	590
Western North	39.8	58.8	1.4	100.0	181	26.3	109
Ahafo	32.7	65.3	2.1	100.0	133	36.8	90
Bono	64.7	34.0	1.3	100.0	222	31.1	78
Bono East	33.8	64.7	1.5	100.0	316	21.1	209
Oti	62.0	32.2	5.8	100.0	187	30.7	71
Northern	70.4	28.0	1.6	100.0	483	43.2	143
Savannah	56.4	40.3	3.3	100.0	155	36.3	68
North East	92.2	6.7	1.1	100.0	119	(22.0)	9
Upper East	79.6	18.5	1.9	100.0	267	39.9	54
Upper West	71.2	27.0	1.7	100.0	155	40.6	45
Education							
No education	58.0	37.4	4.6	100.0	627	21.7	263
Primary	54.8	43.7	1.5	100.0	722	28.3	326
Secondary	48.7	50.1	1.1	100.0	3,976	35.0	2,039
More than secondary	35.3	64.0	0.6	100.0	934	40.4	604
Wealth quintile							
Lowest	57.4	40.2	2.4	100.0	1,089	25.5	464
Second	60.9	38.4	0.7	100.0	1,128	38.0	442
Middle	54.8	43.5	1.7	100.0	1,129	34.3	511
Fourth	43.8	55.3	0.9	100.0	1,465	36.0	824
Highest	31.5	66.9	1.6	100.0	1,447	35.1	991
Total 15–49	48.4	50.2	1.4	100.0	6,258	34.2	3,232
50–59	44.3	54.9	0.8	100.0	767	13.2	427
Total 15–59	47.9	50.7	1.4	100.0	7,025	31.8	3,658

Note: Respondents who are visitors in the household are excluded from this table. Figures in parentheses are based on 25–49 unweighted cases.

[1] May include respondents who were born elsewhere in Ghana but moved to their current place of residence when very young

[2] Includes respondents who reported that they were born outside of Ghana and that they always lived in their current place of residence. Such respondents are assumed not to have moved in the last 5 years.

Table 3.17 Type of migration

Percent distribution of women and men age 15–49 who moved to their current place of residence in the last 5 years by type of migration, according to age, Ghana DHS 2022

Age	Type of migration					Number of respondents
	Urban to urban	Urban to rural	Rural to urban	Rural to rural	Total	
			WOMEN 15–49			
15–19	48.3	24.8	11.3	15.6	100.0	659
20–24	49.4	22.4	11.8	16.4	100.0	960
25–29	55.1	23.1	7.5	14.2	100.0	854
30–34	53.6	27.5	6.7	12.2	100.0	684
35–39	61.1	20.5	5.4	13.1	100.0	412
40–44	58.4	24.9	4.0	12.6	100.0	264
45–49	52.2	28.0	5.4	14.4	100.0	161
Total 15–49	53.1	24.0	8.5	14.4	100.0	3,993
			MEN 15–49			
15–19	46.6	39.1	9.1	5.2	100.0	182
20–24	45.4	43.1	4.9	6.6	100.0	209
25–29	61.3	29.1	3.0	6.6	100.0	233
30–34	60.2	22.2	6.8	10.8	100.0	202
35–39	58.6	25.8	4.3	11.3	100.0	137
40–44	69.5	20.6	4.8	5.1	100.0	94
45–49	(56.6)	(26.0)	(7.4)	(10.0)	100.0	50
Total 15–49	55.8	30.8	5.6	7.8	100.0	1,106
50–59	(53.4)	(33.5)	(1.7)	(11.4)	100.0	56
Total 15–59	55.7	31.0	5.4	7.9	100.0	1,163

Note: Type of migration is based on categorizing the previous place of residence and the current place of residence as urban or rural. The previous place of residence is the place the person moved from just before moving to the current place of residence. Figures in parentheses are based on 25–49 unweighted cases.

Table 3.18.1 Reason for migration: Women

Percent distribution of women age 15–49 who moved to their current place of residence by reason for migration, according to background characteristics, Ghana DHS 2022

Background characteristic	Employment	Education/ training	Marriage formation	Family reunification/ other family-related reason	Forced displacement	Other	Total	Number of women
Age								
15–19	4.9	9.6	4.1	74.5	4.9	1.9	100.0	1,348
20–24	11.2	9.1	20.6	52.2	4.2	2.7	100.0	1,694
25–29	17.1	4.0	34.4	36.8	4.8	2.9	100.0	1,657
30–34	16.9	3.0	35.6	34.8	6.3	3.4	100.0	1,696
35–39	14.1	2.8	35.7	35.0	7.9	4.4	100.0	1,548
40–44	11.8	1.3	32.8	41.5	6.8	5.9	100.0	1,212
45–49	10.8	1.0	33.9	39.7	8.7	5.9	100.0	940
Timing of move to current place of residence								
0–4 years	17.5	5.7	23.0	40.8	7.9	5.2	100.0	3,993
5–9 years	11.6	4.7	29.1	44.1	6.4	4.2	100.0	2,264
10 years or more	8.6	3.5	33.1	49.0	3.9	1.9	100.0	3,839
Type of migration[1]								
Urban to urban	18.5	5.6	17.1	41.6	10.7	6.5	100.0	2,120
Urban to rural	15.1	3.3	23.8	50.1	2.9	4.9	100.0	958
Rural to urban	23.7	18.0	25.7	24.4	6.4	1.8	100.0	339
Rural to rural	14.0	2.8	42.0	31.8	6.8	2.7	100.0	576
Residence								
Urban	13.6	5.9	22.4	45.5	8.0	4.7	100.0	5,988
Rural	11.6	2.8	36.7	43.4	3.2	2.2	100.0	4,108
Region								
Western	15.5	4.7	25.2	50.6	3.5	0.5	100.0	679
Central	8.0	5.9	22.8	53.9	7.5	1.9	100.0	1,244
Greater Accra	12.2	4.3	20.0	43.6	10.1	9.8	100.0	1,807
Volta	11.8	10.3	23.6	48.5	2.4	3.4	100.0	475
Eastern	15.0	3.8	21.1	49.8	8.2	2.2	100.0	863
Ashanti	16.1	4.7	19.4	46.0	8.6	5.2	100.0	2,061
Western North	21.9	3.5	27.5	44.8	1.6	0.7	100.0	243
Ahafo	26.9	4.1	31.9	35.5	0.4	1.2	100.0	214
Bono	22.2	4.8	19.4	50.9	1.3	1.4	100.0	284
Bono East	10.8	3.5	34.4	44.3	6.2	0.9	100.0	423
Oti	13.7	4.7	35.0	43.7	1.3	1.7	100.0	279
Northern	3.4	2.4	68.3	24.9	0.9	0.0	100.0	709
Savannah	12.1	2.8	43.9	40.2	0.5	0.4	100.0	212
North East	5.2	4.3	67.6	20.4	1.4	1.0	100.0	101
Upper East	9.2	4.4	51.7	31.2	1.3	2.2	100.0	238
Upper West	4.9	3.9	50.9	38.8	0.1	1.4	100.0	265
Wealth quintile								
Lowest	13.2	2.1	45.4	36.0	2.8	0.6	100.0	1,453
Second	9.3	3.0	35.5	44.8	5.1	2.3	100.0	1,650
Middle	11.2	5.5	23.8	49.0	6.6	3.9	100.0	1,984
Fourth	12.7	5.9	23.5	45.8	8.3	3.8	100.0	2,401
Highest	16.0	5.3	21.7	45.0	5.9	6.1	100.0	2,607
Total	12.8	4.6	28.2	44.6	6.0	3.7	100.0	10,096

Note: Respondents who are visitors in the household are excluded from this table. Respondents who stated that they were born outside of Ghana and that they have always lived in their current place of residence were not asked about the reason for migration and are excluded from the table.
[1] Restricted to respondents who migrated within the last 5 years

Table 3.18.2 Reason for migration: Men

Percent distribution of men age 15–49 who moved to their current place of residence by reason for migration, according to background characteristics, Ghana DHS 2022

Background characteristic	Employment	Education/ training	Marriage formation	Family reunification/ other family-related reason	Forced displacement	Other	Total	Number of men
Age								
15–19	7.4	17.2	0.8	69.6	4.1	0.9	100.0	503
20–24	21.7	9.8	0.0	60.4	5.4	2.8	100.0	529
25–29	47.6	7.3	2.4	34.4	7.3	1.0	100.0	494
30–34	48.3	3.8	3.0	35.2	7.8	1.9	100.0	507
35–39	43.6	4.6	3.4	37.7	7.4	3.3	100.0	444
40–44	49.2	2.9	3.7	37.1	4.7	2.4	100.0	445
45–49	46.2	2.3	3.0	39.7	6.1	2.8	100.0	305
Timing of move to current place of residence								
0–4 years	41.2	7.1	2.2	37.1	9.2	3.2	100.0	1,106
5–9 years	36.8	8.7	3.6	43.2	5.9	1.9	100.0	794
10 years or more	32.9	6.5	1.4	54.1	3.7	1.3	100.0	1,327
Type of migration[1]								
Urban to urban	38.0	5.3	2.8	37.7	12.9	3.2	100.0	617
Urban to rural	42.3	8.7	1.1	40.7	3.8	3.3	100.0	341
Rural to urban	42.3	16.9	3.7	31.3	5.8	0.0	100.0	62
Rural to rural	59.3	6.5	1.0	23.3	5.4	4.4	100.0	86
Residence								
Urban	31.6	8.0	2.8	46.9	8.4	2.3	100.0	1,960
Rural	44.7	6.1	1.3	43.6	2.6	1.8	100.0	1,267
Region								
Western	44.7	12.3	0.5	36.2	3.1	3.2	100.0	230
Central	37.8	6.4	2.2	47.0	6.1	0.5	100.0	342
Greater Accra	26.5	5.0	2.7	53.2	10.0	2.5	100.0	889
Volta	53.3	16.2	1.4	29.1	0.0	0.0	100.0	74
Eastern	34.4	11.6	3.2	49.6	0.0	1.1	100.0	230
Ashanti	33.6	6.8	3.3	41.3	11.9	3.1	100.0	590
Western North	47.7	3.2	0.0	48.1	0.4	0.6	100.0	109
Ahafo	48.6	7.1	2.0	41.4	0.5	0.4	100.0	90
Bono	50.8	7.1	0.3	38.5	1.7	1.7	100.0	78
Bono East	62.3	4.4	0.9	31.3	0.8	0.3	100.0	209
Oti	53.3	8.2	0.5	35.9	1.1	1.0	100.0	71
Northern	24.9	7.5	2.1	57.1	2.7	5.7	100.0	142
Savannah	44.4	5.2	2.4	44.1	1.8	2.1	100.0	67
North East	(48.0)	(3.7)	(0.0)	(48.3)	(0.0)	(0.0)	100.0	9
Upper East	26.1	18.1	0.0	51.4	0.0	4.4	100.0	52
Upper West	30.7	12.4	4.3	51.8	0.8	0.0	100.0	44
Wealth quintile								
Lowest	49.9	3.2	1.4	42.3	2.1	1.2	100.0	462
Second	35.3	9.9	1.6	47.7	2.7	2.8	100.0	441
Middle	40.2	10.0	1.4	42.7	4.2	1.4	100.0	510
Fourth	37.0	6.5	2.2	43.7	8.5	2.1	100.0	823
Highest	29.2	7.1	3.4	49.3	8.5	2.6	100.0	991
Total 15–49	36.7	7.2	2.2	45.6	6.1	2.1	100.0	3,227
50–59	46.5	2.1	3.7	37.0	8.2	2.5	100.0	427
Total 15–59	37.9	6.6	2.4	44.6	6.3	2.1	100.0	3,654

Note: Respondents who are visitors in the household are excluded from this table. Respondents who stated that they were born outside of Ghana and that they have always lived in their current place of residence were not asked about the reason for migration and are excluded from the table. Figures in parentheses are based on 25–49 unweighted cases.

[1] Restricted to respondents who migrated within the last 5 years

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings

- ***Marital status:*** More women than men age 15–49 are in union (55% versus 45%). The percentage of formally married women declined from 65% in 1988 to 40% in 2022, while the percentage of women living together with a man increased from 5% to 15% within the same period.
- ***Polygyny:*** 15% of currently married women age 15–49 report that their husband or partner has multiple wives.
- ***Age at first marriage:*** The median age at first marriage among women age 25–49 is 21.8 years.
- ***Age at first sexual intercourse:*** The median age at first sexual intercourse among women age 25–49 is 18 years, while the median age among men is 20 years.
- ***Recent sexual activity:*** More than 4 out of 10 women (45%) and men (43%) age 15–49 had sexual intercourse within the 4 weeks preceding the survey.

Marriage and sexual activity help determine the extent to which women are exposed to the risk of pregnancy. Thus, they are important determinants of fertility levels. The timing and circumstances of marriage and sexual activity, however, also have profound consequences for women's and men's lives.

4.1 MARITAL STATUS

Currently in union

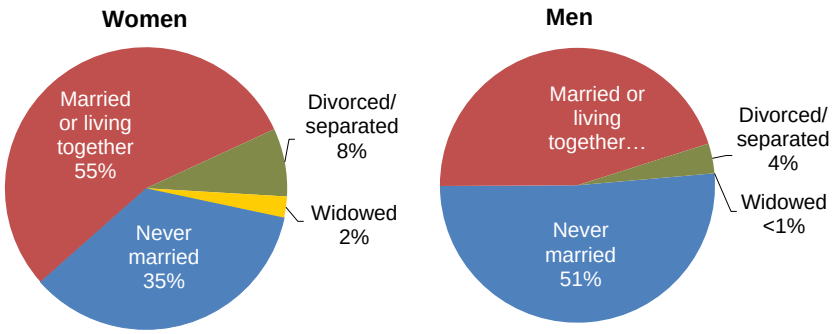
Women and men who report being married or living together with a partner as though married at the time of the survey. In this report, the terms currently in union and currently married are used interchangeably except where noted.

Sample: Women and men age 15–49

In Ghana, more than half of women (55%) and 45% of men age 15–49 are currently in union. Thirty-five percent of women and 51% of men have never been married. The percentage of women who are separated or divorced (8%) is twice that of men (3%) (**Figure 4.1** and **Table 4.1**).

Figure 4.1 **Marital status**

Percent distribution of women and men age 15–49



Trends: The percentage of women age 15–49 who are in union decreased from 70% in 1988 and 1993 to 57% in 2014 and 55% in 2022. The percentage of formally married women has declined since 1988, from 65% to 40%, while the percentage of women living together with a man as if married has increased from 5% to 15%.

4.2 MARRIAGE REGISTRATION

Registered marriage

A woman whose marriage is registered with the civil authorities regardless of whether or not she has a marriage certificate.

Sample: Women age 15–49 who are currently in union

Twenty-two percent of women age 15–49 who are in union have had their marriage registered with the civil authorities, and 19% have a marriage certificate (**Table 4.2**).

4.3 POLYGYNY

Polygyny

Women who report that their husband or partner has other wives are considered to be in a polygynous marriage.

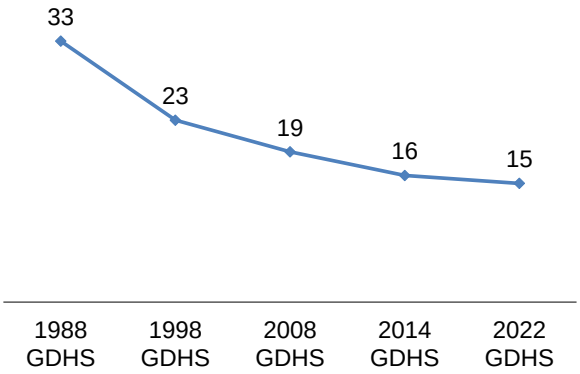
Sample: Currently married women age 15–49

Fifteen percent of currently married women age 15–49 report having one or more co-wives, while 9% of currently married men report having two or more wives (**Table 4.3.1** and **Table 4.3.2**).

Trends: The percentage of currently married women who are in a polygynous union has decreased over time, from 33% in 1988 to 23% in 1998, 19% in 2008, 16% in 2014, and 15% in 2022 (**Figure 4.2**).

Figure 4.2 **Trends in polygyny**

Percentage of married women age 15–49 in a polygynous union



4.4 AGE AT FIRST MARRIAGE

Median age at first marriage

Age by which half of respondents have been married.

Sample: Women age 20–49 and 25–49 and men age 20–49, 25–49, 20–59, and 25–59

The median age at first marriage among women age 25–49 is 21.8 years (**Table 4.4** and **Table 4.5**). In Ghana, the legal age of marriage is 18 years; however, 6% of women report that they were first married by age 15. Twenty-three percent of women were first married by age 18, more than one-third (38%) were married by age 20, and two-thirds (67%) were married by age 25. Among men age 25–49, fewer than 1 in 10 (9%) were married by age 20 and one-third (34%) were married by age 25.

Trends: The median age at first marriage among women age 25–49 has increased steadily over time, from 18.5 years in 1988 to 19.4 years in 2003, 20.7 years in 2014, and 21.8 years in 2022.

4.5 AGE AT FIRST SEXUAL INTERCOURSE

Median age at first sexual intercourse

Age by which half of respondents have had sexual intercourse

Sample: Women age 20–49, 25–49 and 15-24 and men age 20–49, 25–49, 20–59, and 25–59

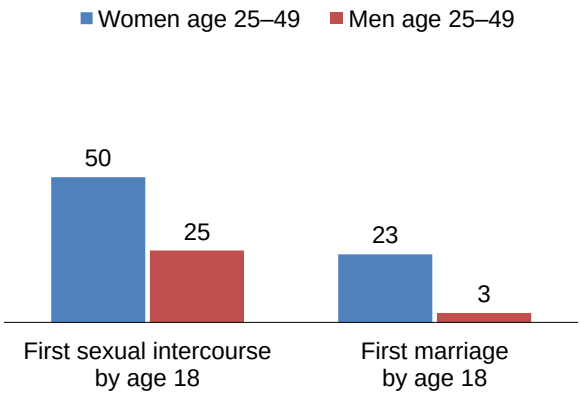
The median age at first sexual intercourse among women age 25–49 is 18 years, while the median age among men is 20 years. By age 20, 74% of women and 50% of men have had sexual intercourse (**Table 4.6** and **Table 4.7**).

In Ghana, the percentage of respondents who were married by their 18th birthday is much higher among women (23%) than among men (3%). Similarly, more women (50%) than men (25%) had sexual intercourse by age 18 (**Figure 4.3**).

Thirty-seven percent of women age 15–24 have never had sexual intercourse, as compared with almost half of men (49%) in the same age group (**Table 4.6**).

Figure 4.3 **First sex and first marriage by age 18**

Percentage who had first sexual intercourse and first marriage by age 18

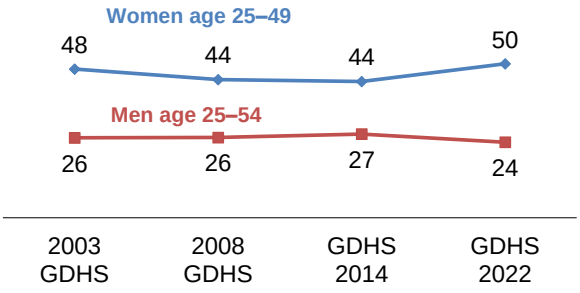


Among women age 25–49, the median age at first intercourse (18 years) is 4 years less than the median age at first marriage (21.8 years). This indicates that many women engage in sex before marriage (**Table 4.6**).

Trends: The percentage of women age 25–49 who had sexual intercourse by age 18 declined from 48% in 2003 to 44% in 2014 and then increased to 50% in 2022 (**Figure 4.4**).

***Figure 4.4* Trends in early sexual intercourse**

Percentage who had first sexual intercourse by age 18



4.6 Recent Sexual Activity

More than 4 out of 10 women (45%) and men (43%) age 15–49 reported having sexual intercourse during the 4 weeks preceding the survey (**Table 4.8.1** and **Table 4.8.2**). Nearly 3 in 10 women and men (28%) had sex within the past year but not within the past 4 weeks. Fourteen percent of women and 21% of men have never had sexual intercourse.

List of Tables

For more information on marriage and sexual activity, see the following tables:

- **Table 4.1 Current marital status**
- **Table 4.2 Marriage registration**
- **Table 4.3.1 Number of women's co-wives**
- **Table 4.3.2 Number of men's wives**
- **Table 4.4 Age at first marriage**
- **Table 4.5 Median age at first marriage according to background characteristics**
- **Table 4.6 Age at first sexual intercourse**
- **Table 4.7 Median age at first sexual intercourse according to background characteristics**
- **Table 4.8.1 Recent sexual activity: Women**
- **Table 4.8.2 Recent sexual activity: Men**

Table 4.1 Current marital status

Percent distribution of women and men age 15–49 by current marital status, according to age, Ghana DHS 2022

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
					WOMEN				
15–19	92.1	3.1	4.1	0.0	0.7	0.0	100.0	7.2	2,682
20–24	58.0	18.7	18.9	0.2	4.1	0.1	100.0	37.6	2,695
25–29	30.6	41.5	20.8	1.0	5.6	0.5	100.0	62.3	2,340
30–34	12.9	58.3	18.0	3.1	6.1	1.6	100.0	76.3	2,252
35–39	6.5	64.0	15.7	3.7	6.4	3.5	100.0	79.7	2,059
40–44	3.5	61.7	12.3	6.8	9.1	6.6	100.0	74.0	1,675
45–49	2.5	59.9	11.8	7.6	8.0	10.2	100.0	71.7	1,312
Total 15–49	35.1	40.0	14.6	2.6	5.2	2.4	100.0	54.6	15,014
					MEN				
15–19	99.0	0.2	0.7	0.0	0.1	0.0	100.0	0.9	1,424
20–24	85.7	6.1	6.1	0.3	1.8	0.0	100.0	12.2	1,033
25–29	54.5	30.7	12.4	0.9	1.5	0.0	100.0	43.2	888
30–34	29.1	53.2	13.4	0.7	3.6	0.0	100.0	66.6	853
35–39	12.8	72.3	9.9	1.5	2.5	0.9	100.0	82.3	809
40–44	8.4	77.6	6.1	2.9	4.3	0.7	100.0	83.7	713
45–49	3.1	79.5	5.8	6.0	4.6	1.0	100.0	85.4	557
Total 15–49	51.1	37.8	7.2	1.3	2.2	0.3	100.0	45.0	6,277
50–59	3.5	81.7	4.1	3.9	4.3	2.5	100.0	85.8	767
Total 15–59	45.9	42.6	6.9	1.6	2.5	0.5	100.0	49.5	7,044

Table 4.2 Marriage registration

Percentage of in-union women age 15–49 whose current marriage or union is registered, percentage whose current marriage or union is registered and who have any documentation recognizing the marriage/union, and percentage whose current marriage or union is registered and who have a marriage certificate, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage whose current marriage or union is registered[1]	Percentage whose current marriage or union is registered and who have any documentation recognizing the marriage/union	Percentage whose current marriage is registered and who have a marriage certificate	Number of women in union[1]
Age				
15–19	3.4	3.4	2.5	194
20–24	5.4	5.2	3.7	1,013
25–29	16.1	15.5	13.2	1,457
30–34	27.5	27.3	24.4	1,719
35–39	26.0	25.7	23.6	1,641
40–44	26.9	26.4	24.9	1,239
45–49	27.3	27.0	24.0	941
Residence				
Urban	30.7	30.3	27.2	4,248
Rural	12.2	11.9	10.6	3,956
Marital status				
Currently married	29.4	28.9	26.0	6,008
Living together	0.9	0.9	0.7	2,197
Region				
Western	26.0	25.8	25.8	487
Central	16.6	16.6	16.2	816
Greater Accra	37.3	36.5	35.3	1,144
Volta	14.4	14.4	14.2	375
Eastern	27.6	27.4	25.8	633
Ashanti	27.9	27.5	27.4	1,426
Western North	8.7	8.5	7.8	231
Ahafo	24.9	24.2	13.8	183
Bono	15.9	15.7	14.3	284
Bono East	9.0	8.6	8.3	376
Oti	7.1	6.6	5.8	248
Northern	29.7	29.5	15.7	870
Savannah	2.6	2.4	2.2	218
North East	2.8	2.6	2.4	229
Upper East	5.0	4.6	4.2	426
Upper West	6.1	5.6	4.9	258
Wealth quintile				
Lowest	5.8	5.7	3.5	1,662
Second	10.5	10.1	7.1	1,513
Middle	14.4	14.0	11.7	1,545
Fourth	22.7	22.6	20.7	1,743
Highest	52.3	51.8	49.8	1,742
Total	21.8	21.4	19.2	8,205

[1] Includes women who report that they are currently married or living with a man as if married

Table 4.3.1 Number of women's co-wives

Percent distribution of currently married women age 15–49 by number of co-wives, and percentage of currently married women with one or more co-wives, according to background characteristics, Ghana DHS 2022

Background characteristic	Number of co-wives				Total	Percentage with one or more co-wives[1]	Number of women
	0	1	2+	Don't know			
Age							
15–19	87.3	9.0	1.5	2.1	100.0	10.5	194
20–24	89.5	8.6	0.7	1.2	100.0	9.3	1,013
25–29	88.1	9.7	1.4	0.8	100.0	11.1	1,457
30–34	85.1	11.2	3.0	0.7	100.0	14.2	1,719
35–39	83.1	13.2	2.9	0.9	100.0	16.0	1,641
40–44	80.1	14.3	4.3	1.3	100.0	18.6	1,239
45–49	80.0	15.4	4.3	0.3	100.0	19.7	941
Residence							
Urban	88.0	8.7	2.2	1.1	100.0	10.9	4,248
Rural	80.7	15.3	3.3	0.6	100.0	18.6	3,956
Region							
Western	93.1	6.1	0.8	0.0	100.0	6.9	487
Central	89.3	8.1	1.8	0.7	100.0	9.9	816
Greater Accra	94.2	5.1	0.3	0.3	100.0	5.4	1,144
Volta	83.5	13.2	2.3	1.0	100.0	15.5	375
Eastern	94.6	5.2	0.0	0.2	100.0	5.2	633
Ashanti	88.6	6.4	1.9	3.1	100.0	8.3	1,426
Western North	87.9	10.7	0.7	0.8	100.0	11.3	231
Ahafo	88.6	9.3	1.0	1.1	100.0	10.3	183
Bono	92.0	6.9	0.8	0.2	100.0	7.7	284
Bono East	85.3	11.4	2.4	0.8	100.0	13.9	376
Oti	81.1	13.7	4.8	0.4	100.0	18.6	248
Northern	58.8	33.2	7.9	0.1	100.0	41.1	870
Savannah	68.2	21.9	9.1	0.7	100.0	31.0	218
North East	60.0	30.6	9.2	0.1	100.0	39.8	229
Upper East	82.0	14.8	2.8	0.3	100.0	17.6	426
Upper West	77.7	15.5	5.8	1.0	100.0	21.3	258
Education							
No education	66.3	25.8	7.4	0.4	100.0	33.2	2,015
Primary	84.3	12.1	2.9	0.7	100.0	15.0	1,233
Secondary	91.6	6.5	0.9	1.0	100.0	7.4	4,174
More than secondary	93.7	4.5	0.2	1.6	100.0	4.7	783
Wealth quintile							
Lowest	73.9	20.7	5.2	0.3	100.0	25.8	1,662
Second	79.0	17.4	3.3	0.3	100.0	20.7	1,513
Middle	86.4	10.0	2.7	0.8	100.0	12.7	1,545
Fourth	89.3	7.1	1.8	1.8	100.0	8.9	1,743
Highest	93.0	5.2	0.7	1.1	100.0	5.9	1,742
Total	84.5	11.9	2.7	0.9	100.0	14.6	8,205

[1] Excludes women who responded "don't know" when asked if their husband has other wives

Table 4.3.2 Number of men's wives

Percent distribution of currently married men age 15–49 by number of wives, according to background characteristics, Ghana DHS 2022

Background characteristic	Number of wives		Total	Number of men
	1	2+		
Age				
15–19	*	*	100.0	13
20–24	97.4	2.6	100.0	126
25–29	96.5	3.5	100.0	383
30–34	93.5	6.5	100.0	568
35–39	90.8	9.2	100.0	665
40–44	88.6	11.4	100.0	597
45–49	87.8	12.2	100.0	475
Residence				
Urban	93.5	6.5	100.0	1,479
Rural	89.2	10.8	100.0	1,349
Region				
Western	96.9	3.1	100.0	190
Central	97.7	2.3	100.0	256
Greater Accra	96.0	4.0	100.0	509
Volta	92.2	7.8	100.0	113
Eastern	95.8	4.2	100.0	192
Ashanti	96.3	3.7	100.0	442
Western North	89.1	10.9	100.0	82
Ahafo	89.5	10.5	100.0	69
Bono	93.9	6.1	100.0	87
Bono East	88.7	11.3	100.0	143
Oti	90.3	9.7	100.0	87
Northern	74.5	25.5	100.0	276
Savannah	82.4	17.6	100.0	86
North East	78.0	22.0	100.0	74
Upper East	86.1	13.9	100.0	137
Upper West	87.5	12.5	100.0	86
Education				
No education	78.4	21.6	100.0	469
Primary	87.4	12.6	100.0	335
Secondary	94.5	5.5	100.0	1,580
More than secondary	97.3	2.7	100.0	444
Wealth quintile				
Lowest	83.1	16.9	100.0	548
Second	90.9	9.1	100.0	491
Middle	90.5	9.5	100.0	447
Fourth	93.7	6.3	100.0	684
Highest	97.0	3.0	100.0	657
Total 15–49	91.4	8.6	100.0	2,828
50–59	89.6	10.4	100.0	658
Total 15–59	91.1	8.9	100.0	3,485

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 4.4 Age at first marriage

Percentage of women and men age 15–49 who were first married by specific exact ages, and median age at first marriage, according to current age, Ghana DHS 2022

Current age	Percentage first married by exact age: 15	18	20	22	25	Percentage never married	Number of respondents	Median age at first marriage
				WOMEN				
15–19	1.5	na	na	na	na	92.1	2,682	a
20–24	3.3	16.1	28.4	na	na	58.0	2,695	a
25–29	3.7	17.5	30.7	43.3	60.5	30.6	2,340	23.0
30–34	6.2	23.4	37.2	50.8	64.6	12.9	2,252	21.9
35–39	6.1	23.7	37.8	51.0	65.6	6.5	2,059	21.8
40–44	6.5	26.7	45.6	58.8	72.1	3.5	1,675	20.6
45–49	6.9	28.2	46.1	58.8	77.0	2.5	1,312	20.6
20–49	5.2	21.7	36.2	na	na	22.7	12,332	a
25–49	5.7	23.2	38.4	51.5	66.8	12.8	9,638	21.8
				MEN				
15–19	0.0	na	na	na	na	99.0	1,424	a
20–24	0.0	2.4	7.3	na	na	85.7	1,033	a
25–29	0.0	2.7	8.7	17.3	33.0	54.5	888	a
30–34	0.5	3.9	9.5	16.3	31.2	29.1	853	28.3
35–39	0.1	3.3	11.3	19.8	34.7	12.8	809	28.2
40–44	0.1	3.8	8.5	20.1	38.4	8.4	713	27.0
45–49	0.1	1.9	7.7	18.0	35.0	3.1	557	28.0
20–49	0.1	3.0	8.9	na	na	37.1	4,853	a
25–49	0.2	3.2	9.3	18.2	34.2	23.9	3,819	a
20–59	0.1	3.2	9.2	na	na	32.5	5,620	a
25–59	0.2	3.4	9.6	18.7	34.9	20.5	4,586	a

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
na = not applicable due to censoring
a = omitted because less than 50% of the respondents began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.5 Median age at first marriage according to background characteristics

Median age at first marriage among women age 25–49 and 30–49, and median age at first marriage among men age 30–59 and 35–59, according to background characteristics, Ghana DHS 2022

Background characteristic	Women age		Men age	
	25–49	30–49	30–59	35–59
Residence				
Urban	23.2	22.7	29.3	29.0
Rural	20.1	19.9	25.7	25.6
Region				
Western	23.5	23.1	28.0	28.0
Central	21.3	20.9	27.8	27.8
Greater Accra	24.7	24.5	a	30.7
Volta	21.7	21.2	27.0	26.7
Eastern	22.1	21.5	26.4	25.3
Ashanti	21.3	20.8	27.2	26.8
Western North	20.4	20.0	25.6	25.3
Ahafo	20.5	20.0	27.6	26.8
Bono	23.1	23.2	27.4	27.0
Bono East	20.7	19.8	28.0	27.8
Oti	20.7	20.5	25.2	24.5
Northern	20.4	20.3	26.2	26.3
Savannah	20.2	20.1	25.5	25.5
North East	19.4	19.3	25.6	25.7
Upper East	20.0	19.5	25.0	25.1
Upper West	21.1	20.7	25.5	25.5
Education				
No education	19.2	19.2	25.1	25.7
Primary	19.6	19.5	25.7	25.9
Secondary	22.5	22.1	27.7	27.5
More than secondary	a	27.7	a	30.1
Wealth quintile				
Lowest	19.3	19.1	24.9	25.1
Second	20.0	19.7	25.5	25.4
Middle	21.0	20.6	26.8	26.6
Fourth	22.5	21.9	28.5	28.2
Highest	a	25.3	a	30.2
Total	21.8	21.3	27.7	27.4

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
a = omitted because less than 50% of the respondents began living with their spouse/partner for the first time before reaching the beginning of the age group

Table 4.6 Age at first sexual intercourse

Percentage of women and men age 15–49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Ghana DHS 2022

Current age	Percentage who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number	Median age at first intercourse
				WOMEN				
15–19	10.2	na	na	na	na	60.9	2,682	a
20–24	10.5	46.5	74.1	na	na	14.0	2,695	18.2
25–29	10.4	46.6	72.6	85.4	93.4	3.8	2,340	18.2
30–34	11.2	49.3	73.7	86.1	93.5	1.2	2,252	18.0
35–39	10.4	49.0	74.1	87.5	93.4	0.2	2,059	18.1
40–44	12.7	52.3	75.7	89.8	94.0	0.1	1,675	17.9
45–49	10.1	52.3	77.7	88.0	93.8	0.2	1,312	17.8
20–49	10.8	48.8	74.3	na	na	4.1	12,332	18.1
25–49	10.9	49.5	74.4	87.1	93.6	1.3	9,638	18.0
15–24	10.3	na	na	na	na	37.4	5,376	a
				MEN				
15–19	8.9	na	na	na	na	69.3	1,424	a
20–24	6.2	31.8	59.5	na	na	21.8	1,033	19.3
25–29	7.2	30.5	57.1	76.5	90.6	4.2	888	19.5
30–34	4.9	20.9	48.1	68.0	83.3	1.9	853	20.1
35–39	4.6	24.7	51.6	70.2	85.5	1.2	809	19.9
40–44	3.1	22.2	45.8	69.0	85.2	1.2	713	20.3
45–49	5.1	22.9	46.9	69.8	82.9	0.4	557	20.2
20–49	5.3	26.0	52.3	na	na	6.2	4,853	19.8
25–49	5.1	24.5	50.3	70.9	85.8	2.0	3,819	20.0
15–24	7.8	na	na	na	na	49.3	2,458	a
20–59	5.1	25.7	51.3	na	na	5.4	5,620	19.9
25–59	4.8	24.3	49.5	70.5	85.1	1.7	4,586	20.0

na = not applicable due to censoring
a = omitted because less than 50% of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.7 Median age at first sexual intercourse according to background characteristics

Median age at first sexual intercourse among women age 20–49 and 25–49, and median age at first sexual intercourse among men age 20–59 and 25–59, according to background characteristics, Ghana DHS 2022

Background characteristic	Women age		Men age	
	20–49	25–49	20–59	25–59
Residence				
Urban	18.4	18.4	19.9	20.1
Rural	17.6	17.6	19.8	20.0
Region				
Western	17.8	17.8	19.5	19.8
Central	17.5	17.4	a	20.2
Greater Accra	18.6	18.6	19.9	20.0
Volta	18.3	18.3	19.9	20.0
Eastern	18.0	18.0	19.4	19.5
Ashanti	18.3	18.2	19.7	19.8
Western North	17.7	17.7	18.7	18.8
Ahafo	17.7	17.7	19.8	20.0
Bono	17.9	17.9	19.5	19.4
Bono East	17.5	17.5	a	20.2
Oti	17.6	17.5	19.4	19.5
Northern	18.1	18.0	a	20.4
Savannah	17.8	17.7	a	20.5
North East	17.8	17.8	a	20.7
Upper East	17.9	18.0	a	20.4
Upper West	18.6	18.5	a	20.5
Education				
No education	17.3	17.2	a	20.2
Primary	17.1	17.1	19.1	19.3
Secondary	18.1	18.1	19.7	19.8
More than secondary	a	20.6	a	20.9
Wealth quintile				
Lowest	17.4	17.4	19.8	20.0
Second	17.6	17.5	a	20.2
Middle	17.7	17.6	19.6	19.9
Fourth	18.1	18.0	19.7	19.9
Highest	19.3	19.2	a	20.2
Total	18.1	18.0	19.9	20.0

a = omitted because less than 50% of the respondents had intercourse for the first time before reaching the beginning of the age group

Table 4.8.1 Recent sexual activity: Women

Percent distribution of women age 15–49 by timing of last sexual intercourse, according to background characteristics, Ghana DHS 2022

Background characteristic	Timing of last sexual intercourse			Never had sexual intercourse	Total	Number of women
	Within the last 4 weeks	Within 1 year[1]	One or more years			
Age						
15–19	15.9	16.6	6.6	60.9	100.0	2,682
20–24	40.2	33.6	12.2	14.0	100.0	2,695
25–29	49.6	35.1	11.5	3.8	100.0	2,340
30–34	57.1	30.2	11.5	1.2	100.0	2,252
35–39	58.8	27.8	13.2	0.2	100.0	2,059
40–44	56.2	26.8	16.9	0.1	100.0	1,675
45–49	45.6	28.5	25.7	0.2	100.0	1,312
Marital status						
Never married	19.1	27.0	13.3	40.5	100.0	5,268
Married or living together	65.6	27.8	6.5	0.0	100.0	8,205
Divorced/separated/widowed	20.2	35.1	44.7	0.0	100.0	1,542
Duration of current union[2]						
<1 year	71.1	25.5	3.1	0.2	100.0	372
1–4 years	64.1	30.4	5.5	0.0	100.0	2,022
5–9 years	66.5	27.5	6.0	0.0	100.0	1,821
10–14 years	66.5	27.3	6.1	0.0	100.0	1,505
15–19 years	68.3	25.1	6.7	0.0	100.0	1,080
20–24 years	63.1	28.9	8.0	0.0	100.0	834
25+ years	61.1	26.3	12.6	0.0	100.0	570
Residence						
Urban	42.0	29.2	13.0	15.8	100.0	8,557
Rural	48.2	27.2	12.5	12.1	100.0	6,457
Region						
Western	48.6	25.7	11.4	14.3	100.0	955
Central	42.6	28.4	13.8	15.1	100.0	1,703
Greater Accra	41.5	30.5	10.7	17.3	100.0	2,327
Volta	44.1	26.0	12.9	17.0	100.0	713
Eastern	47.5	25.6	12.5	14.4	100.0	1,220
Ashanti	42.9	27.9	16.0	13.2	100.0	2,928
Western North	48.3	30.9	10.3	10.5	100.0	411
Ahafo	49.0	27.5	11.1	12.4	100.0	317
Bono	46.6	26.1	11.8	15.5	100.0	567
Bono East	46.3	29.2	13.5	11.0	100.0	676
Oti	44.6	33.7	10.3	11.4	100.0	403
Northern	46.6	28.0	14.0	11.4	100.0	1,149
Savannah	44.6	31.0	11.7	12.8	100.0	319
North East	54.1	26.4	8.4	11.0	100.0	290
Upper East	45.2	28.9	10.9	15.0	100.0	640
Upper West	41.1	29.7	12.7	16.5	100.0	398
Education						
No education	53.9	27.7	16.3	2.0	100.0	2,411
Primary	48.8	26.9	13.0	11.3	100.0	2,071
Secondary	41.8	28.1	11.8	18.4	100.0	8,999
More than secondary	41.1	32.6	13.4	12.9	100.0	1,533
Wealth quintile						
Lowest	47.8	27.5	13.3	11.3	100.0	2,447
Second	43.5	29.4	14.2	12.9	100.0	2,712
Middle	44.7	28.1	13.8	13.3	100.0	3,121
Fourth	44.9	29.2	11.9	14.1	100.0	3,379
Highest	43.1	27.3	11.3	18.3	100.0	3,355
Total	44.7	28.3	12.8	14.2	100.0	15,014

[1] Excludes women who had sexual intercourse within the last 4 weeks
[2] Excludes women who are not currently married

Table 4.8.2 Recent sexual activity: Men

Percent distribution of men age 15–49 by timing of last sexual intercourse, according to background characteristics, Ghana DHS 2022

Background characteristic	Timing of last sexual intercourse			Never had sexual intercourse	Total	Number of men
	Within the last 4 weeks	Within 1 year[1]	One or more years			
Age						
15–19	6.6	14.4	9.7	69.3	100.0	1,424
20–24	28.6	34.6	14.9	21.8	100.0	1,033
25–29	48.8	37.2	9.7	4.2	100.0	888
30–34	57.5	33.9	6.7	1.9	100.0	853
35–39	62.1	31.7	5.0	1.2	100.0	809
40–44	67.2	24.3	7.4	1.2	100.0	713
45–49	66.5	25.9	7.1	0.4	100.0	557
Marital status						
Never married	18.1	27.9	13.8	40.1	100.0	3,208
Married or living together	70.9	26.9	2.2	0.0	100.0	2,828
Divorced/separated/widowed	33.2	41.1	25.7	0.0	100.0	242
Marital duration[2]						
<1 year	72.9	27.1	0.0	0.0	100.0	102
1–4 years	65.8	30.8	3.5	0.0	100.0	540
5–9 years	67.2	30.8	2.0	0.0	100.0	604
10–14 years	71.5	27.0	1.5	0.0	100.0	456
15–19 years	68.5	29.8	1.7	0.0	100.0	319
20–24 years	82.3	15.4	2.3	0.0	100.0	232
25+ years	74.2	23.8	2.0	0.0	100.0	73
Married more than once	75.5	21.8	2.6	0.0	100.0	502
Residence						
Urban	43.2	28.3	9.1	19.3	100.0	3,442
Rural	41.6	27.5	9.0	21.9	100.0	2,835
Region						
Western	47.9	28.7	3.5	19.9	100.0	414
Central	37.3	33.3	6.9	22.5	100.0	686
Greater Accra	47.0	28.0	8.9	16.1	100.0	1,076
Volta	43.3	30.8	5.7	20.2	100.0	235
Eastern	42.3	23.7	15.1	18.9	100.0	466
Ashanti	40.8	26.0	10.8	22.4	100.0	1,179
Western North	47.2	27.9	7.0	17.9	100.0	181
Ahafo	50.2	21.8	7.1	20.8	100.0	133
Bono	46.0	25.1	8.6	20.2	100.0	222
Bono East	38.6	33.0	11.3	17.1	100.0	316
Oti	42.3	32.4	7.0	18.4	100.0	187
Northern	41.6	25.0	11.7	21.8	100.0	484
Savannah	43.8	24.4	6.9	24.9	100.0	155
North East	37.2	31.3	6.3	25.2	100.0	119
Upper East	37.6	29.2	9.2	24.1	100.0	267
Upper West	36.3	28.0	7.2	28.5	100.0	155
Education						
No education	53.2	28.8	7.9	10.0	100.0	628
Primary	42.6	23.4	9.6	24.3	100.0	725
Secondary	39.9	26.9	8.8	24.4	100.0	3,990
More than secondary	46.3	35.6	10.3	7.8	100.0	935
Wealth quintile						
Lowest	40.0	24.6	9.8	25.6	100.0	1,089
Second	36.2	27.8	9.7	26.3	100.0	1,133
Middle	41.7	29.0	9.6	19.7	100.0	1,137
Fourth	46.5	28.9	9.5	15.1	100.0	1,466
Highest	45.7	29.0	7.1	18.2	100.0	1,453
Total 15–49	42.5	28.0	9.1	20.5	100.0	6,277
50–59	57.2	30.1	12.4	0.4	100.0	767
Total 15–59	44.1	28.2	9.4	18.3	100.0	7,044

[1] Excludes men who had sexual intercourse within the last 4 weeks
[2] Excludes men who are not currently married

FERTILITY 5

Key Findings

- ***Total fertility rate:*** The total fertility rate (TFR) for the 3 years preceding the survey is 3.9 children per woman.
- ***Trends:*** The TFR has declined over time (from 6.4 in 1988 to 3.9 in 2022).
- ***Birth intervals:*** The median birth interval is 40.6 months. Fourteen percent of births occurred less than 24 months after the preceding birth.
- ***Age at menarche:*** The mean age at first menstruation among women age 15–49 is 14.6 years.
- ***Age at first birth:*** The median age at first birth among women age 25–49 is 22.1 years.
- ***Teenage pregnancy:*** 15% of women age 15–19 have ever been pregnant, 11% have had a live birth, 4% have had a pregnancy loss, and 2% are currently pregnant.
- ***Pregnancy outcomes:*** 82% of pregnancies ending in the 3 years preceding the survey resulted in live births, 11% resulted in miscarriages, 7% were terminated through induced abortions, and 1% ended in stillbirths.

The number of children that a woman bears depends on many factors, including the age she begins childbearing, how long she waits between births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many countries. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

This chapter describes the current level of fertility in Ghana and some of its proximate determinants. It presents information on the total fertility rate, birth intervals, insusceptibility to pregnancy (because of postpartum amenorrhoea, postpartum abstinence, or menopause), age at first birth, teenage pregnancy, and induced abortion rates.

5.1 CURRENT FERTILITY

Total fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed pregnancy histories provided by women.

Sample: Women age 15–49

The total fertility rate (TFR) is 3.9 children per woman for the 3-year period preceding the survey. Fertility is higher in rural areas (4.8 children per woman) than in urban areas (3.2 children per woman) (**Table 5.1**).

By region, the TFR ranges from 2.9 among women in Greater Accra to 6.6 among women in North East (**Map 5.1** and **Table 5.2**). Age-specific fertility rates (ASFRs) peak among women age 25–29 (190 births per 1,000 women) and fall sharply thereafter. Seven percent of women reported that they were pregnant at the time of the survey (**Table 5.1**). **Table 5.3** presents age-specific fertility rates for 5-year periods preceding the 2022 survey, and **Figure 5.1** presents trends in ASFRs from 1988 to 2022.

Trends: The TFR declined from 6.4 children per woman in 1988 to 3.9 in 2022. The TFR among women in rural areas dropped from 7.0 in 1988 to 4.8 in 2022. Among women in urban areas, the TFR decreased from 5.3 to 3.2 over the same period (data not shown).

Map 5.1 **Fertility by region**

Total fertility rate for the 3 years before the survey

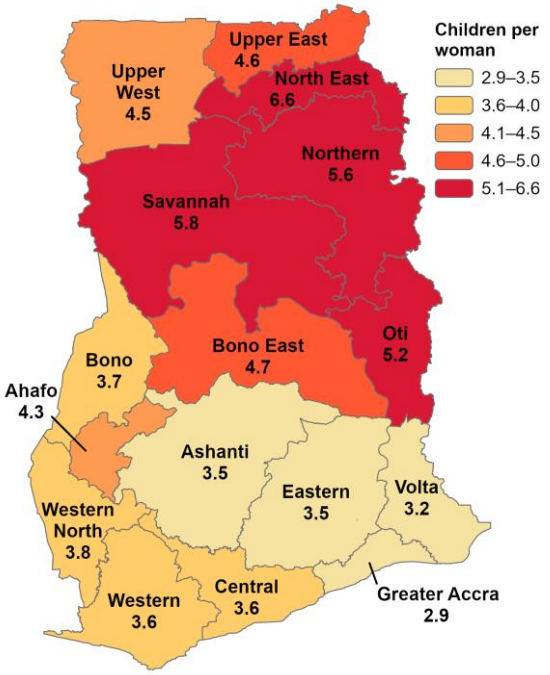
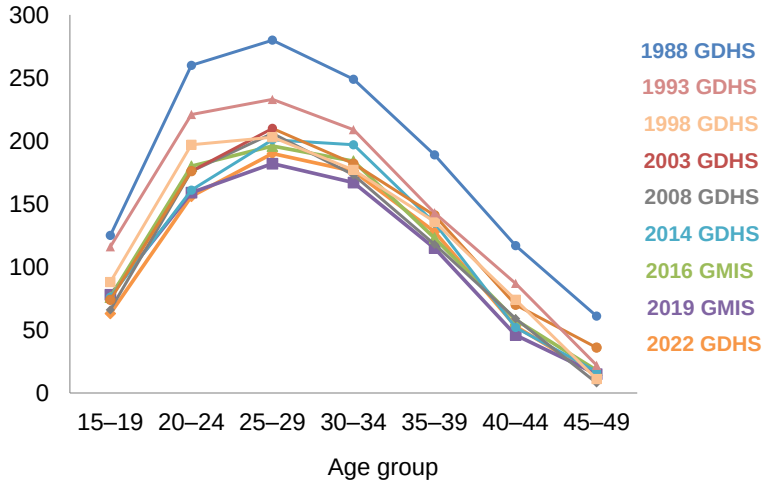


Figure 5.1 **Trends in age-specific fertility**

Births per 1,000 women



5.2 CHILDREN EVER BORN AND LIVING

By obtaining complete pregnancy histories, the 2022 GDHS allows an estimation of the number of children ever born to women of reproductive age and the number of children living at the time of the survey. Overall, women age 15–49 have an average of 2.2 children, almost all of whom are still alive (**Table 5.4**). Currently married women have an average of 3.2 children.

5.3 BIRTH INTERVALS

Median birth interval

Number of months since the preceding birth by which half of children are born.

Sample: Non-first births in the 5 years before the survey

Spacing between births has a positive impact on the health and well-being of both the mother and the child. Research has shown that children born within short intervals after the preceding birth (within 24 months) are at a higher risk of illness and death (Marston 2006; Rutstein 2005) than those born after longer intervals. Conversely, longer birth intervals have been associated with a higher risk of complications such as preeclampsia, labour dystocia, haemorrhage, and obstructed labour (Bauserman et al. 2020; Conde-Agudelo et al. 2007; Rutstein 2005). In Ghana, the median interval between births is 40.6 months. Fourteen percent of births occurred less than 24 months after the preceding birth (**Table 5.5**).

Trends: The median birth interval increased from 34.6 months in 1988 to 40.6 months in 2022.

5.4 INSUSCEPTIBILITY TO PREGNANCY

Postpartum amenorrhoea

The period of time after the end of a pregnancy and before the resumption of menstruation.

Postpartum abstinence

The period of time after the end of a pregnancy and before the resumption of sexual intercourse.

Postpartum insusceptibility

The period of time during which a woman is considered not at risk of pregnancy because she is postpartum amenorrhoeic and/or abstaining from sexual intercourse postpartum.

Median duration of postpartum amenorrhoea

Number of months after the end of a pregnancy by which time half of women have begun menstruating.

Sample: Women who had a live birth or stillbirth in the 3 years before the survey

Median duration of postpartum insusceptibility

Number of months after the end of a pregnancy by which time half of women are no longer protected against pregnancy by either postpartum amenorrhoea or abstinence from sexual intercourse.

Sample: Women who had a live birth or stillbirth in the 3 years before the survey

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. The length and intensity of breastfeeding have a bearing on the duration of amenorrhoea, which offers protection from early conception after a preceding birth. Postpartum abstinence refers to the period between childbirth and the time when a woman returns to sexual activity.

Overall, 35% of women who gave birth in the 3 years preceding the survey are insusceptible to pregnancy because they are amenorrhoeic (26%) and/or because they are abstaining from sexual intercourse (24%). Women are amenorrhoeic for a median of 6.7 months and abstain from sexual intercourse for a median of 4.7 months; the median period of insusceptibility is 9.6 months (**Table 5.6** and **Table 5.7**).

Trends: Between 1988 and 2022, the median duration of postpartum amenorrhoea dropped from 14.4 months to 6.7 months, while the median duration of abstinence decreased from 8.6 months to 4.7 months. The median duration of postpartum insusceptibility decreased from 16.5 months in 1988 to 9.6 months in 2022.

5.5 Age at First Menstruation

The onset of menarche is the beginning of sexual maturity in adolescent girls, marking the start of their first menstrual flow. A look at mean age at menarche across different age groups shows a declining trend over time. The average age at first menstruation among women age 15–49 is 14.6 years. One percent of women had their first menstrual flow by age 10 (**Table 5.8**).

5.6 Arrival of Menopause

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrhoeic and have not had a menstrual period in the 6 months before the survey, if they report being menopausal or having had a hysterectomy, or if they have never menstruated.

Sample: Women age 30–49

Beyond age 30, women's ability to become pregnant decreases as increasing percentages of women become infecund. Although the onset of infecundity is difficult to determine, one proxy indicator of infecundity is menopause (**Table 5.9**). Eight percent of women age 30–49 are menopausal. The percentage of women who are menopausal increases with age, from 2% among women age 30–34 to 44% among women age 48–49.

5.7 Age at First Birth

Median age at first birth

Age by which half of women have had their first child.

Sample: Women age 20–49 and 25–49

The age at which a woman has her first child has an impact on her overall fertility, health, and welfare as well as the health of her child. In Ghana, the median age at first birth among women age 25–49 is 22.1 years (**Table 5.10** and **Table 5.11**). Eleven percent of women have never had a live birth.

5.8 Teenage Pregnancy

Teenage pregnancy

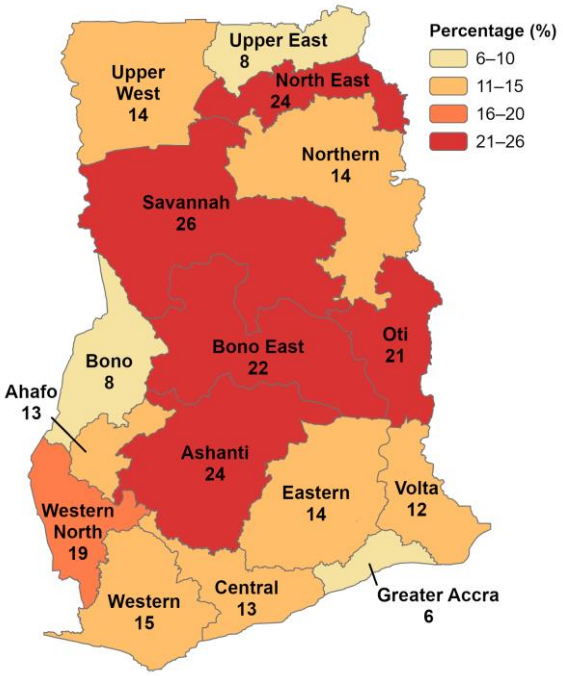
Percentage of women age 15–19 who have ever been pregnant

Sample: Women age 15–19

In Ghana, 15% of women age 15–19 have ever been pregnant, 11% have had a live birth, and 4% have had a pregnancy loss. Two percent of women age 15–19 reported that they are currently pregnant (**Table 5.12**). Ten percent of teenage women had sexual intercourse before age 15, 2% were married before age 15, and 2% were pregnant before age 15 (**Table 5.13**). By region, the percentage of women age 15–19 who have ever been pregnant ranges from 6% in Greater Accra to 26% in Savannah (**Map 5.2**).

Map 5.2 **Teenage pregnancy by region**

Percentage of women age 15–19 who have ever been pregnant



5.9 Pregnancy Outcomes and Induced Abortion Rates

Pregnancy outcomes

Live birth:	a child who was born alive, even if for a very short time
Stillbirth:	a child who was born dead (no signs of life) following a pregnancy that lasted 7 months (28 weeks) or longer
Miscarriage:	a pregnancy that ended involuntarily before completing 7 months (28 weeks)
Induced abortion:	a pregnancy that was voluntarily ended

Sample: Pregnancies among women age 15–49 ending in the 3 years preceding the survey

Eighty-two percent of pregnancies ending in the 3 years preceding the survey resulted in live births, 11% resulted in miscarriages, 7% led to induced abortions, and 1% ended in stillbirths (**Table 5.14**).

LIST OF TABLES

For more information on fertility levels and some of the determinants of fertility, see the following tables:

- **Table 5.1 Current fertility**
- **Table 5.2 Fertility by background characteristics**
- **Table 5.3 Trends in age-specific fertility rates**
- **Table 5.4 Children ever born and living**
- **Table 5.5 Birth intervals**
- **Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility**
- **Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility**
- **Table 5.8 Age at first menstruation**
- **Table 5.9 Menopause**
- **Table 5.10 Age at first birth**
- **Table 5.11 Median age at first birth**
- **Table 5.12 Teenage pregnancy**
- **Table 5.13 Sexual and reproductive health behaviours before age 15**
- **Table 5.14 Pregnancy outcome by background characteristics**
- **Table 5.15 Induced abortion rates**

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, according to residence, Ghana DHS 2022

	Residence		
Age group	Urban	Rural	Total
10–14	3	0	2
15–19	43	88	63
20–24	121	203	156
25–29	160	231	190
30–34	159	199	176
35–39	110	155	128
40–44	43	66	53
45–49	6	23	14
TFR (15–49)	3.2	4.8	3.9
GFR	109	162	132
CBR	25.1	30.9	27.9

Note: Age-specific fertility rates are per 1,000 women. Rates are for the period 1–36 months preceding the interview. Rates for the 10–14 age group are based on retrospective data from women age 15–17.
TFR: total fertility rate, expressed per woman
GFR: general fertility rate, expressed per 1,000 women age 15–44
CBR: crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15–49 currently pregnant, and mean number of children ever born to women age 40–49, according to background characteristics, Ghana DHS 2022

Background characteristic	Total fertility rate	Percentage of women age 15–49 currently pregnant	Mean number of children ever born to women age 40–49
Residence			
Urban	3.2	6.2	3.9
Rural	4.8	7.7	5.3
Region			
Western	3.6	7.1	4.5
Central	3.6	6.2	4.6
Greater Accra	2.9	6.2	3.5
Volta	3.2	6.2	4.1
Eastern	3.5	7.7	4.2
Ashanti	3.5	5.8	4.4
Western North	3.8	6.5	4.6
Ahafo	4.3	6.4	4.8
Bono	3.7	6.6	4.3
Bono East	4.7	6.2	4.9
Oti	5.2	8.3	5.7
Northern	5.6	9.6	5.9
Savannah	5.8	9.9	5.9
North East	6.6	10.6	6.3
Upper East	4.6	6.7	5.0
Upper West	4.5	6.5	5.1
Education			
No education	5.8	7.9	5.6
Primary	4.7	7.2	4.8
Secondary	3.5	6.6	3.9
More than secondary	2.5	5.8	2.4
Wealth quintile			
Lowest	5.9	8.2	6.0
Second	4.9	6.9	5.3
Middle	3.7	6.2	4.7
Fourth	3.1	7.4	4.0
Highest	2.7	5.8	3.0
Total	3.9	6.8	4.5

Note: Total fertility rates are for the period 1–36 months prior to the interview.

Table 5.3 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, according to age group, Ghana DHS 2022

	Number of years preceding survey			
Age group	0–4	5–9	10–14	15–19
10–14	1	3	4	4
15–19	63	64	75	83
20–24	152	152	173	185
25–29	191	206	207	225
30–34	182	188	204	207
35–39	125	145	159	
40–44	58	82		
45–49	17			

Note: Age-specific fertility rates are per 1,000 women. For the 0–4 year period, rates for the 10–14 age group are based on retrospective data from women age 15–19.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15–49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Ghana DHS 2022

	Number of children ever born														
Age group	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	Mean number of children ever born	Mean number of living children
ALL WOMEN															
15–19	89.1	10.1	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,682	0.12	0.11
20–24	53.2	29.9	13.0	3.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,695	0.69	0.66
25–29	25.4	28.7	23.0	14.7	6.4	1.4	0.4	0.1	0.0	0.0	0.0	100.0	2,340	1.54	1.48
30–34	10.9	14.4	22.6	20.0	16.6	9.1	4.7	1.4	0.2	0.1	0.0	100.0	2,252	2.72	2.58
35–39	5.3	7.4	15.5	20.0	20.5	14.7	8.4	5.4	1.9	0.6	0.4	100.0	2,059	3.66	3.45
40–44	2.8	6.5	10.5	16.3	19.0	16.0	11.7	8.3	5.0	2.8	1.1	100.0	1,675	4.38	4.05
45–49	2.8	6.7	7.3	15.0	18.2	16.0	12.7	9.6	5.0	4.2	2.4	100.0	1,312	4.66	4.24
Total	32.3	16.1	13.4	11.7	10.2	6.8	4.3	2.7	1.3	0.8	0.4	100.0	15,014	2.19	2.05
CURRENTLY MARRIED WOMEN															
15–19	39.8	51.1	6.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	194	0.71	0.69
20–24	18.9	46.4	25.4	7.3	1.9	0.0	0.1	0.0	0.0	0.0	0.0	100.0	1,013	1.27	1.23
25–29	9.7	27.4	29.6	20.6	10.0	1.8	0.7	0.1	0.0	0.0	0.0	100.0	1,457	2.03	1.94
30–34	4.6	12.5	23.1	21.9	19.2	10.8	5.9	1.6	0.2	0.1	0.0	100.0	1,719	3.05	2.89
35–39	2.2	5.7	13.6	20.1	22.9	16.3	9.9	5.9	2.3	0.7	0.4	100.0	1,641	3.95	3.75
40–44	1.3	4.1	8.4	15.9	20.4	17.1	13.5	9.6	5.7	3.2	0.9	100.0	1,239	4.67	4.33
45–49	2.0	6.0	6.0	14.2	17.0	16.8	14.2	9.9	6.1	4.8	2.9	100.0	941	4.90	4.47
Total	6.8	16.9	18.1	17.2	15.6	10.4	7.0	4.1	2.1	1.2	0.6	100.0	8,205	3.23	3.04

Table 5.5 Birth intervals

Percent distribution of non-first live births in the 5 years preceding the survey by number of months since preceding live birth, and median number of months since preceding live birth, according to background characteristics, Ghana DHS 2022

Background characteristic	Months since preceding live birth						Total	Number of non-first live births	Median number of months since preceding live birth
	7–17	18–23	24–35	36–47	48–59	60+			
Mother's age									
15–19	(18.8)	(4.2)	(70.6)	(6.5)	(0.0)	(0.0)	100.0	22	(27.5)
20–29	5.5	12.1	32.7	21.3	12.5	15.8	100.0	1,858	35.8
30–39	4.0	9.2	25.9	21.2	14.0	25.6	100.0	3,444	41.2
40–49	2.6	6.0	18.0	21.3	17.0	35.1	100.0	923	49.5
Sex of preceding birth									
Male	4.7	10.1	26.6	22.0	13.0	23.6	100.0	3,150	40.0
Female	3.8	9.1	27.3	20.4	15.0	24.4	100.0	3,097	41.3
Survival of preceding birth									
Living	3.7	9.2	26.9	21.7	14.2	24.4	100.0	5,971	41.1
Dead	18.2	18.8	27.6	11.4	9.2	14.8	100.0	276	29.3
Birth order									
2–3	4.6	10.1	25.4	19.6	13.7	26.6	100.0	3,273	41.4
4–6	4.1	8.4	27.5	22.7	14.8	22.5	100.0	2,422	40.6
7+	3.2	11.6	33.4	24.1	12.3	15.3	100.0	552	36.9
Residence									
Urban	4.4	9.8	24.5	19.4	14.9	27.0	100.0	2,910	42.3
Rural	4.2	9.4	29.0	22.8	13.1	21.4	100.0	3,337	39.3
Region									
Western	7.3	10.3	26.4	19.4	11.8	24.8	100.0	394	39.2
Central	5.6	8.7	27.2	17.0	12.7	28.8	100.0	646	40.9
Greater Accra	5.1	11.3	23.2	16.7	12.7	31.0	100.0	745	42.3
Volta	4.1	10.3	24.4	16.8	12.0	32.5	100.0	233	43.4
Eastern	3.0	10.6	22.8	23.9	10.8	29.0	100.0	456	42.1
Ashanti	3.9	10.4	25.3	19.2	15.7	25.4	100.0	1,077	41.3
Western North	7.8	7.7	22.4	22.9	13.7	25.5	100.0	169	41.7
Ahafo	5.0	9.1	24.7	22.3	12.2	26.6	100.0	141	41.2
Bono	5.2	7.6	24.2	18.4	14.4	30.2	100.0	202	42.6
Bono East	5.1	11.3	26.6	21.1	13.2	22.7	100.0	344	39.9
Oti	3.6	9.3	31.9	19.8	14.5	20.9	100.0	220	39.5
Northern	2.6	8.7	32.6	28.2	15.2	12.7	100.0	750	38.1
Savannah	4.4	11.2	39.1	19.2	15.0	11.2	100.0	198	34.5
North East	1.6	7.5	38.8	26.1	15.0	11.0	100.0	211	36.8
Upper East	3.0	6.7	21.2	27.4	17.9	23.7	100.0	280	43.0
Upper West	2.2	5.3	28.2	30.1	17.7	16.6	100.0	180	41.2
Mother's education									
No education	3.5	8.4	31.9	25.3	13.6	17.3	100.0	1,776	38.7
Primary	3.6	10.3	24.5	19.4	12.8	29.3	100.0	1,030	42.7
Secondary	4.9	9.3	24.8	19.4	14.7	26.9	100.0	2,924	42.0
More than secondary	5.1	13.4	27.1	20.6	13.5	20.3	100.0	516	38.1
Wealth quintile									
Lowest	4.1	9.7	34.1	24.6	13.8	13.8	100.0	1,588	36.8
Second	3.9	8.5	28.0	21.3	14.5	23.9	100.0	1,298	40.5
Middle	5.4	9.0	23.9	20.2	14.4	27.2	100.0	1,216	42.8
Fourth	4.2	8.4	21.5	20.9	12.1	32.9	100.0	1,114	44.7
Highest	3.9	12.8	24.2	17.4	15.2	26.5	100.0	1,031	40.7
Total	4.3	9.6	26.9	21.2	14.0	24.0	100.0	6,247	40.6

Note: First-order live births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. Figures in parentheses are based on 25–49 unweighted cases.

Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of live births and stillbirths in the 3 years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, according to number of months since birth, and median and mean durations, Ghana DHS 2022

	Percentage of births for which the mother is:			
Months since birth	Amenorrhoeic	Abstaining	Insusceptible[1]	Number of births[2]
<2	86.4	95.5	97.0	315
2–3	73.7	71.0	86.9	279
4–5	60.7	42.9	72.7	274
6–7	46.4	28.3	57.4	321
8–9	37.9	23.7	48.5	252
10–11	38.9	21.5	48.4	302
12–13	27.2	21.4	42.0	322
14–15	18.5	20.4	33.3	285
16–17	13.3	16.4	25.3	330
18–19	14.4	13.2	24.2	348
20–21	7.8	11.6	17.3	300
22–23	6.8	12.3	17.1	268
24–25	3.2	8.9	10.9	290
26–27	3.8	2.7	6.0	246
28–29	2.5	5.2	6.8	254
30–31	2.0	6.8	8.3	335
32–33	5.6	5.4	10.7	223
34–35	1.8	4.5	5.9	233
Total	25.7	23.5	35.2	5,177
Median	6.7	4.7	9.6	na
Mean	10.0	9.2	13.4	na

Note: Estimates are based on status at the time of the survey.
na = not applicable
[1] Includes live births and stillbirths for which mothers are either still amenorrhoeic or still abstaining (or both) following birth
[2] Includes live births and stillbirths

Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following live births and stillbirths in the 3 years preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15–29	7.1	4.8	10.2
30–49	6.4	4.6	8.4
Residence			
Urban	6.4	4.6	9.0
Rural	7.1	4.8	11.0
Region			
Western	(4.9)	(4.9)	(8.9)
Central	5.9	(4.3)	7.6
Greater Accra	(7.0)	4.1	(9.0)
Volta	(9.6)	(4.1)	(12.5)
Eastern	5.3	(4.1)	6.4
Ashanti	5.8	5.3	14.0
Western North	(6.1)	(5.0)	(9.7)
Ahafo	6.4	5.1	13.3
Bono	(6.9)	*	(8.2)
Bono East	5.0	4.6	6.3
Oti	9.4	5.7	11.6
Northern	8.8	5.2	10.6
Savannah	10.6	7.9	13.0
North East	10.3	6.3	13.2
Upper East	8.3	4.6	11.1
Upper West	10.9	4.8	12.7
Mother's education			
No education	11.2	5.0	13.3
Primary	7.4	5.1	9.7
Secondary	6.2	4.6	8.7
More than secondary	4.9	4.3	6.6
Wealth quintile			
Lowest	11.6	5.4	14.4
Second	6.4	5.5	9.7
Middle	6.5	4.6	9.5
Fourth	6.1	4.6	7.2
Highest	4.5	3.9	7.0
Total	6.7	4.7	9.6

Note: Medians are based on status at the time of the survey (current status). Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.8 Age at first menstruation

Percentage of women age 15–49 whose first menstruation occurred by specific exact ages, percentage who have never menstruated, and mean age at menarche, according to current age, Ghana DHS 2022

	Age at menarche						Percentage who have never menstruated	Don't know	Total	Number of women	Mean age at menarche
Current age	≤10	11	12	13	14	15+					
15–19	2.2	3.8	12.8	24.8	24.7	29.1	2.5	0.2	100.0	2,682	13.7
20–24	1.2	3.9	10.5	16.9	18.5	48.5	0.1	0.5	100.0	2,695	14.4
25–29	0.9	2.8	8.7	15.1	19.5	51.9	0.0	1.0	100.0	2,340	14.7
30–34	0.8	1.9	7.5	14.6	19.4	54.7	0.3	0.8	100.0	2,252	14.7
35–39	0.9	1.9	6.6	11.0	18.9	58.9	0.1	1.8	100.0	2,059	15.0
40–44	0.5	1.6	6.2	10.9	16.6	62.9	0.3	1.0	100.0	1,675	15.1
45–49	1.0	0.7	4.7	10.9	17.2	64.4	0.0	1.1	100.0	1,312	15.2
Total	1.1	2.6	8.7	15.7	19.6	50.9	0.5	0.9	100.0	15,014	14.6

Table 5.9 Menopause

Percentage of women age 30–49 who are menopausal, according to age, Ghana DHS 2022

Age	Percentage menopausal[1]	Number of women
30–34	1.8	2,252
35–39	2.5	2,059
40–41	4.2	699
42–43	9.0	713
44–45	16.5	615
46–47	23.5	490
48–49	44.2	469
Total	8.4	7,298

[1] Percentage of women (1) who are not pregnant, (2) who have had a birth in the past 5 years and are not postpartum amenorrhoeic, and (3) for whom one of the following additional conditions applies: (a) their last menstrual period occurred 6 or more months preceding the survey, (b) they declared that they are in menopause or have had a hysterectomy, or (c) they have never menstruated

Table 5.10 Age at first birth

Percentage of women age 15–49 who had a live birth by specific exact ages, percentage who have never had a live birth, and median age at first live birth, according to current age, Ghana DHS 2022

	Percentage who had a live birth by exact age					Percentage who have never had a live birth	Number of women	Median age at first live birth
Current age	15	18	20	22	25			
15–19	0.7	na	na	na	na	89.1	2,682	a
20–24	1.5	11.8	26.6	na	na	53.2	2,695	a
25–29	1.7	13.6	28.8	43.5	63.6	25.4	2,340	23.0
30–34	2.3	17.2	33.7	50.0	67.4	10.9	2,252	22.0
35–39	2.3	17.1	33.0	49.1	69.8	5.3	2,059	22.1
40–44	3.1	17.9	36.3	54.1	72.7	2.8	1,675	21.4
45–49	3.2	19.9	37.6	54.0	73.1	2.8	1,312	21.4
20–49	2.2	15.7	31.9	na	na	20.0	12,332	a
25–49	2.4	16.8	33.3	49.5	68.7	10.7	9,638	22.1

na = not applicable due to censoring
a = omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.11 Median age at first birth

Median age at first live birth among women age 20–49 and age 25–49, according to background characteristics, Ghana DHS 2022

Background characteristic	Women age	
	25–49	30–49
Residence		
Urban	23.4	23.1
Rural	20.8	20.7
Region		
Western	21.6	21.2
Central	21.4	21.4
Greater Accra	24.5	24.4
Volta	22.2	21.8
Eastern	21.8	21.6
Ashanti	22.2	21.7
Western North	21.1	20.9
Ahafo	21.1	20.8
Bono	22.4	22.3
Bono East	20.8	20.6
Oti	20.6	20.5
Northern	21.9	21.7
Savannah	20.9	20.9
North East	20.5	20.5
Upper East	21.0	20.6
Upper West	22.1	21.8
Education		
No education	20.2	20.2
Primary	19.9	20.0
Secondary	22.5	22.4
More than secondary	a	28.7
Wealth quintile		
Lowest	20.4	20.3
Second	20.5	20.4
Middle	20.9	20.8
Fourth	22.8	22.0
Highest	a	25.7
Total	22.1	21.8

a = omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.12 Teenage pregnancy

Percentage of women age 15–19 who have ever had a live birth, percentage who have ever had a pregnancy loss, percentage who are currently pregnant, and percentage who have ever been pregnant, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of women age 15–19 who: Have ever had a live birth	Have ever had a pregnancy loss[1]	Are currently pregnant	Have ever been pregnant	Number of women
Age					
15	1.3	0.6	0.6	2.4	655
16	3.7	1.3	1.6	6.3	506
17	12.1	3.4	1.1	16.2	568
18	17.8	8.0	3.4	24.7	480
19	23.8	7.8	3.2	31.6	473
Residence					
Urban	8.0	4.2	1.1	11.4	1,458
Rural	14.4	3.5	2.8	19.7	1,223
Region					
Western	10.7	2.4	3.3	14.7	177
Central	7.0	5.4	2.4	12.9	354
Greater Accra	5.4	2.3	0.6	6.0	364
Volta	7.8	2.7	1.9	11.8	158
Eastern	11.4	3.0	0.0	13.7	202
Ashanti	16.8	8.4	1.1	23.9	470
Western North	10.6	6.0	4.0	18.9	79
Ahafo	8.5	3.5	2.6	13.4	59
Bono	6.0	1.9	0.9	8.3	113
Bono East	19.1	3.9	1.0	22.3	135
Oti	15.4	2.8	4.0	21.1	87
Northern	11.2	0.6	2.5	14.2	161
Savannah	17.5	3.9	6.1	25.9	67
North East	17.5	1.4	5.9	23.5	56
Upper East	6.2	0.0	2.1	8.2	111
Upper West	10.4	2.0	2.1	13.8	89
Education					
No education	26.5	5.7	8.3	34.3	99
Primary	20.3	4.9	2.8	26.2	404
Secondary	8.6	3.7	1.4	12.5	2,150
More than secondary	*	*	*	*	29
Wealth quintile					
Lowest	17.5	2.1	4.1	23.1	462
Second	15.0	3.7	2.2	19.2	568
Middle	13.0	6.1	1.5	17.9	639
Fourth	5.0	4.1	1.6	9.6	523
Highest	3.7	2.8	0.3	5.7	490
Total	10.9	3.9	1.9	15.2	2,682

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Stillbirth, miscarriage, or abortion

Table 5.13 Sexual and reproductive health behaviours before age 15

Among women and men age 15–19, percentage who initiated sexual intercourse, were married, and had a live birth/fathered a child before age 15, according to sex, and percentage of women who were pregnant before age 15, Ghana DHS 2022

Sex	Had sexual intercourse before age 15	Married before age 15	Had a live birth/fathered a child before age 15	Pregnant before age 15	Number
Women	10.2	1.5	0.7	2.3	2,682
Men	8.9	0.0	0.0	na	1,424

na = not applicable

Table 5.14 Pregnancy outcome by background characteristics

Percent distribution of pregnancies ending in the 3 years preceding the survey by type of outcome, according to background characteristics, Ghana DHS 2022

Background characteristic	Pregnancy outcome				Total	Number of pregnancies
	Live birth	Stillbirth[1]	Miscarriage[2]	Induced abortion		
Age at pregnancy outcome						
<20	74.7	2.3	6.7	16.2	100.0	668
20–24	80.3	0.9	9.8	9.1	100.0	1,501
25–34	84.6	1.2	9.9	4.3	100.0	2,906
35–44	80.6	1.2	14.4	3.8	100.0	1,278
45–49	71.9	6.9	17.3	4.0	100.0	54
Pregnancy order						
First	79.7	1.8	9.6	8.9	100.0	1,485
Second	80.0	0.6	11.4	8.0	100.0	1,321
Third	80.8	0.8	12.9	5.5	100.0	1,029
Fourth	84.5	0.6	10.5	4.4	100.0	864
Fifth or higher	83.7	2.0	9.2	5.1	100.0	1,707
Residence						
Urban	78.3	1.0	12.4	8.3	100.0	3,195
Rural	85.0	1.6	8.6	4.8	100.0	3,212
Region						
Western	81.6	0.9	11.1	6.4	100.0	394
Central	76.2	1.8	9.8	12.2	100.0	705
Greater Accra	76.4	1.2	12.4	10.0	100.0	837
Volta	77.5	2.1	15.5	4.9	100.0	251
Eastern	74.2	0.9	13.6	11.3	100.0	501
Ashanti	78.8	1.2	11.9	8.1	100.0	1,175
Western North	80.4	0.6	9.6	9.4	100.0	177
Ahafo	88.3	1.0	7.3	3.4	100.0	131
Bono	81.6	1.7	11.0	5.8	100.0	215
Bono East	86.8	0.5	10.2	2.4	100.0	326
Oti	84.6	1.6	12.0	1.9	100.0	214
Northern	91.0	2.0	6.9	0.1	100.0	637
Savannah	87.4	1.0	8.9	2.8	100.0	189
North East	94.5	1.2	3.3	1.1	100.0	184
Upper East	90.9	0.7	7.6	0.8	100.0	298
Upper West	89.2	1.4	6.6	2.8	100.0	173
Education						
No education	90.1	1.4	6.4	2.1	100.0	1,273
Primary	82.9	2.8	8.7	5.7	100.0	972
Secondary	78.5	0.8	11.8	9.0	100.0	3,572
More than secondary	80.2	1.8	14.9	3.0	100.0	590
Wealth quintile						
Lowest	90.3	1.6	6.1	2.0	100.0	1,377
Second	86.0	1.4	6.9	5.8	100.0	1,276
Middle	80.1	1.4	10.7	7.8	100.0	1,298
Fourth	75.6	0.4	14.5	9.5	100.0	1,296
Highest	75.0	1.7	15.2	8.1	100.0	1,160
Total	81.7	1.3	10.5	6.5	100.0	6,407

[1] Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[2] Miscarriages are foetal deaths in pregnancies lasting less than 28 weeks. When pregnancy duration is reported in months, miscarriages are foetal deaths in pregnancies lasting less than 7 months.

Table 5.15 Induced abortion rates

Age-specific and total induced abortion rates, and general abortion rates, for the 3 years preceding the survey, according to residence, Ghana DHS 2022

	Residence		
Age group	Urban	Rural	Total
10–14	1	0	1
15–19	16	10	13
20–24	18	16	17
25–29	12	10	11
30–34	7	6	7
35–39	7	3	5
40–44	2	5	4
45–49	0	2	1
TAR (15–49)	0.3	0.3	0.3
GAR	11	9	10

Note: Age-specific induced abortion rates are per 1,000 women. Rates are for the period 1–36 months preceding the interview. Rates for the 10–14 age group are based on retrospective data from women age 15–17.
TAR: total induced abortion rate, expressed per woman
GAR: general induced abortion rate, expressed per 1,000 women age 15–44

FERTILITY PREFERENCES 6

Key Findings

- ***Desire for another child:*** 27% of currently married women want to have another child within 2 years and 30% want to wait at least 2 years.
- ***Desire to limit childbearing:*** 33% of women do not want to have another child, including 3% who are sterilized.
- ***Trends:*** Desire to limit childbearing (including through sterilisation) among currently married women declined slightly from 34% in 1993 to 33% in 2022. In contrast, desire to limit childbearing among currently married men increased from 24% in 1993 to 28% in 2022.
- ***Ideal family size:*** The mean ideal number of children is 4.5 among women overall and 4.9 among currently married women.
- ***Family planning status:*** 61% of live births and current pregnancies were planned at the time of conception, 30% were mistimed, and 9% were not wanted at all.
- ***Wanted fertility rates:*** The total wanted fertility rate is 3.4 children, while the actual total fertility rate is 3.9 children; thus, on average, women are having 0.5 more children than they want.

Information on fertility preferences can help family planning programme planners assess the desire for children, the extent of mistimed and unwanted pregnancies, and the demand for contraception to space or limit births. This information suggests the direction that fertility patterns could take in the future.

This chapter presents information on whether and when married women and men want more children, their ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women and men were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women and men who are sterilised are assumed not to want any more children.

Sample: Currently married women and men age 15–49

The findings of the survey indicate that there is considerable desire among married Ghanaians to control the timing and number of births. Thirty-three percent of currently married women age 15–49 do not want to have another child or are sterilised, and 30% would like to wait for 2 or more years for the next birth. Twenty-seven percent of women want to have another child within 2 years. Similarly, 28% of men do not want to have another child or are sterilised, and nearly 4 in 10 (38%) would like to wait for 2 or more years for the next birth (**Table 6.1**).

The proportion of both women and men who want to have a child soon is inversely associated with the number of living children. Over 7 in 10 (77%) currently married women with no living children want to have a child soon, as compared with 11% of women with six or more children. Among currently married men, 72% of those with no living children want to have a child soon, as compared with 18% of those with six or more children. The desire to limit childbearing rises with number of living children, from 3% among married women with no living children to near 70% among those with six or more living children (**Figure 6.1**, **Figure 6.2**, and **Table 6.2.1**). Similar to women, the percentage of married men who want no more children rises with number of living children (**Table 6.2.2**).

Trends: The desire to limit childbearing (including through sterilisation) among currently married women declined slightly from 34% in 1993 to 33% in 2022. In contrast, the desire to limit childbearing among currently married men increased from 24% in 1993 to 28% in 2022.

Figure 6.1 **Desire to limit childbearing by number of living children**

Percentage of currently married women age 15–49 who want no more children

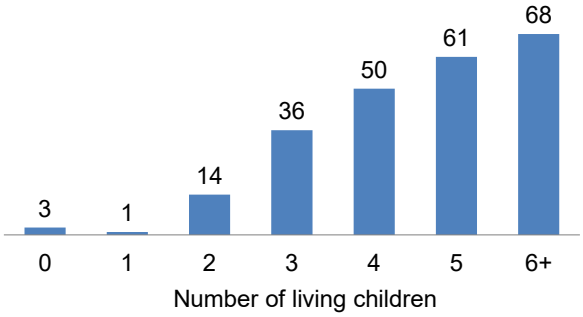
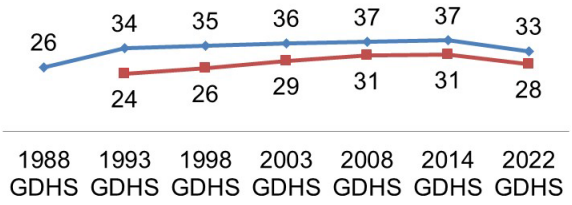


Figure 6.2 **Trends in desire to limit childbearing**

Percentage of currently married women and men age 15–49 who want no more children



6.2 IDEAL FAMILY SIZE

Ideal family size

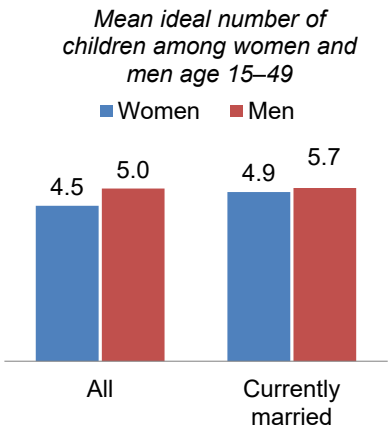
Respondents with no children were asked "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?"

Sample: Women and men age 15–49

The mean ideal number of children is 4.5 among women overall and 4.9 among currently married women, while the ideal number is 5.0 among all men (**Figure 6.3**). Among women, the mean ideal number of children increases with the number of living children, from 4.0 children among those with one child to 6.5 children among those with six or more children. A similar pattern is observed among men (**Table 6.3** and **Table 6.4**).

Trends: The mean ideal number of children among all women age 15–49 decreased from 5.3 in 1998 to 4.3 in 2014 before increasing to 4.5 in 2022.

Figure 6.3 **Ideal family size**



6.3 FERTILITY PLANNING STATUS

Planning status of births/pregnancies

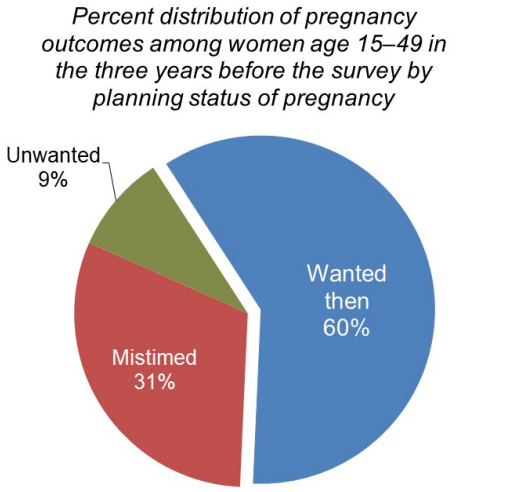
Women reported whether their births/pregnancies were wanted at the time (planned birth), at a later time (mistimed birth), or not at all (unwanted birth).

Sample: Current pregnancies and live births in the 3 years before the survey among women age 15–49 and all pregnancy outcomes in the 3 years before the survey among women age 15–49

Sixty-one percent of live births and current pregnancies were wanted at the time of conception, 30% were mistimed, and 9% were not wanted at all (**Figure 6.4** and **Table 6.5**).

Trends: The percentage of planned births increased from 57% in 1993 to 66% in 2014 and then declined to 61% in 2022. Over the same period, births and pregnancies that were mistimed declined from 33% in 1993 to 25% in 2008 before increasing to 27% in 2014 and 30% in 2022. Unwanted births and pregnancies rose from 9% in 1993 to a peak of 18% in 2003 before declining once again to 9% in 2022.

Figure 6.4 **Fertility planning status**



6.4 WANTED FERTILITY RATES

Unwanted birth

Any birth in excess of the number of children a woman reported as her ideal number.

Wanted birth

Any birth less than or equal to the number of children a woman reported as her ideal number.

Wanted fertility rate

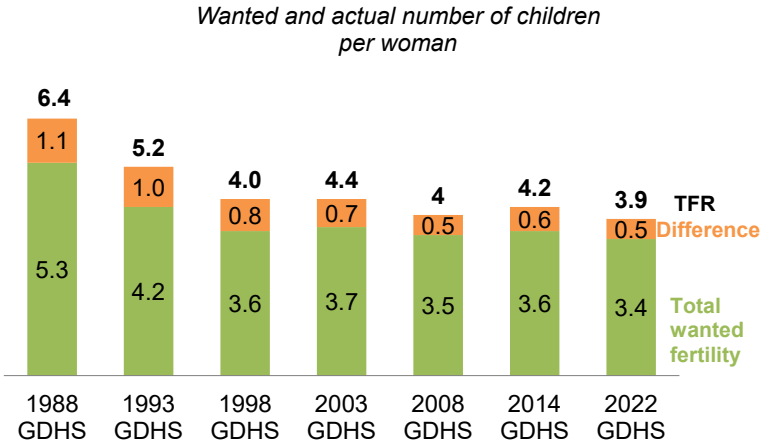
The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates, excluding unwanted births.

Sample: Women age 15–49

The wanted fertility rate represents the level of fertility that would have prevailed if all unwanted births were prevented. The total wanted fertility rate is 3.4 children, while the actual total fertility rate is 3.9 children; thus, on average, women are having 0.5 more children than they want (**Table 6.6**).

Trends: The total wanted fertility rate declined from 5.3 children in 1988 to 3.4 children in 2022. Over the same period, the gap between wanted and actual fertility decreased from 1.1 children to 0.5 children (**Figure 6.5**).

Figure 6.5 **Trends in wanted and actual fertility**



List of Tables

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- **Table 6.1** **Fertility preferences according to number of living children**
- **Table 6.2.1** **Desire to limit childbearing: Women**
- **Table 6.2.2** **Desire to limit childbearing: Men**
- **Table 6.3** **Ideal number of children according to number of living children**
- **Table 6.4** **Mean ideal number of children according to background characteristics**
- **Table 6.5** **Fertility planning status**
- **Table 6.6** **Wanted fertility rates**

Table 6.1 Fertility preferences according to number of living children

Percent distribution of currently married women and currently married men age 15–49 by desire for children, according to number of living children, Ghana DHS 2022

Desire for children	Number of living children							Total 15–49	Total 15–59
	0	1	2	3	4	5	6+		
				WOMEN[1]					
Have another soon[2]	76.5	39.7	33.2	22.9	17.2	13.3	10.7	27.2	na
Have another later[3]	15.3	49.1	42.9	30.7	21.9	16.7	10.1	29.8	na
Have another, undecided when	3.5	6.3	4.4	3.9	3.1	2.2	1.5	3.8	na
Undecided	0.9	1.8	3.7	4.5	5.7	5.3	5.8	4.2	na
Want no more	2.1	1.4	13.3	31.2	45.3	55.6	61.4	29.8	na
Sterilised[4]	0.4	0.0	0.4	4.4	4.4	4.9	6.9	3.0	na
Declared infecund	1.3	1.6	2.0	2.3	2.4	2.0	3.7	2.2	na
Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na
Number	449	1,351	1,610	1,571	1,321	923	980	8,205	na
				MEN[5]					
Have another soon[2]	71.7	37.7	33.2	25.0	19.0	18.4	18.2	29.2	26.8
Have another later[3]	23.0	57.5	50.6	38.0	23.8	26.3	27.0	37.9	32.1
Have another, undecided when	2.0	1.3	3.0	2.1	2.4	3.2	0.6	2.1	1.9
Undecided	2.1	1.0	1.7	4.2	5.6	3.0	2.2	2.9	2.7
Want no more	0.7	2.2	10.9	29.5	47.6	47.5	51.2	27.0	35.2
Sterilised[4]	0.0	0.0	0.5	1.2	0.8	0.9	0.5	0.6	0.9
Declared infecund	0.4	0.1	0.1	0.2	0.5	0.8	0.3	0.3	0.4
Missing	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	179	451	585	511	442	265	394	2,828	3,485

na = not applicable
[1] The number of living children includes a woman's current pregnancy.
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilisation
[5] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15–49 who want no more children by number of living children, according to background characteristics, Ghana DHS 2022

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	3.6	1.0	18.5	42.7	57.0	71.6	76.5	34.7
Rural	1.1	2.1	6.6	26.6	41.5	52.2	64.7	30.8
Region								
Western	*	2.2	12.1	42.7	66.3	71.6	(74.3)	41.3
Central	*	2.2	13.1	39.4	61.2	73.2	78.8	38.7
Greater Accra	(4.4)	1.7	28.9	61.7	75.2	(82.6)	(79.3)	43.5
Volta	*	0.0	15.7	40.7	67.6	(69.3)	(69.7)	37.0
Eastern	(0.0)	2.7	14.9	35.3	57.2	(82.1)	84.1	37.5
Ashanti	(4.1)	1.3	12.0	40.5	50.8	68.3	77.7	36.0
Western North	*	1.1	7.3	34.5	64.1	70.8	84.6	40.3
Ahafo	(0.0)	3.3	16.7	27.8	37.6	62.3	76.5	35.7
Bono	*	0.7	14.9	33.1	55.4	67.7	(87.6)	34.3
Bono East	*	0.0	11.8	23.6	34.5	41.2	60.0	26.5
Oti	*	1.4	7.8	25.7	29.8	49.9	58.4	28.5
Northern	2.6	1.2	3.0	9.0	13.6	24.4	45.5	14.9
Savannah	(9.6)	0.0	2.8	7.4	15.6	19.5	46.7	15.7
North East	(1.8)	0.0	1.6	6.8	13.0	13.4	54.2	16.4
Upper East	(2.1)	0.0	2.9	19.3	34.6	64.9	57.9	21.7
Upper West	(0.0)	5.1	8.2	13.9	36.0	56.7	76.2	27.1
Education								
No education	0.5	2.0	3.8	22.7	29.5	45.2	58.6	33.4
Primary	0.0	2.7	14.4	33.7	38.6	66.1	73.1	36.3
Secondary	3.6	1.4	13.8	35.6	62.6	74.3	82.9	31.9
More than secondary	2.0	0.0	22.1	59.9	70.2	*	*	31.3
Wealth quintile								
Lowest	0.4	1.8	4.6	13.5	26.8	40.4	59.5	26.5
Second	1.5	2.5	8.2	21.1	39.9	58.7	66.1	32.3
Middle	5.0	0.3	9.9	32.4	48.2	67.6	76.5	34.4
Fourth	1.2	0.8	16.4	42.7	60.6	80.2	75.9	33.5
Highest	3.8	1.8	22.2	52.5	72.7	70.9	(91.5)	37.2
Total	2.5	1.4	13.7	35.6	49.7	60.5	68.2	32.8

Note: Women who have been sterilised or whose husband has been sterilised are considered to want no more children. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] The number of living children includes a woman's current pregnancy.

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15–49 who want no more children by number of living children, according to background characteristics, Ghana DHS 2022

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	0.0	3.0	13.4	39.6	55.8	51.4	56.4	30.2
Rural	1.8	1.4	8.9	18.0	39.4	46.0	49.1	24.8
Region								
Western	*	*	(22.9)	(21.5)	*	*	*	35.5
Central	*	*	(10.5)	(41.7)	*	*	*	30.7
Greater Accra	*	(0.0)	(18.7)	48.1	(57.4)	*	*	34.2
Volta	*	*	(28.7)	(36.0)	*	*	*	37.0
Eastern	*	*	(6.7)	*	*	*	(84.0)	42.7
Ashanti	*	(3.8)	(6.5)	(43.0)	(60.1)	*	*	34.7
Western North	*	(9.1)	(17.7)	*	*	*	(63.5)	36.7
Ahafo	*	(0.0)	(3.0)	(20.8)	*	*	(59.7)	24.1
Bono	*	*	(11.7)	(14.3)	*	*	*	23.7
Bono East	*	(0.0)	(13.1)	(18.6)	(27.9)	*	(46.3)	20.1
Oti	*	(0.0)	(7.7)	(10.3)	(30.2)	*	(48.4)	23.4
Northern	*	(0.0)	1.8	(0.0)	(13.5)	(0.0)	15.6	5.5
Savannah	*	(2.5)	(1.4)	(2.7)	(5.9)	*	15.5	7.2
North East	*	(0.0)	(8.2)	(4.1)	(22.3)	*	25.0	11.8
Upper East	*	(0.0)	(5.9)	(8.5)	*	*	*	16.4
Upper West	*	(2.6)	(6.7)	(13.6)	*	*	(35.9)	17.7
Education								
No education	*	0.9	2.9	16.7	37.0	20.9	25.7	19.7
Primary	*	0.0	6.7	18.4	40.8	(48.7)	64.9	28.5
Secondary	1.1	3.3	11.4	29.8	51.4	60.3	65.6	28.8
More than secondary	(0.0)	1.0	17.9	48.7	56.9	*	(64.0)	31.1
Wealth quintile								
Lowest	(2.7)	0.6	6.3	3.3	27.0	29.4	36.3	18.5
Second	(0.0)	2.1	3.8	19.7	39.3	49.5	59.2	27.7
Middle	(2.8)	2.7	10.7	26.0	49.4	50.3	60.3	27.6
Fourth	(0.0)	4.3	14.8	31.5	60.8	(74.9)	61.3	30.6
Highest	(0.0)	1.3	16.6	52.1	56.0	(52.3)	(62.0)	32.1
Total 15–49	0.7	2.2	11.4	30.6	48.4	48.3	51.8	27.6
50–59	*	*	(56.7)	81.5	79.5	69.8	71.7	72.1
Total 15–59	3.0	3.2	14.4	37.9	54.8	54.5	60.2	36.0

Note: Men who have been sterilised or who state in response to the question about desire for children that their wife has been sterilised are considered to want no more children. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.3 Ideal number of children according to number of living children

Percent distribution of women and men age 15–49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Ghana DHS 2022

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
				WOMEN				
0	0.8	0.5	0.8	0.6	0.7	0.7	1.2	0.7
1	0.7	0.8	0.7	0.4	0.4	0.1	0.1	0.6
2	11.5	8.2	8.1	4.5	3.8	2.2	0.8	7.3
3	28.8	30.5	18.4	12.3	8.0	7.7	4.8	20.0
4	35.0	33.5	42.1	37.4	27.2	19.1	18.6	32.9
5	13.2	13.9	12.6	20.1	17.4	19.7	11.7	14.9
6+	9.4	11.2	16.2	22.6	41.1	47.5	59.4	22.2
Non-numeric responses	0.6	1.4	1.0	2.0	1.4	3.0	3.2	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,714	2,453	2,140	1,928	1,572	1,078	1,128	15,014
Mean ideal number of children for women 15–49:[2]								
All women	3.9	4.0	4.3	4.7	5.2	5.7	6.5	4.5
Number of women	4,685	2,420	2,118	1,889	1,550	1,045	1,092	14,798
Currently married women	4.3	4.2	4.3	4.7	5.2	5.8	6.5	4.9
Number of currently married women	447	1,337	1,598	1,541	1,299	898	944	8,064
				MEN[3]				
0	0.9	0.1	0.8	1.6	1.7	0.9	0.8	0.9
1	0.8	0.9	0.4	0.7	0.1	0.3	0.1	0.6
2	10.5	6.1	6.8	5.6	1.4	1.9	2.2	7.6
3	27.1	29.0	20.2	19.6	10.9	6.4	6.5	22.4
4	25.4	27.7	28.2	27.1	29.2	16.7	8.8	24.9
5	16.4	15.7	15.4	19.1	13.6	21.1	7.6	15.9
6+	17.3	18.8	26.7	24.7	39.5	50.3	70.1	25.7
Non-numeric responses	1.7	1.6	1.5	1.6	3.5	2.3	4.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	3,199	684	672	567	472	274	408	6,277
Mean ideal number of children for men 15–49:[2]								
All men	4.3	4.6	4.8	4.9	5.7	6.4	9.2	5.0
Number of men	3,145	673	662	558	455	268	392	6,153
Currently married men	4.3	4.7	4.8	4.9	5.8	6.4	9.2	5.7
Number of currently married men	178	444	575	503	425	258	378	2,761
Mean ideal number of children for men 15–59:[2]								
All men	4.3	4.6	4.8	4.8	5.6	6.3	9.0	5.1
Number of men	3,173	700	715	659	587	386	672	6,892
Currently married men	4.3	4.7	4.8	4.8	5.6	6.3	9.1	5.9
Number of currently married men	182	461	616	588	533	365	647	3,391

[1] The number of living children includes the current pregnancy for women.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.4 Mean ideal number of children according to background characteristics

Mean ideal number of children for all women age 15–49, according to background characteristics, Ghana DHS 2022

Background characteristic	Mean	Number of women[1]
Age		
15–19	4.0	2,668
20–24	4.1	2,676
25–29	4.3	2,314
30–34	4.5	2,210
35–39	4.9	2,039
40–44	5.1	1,615
45–49	5.4	1,275
Residence		
Urban	4.2	8,441
Rural	4.9	6,357
Region		
Western	4.1	951
Central	4.0	1,690
Greater Accra	3.8	2,306
Volta	3.8	705
Eastern	4.1	1,201
Ashanti	4.4	2,835
Western North	4.4	408
Ahafo	4.5	317
Bono	4.2	566
Bono East	4.9	671
Oti	5.2	386
Northern	6.2	1,138
Savannah	6.3	316
North East	6.5	288
Upper East	5.2	624
Upper West	5.2	398
Education		
No education	6.2	2,351
Primary	4.8	2,030
Secondary	4.1	8,899
More than secondary	3.6	1,519
Wealth quintile		
Lowest	5.7	2,418
Second	5.0	2,653
Middle	4.4	3,085
Fourth	4.1	3,320
Highest	3.8	3,323
Total	4.5	14,798

[1] Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of live births and current pregnancies among women age 15–49 in the 3 years preceding the survey by planning status of the pregnancy, according to birth order and mother's age at birth, Ghana DHS 2022

Characteristic	Planning status of pregnancy outcome: Wanted then	Wanted later	Wanted no more	Total	Number of pregnancy outcomes[1]
Birth order					
1	55.8	40.8	3.4	100.0	1,652
2	68.8	27.3	3.8	100.0	1,372
3	67.3	28.1	4.6	100.0	1,061
4+	57.8	23.0	19.1	100.0	2,172
Mother's age at birth[2]					
<20	35.4	59.2	5.4	100.0	543
20–24	55.9	39.5	4.5	100.0	1,425
25–29	66.9	27.3	5.8	100.0	1,639
30–34	69.5	22.3	8.2	100.0	1,353
35–39	65.1	18.2	16.8	100.0	943
40–44	58.5	11.8	29.7	100.0	301
45–49	39.6	12.4	48.0	100.0	52
Total	61.3	29.5	9.1	100.0	6,257

[1] For pregnancies that resulted in multiple outcomes (for example, twins), each outcome is counted individually.
[2] For current pregnancies, the maternal age at birth is estimated as the mother's expected age at the time of the birth.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	2.8	3.2
Rural	4.2	4.8
Region		
Western	3.0	3.6
Central	2.8	3.6
Greater Accra	2.6	2.9
Volta	2.7	3.2
Eastern	3.0	3.5
Ashanti	3.0	3.5
Western North	3.3	3.8
Ahafo	3.7	4.3
Bono	3.4	3.7
Bono East	4.3	4.7
Oti	4.6	5.2
Northern	5.1	5.6
Savannah	5.4	5.8
North East	6.5	6.6
Upper East	4.5	4.6
Upper West	4.2	4.5
Education		
No education	5.3	5.8
Primary	3.9	4.7
Secondary	3.1	3.5
More than secondary	2.3	2.5
Wealth quintile		
Lowest	5.2	5.9
Second	4.3	4.9
Middle	3.1	3.7
Fourth	2.7	3.1
Highest	2.4	2.7
Total	3.4	3.9

Note: Rates are calculated based on births to women age 15–49 in the period 1–36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

FAMILY PLANNING 7

Key Findings

- ***Contraceptive knowledge:*** Knowledge of at least one method (traditional or modern) of contraception is nearly universal among both women and men.
- ***Contraceptive use:*** 32% of women overall are using a method of contraception; 23% are using a modern method and 8% are using a traditional method. Twenty-eight percent of currently married women and 45% of sexually active unmarried women are using a modern method.
- ***Source of modern contraceptives:*** The government sector remains the major source of contraceptive methods in Ghana, providing methods to 59% of users. The private sector (nongovernmental organisation [NGO] and non-NGO sources) provides contraceptives to 39% of users.
- ***Discontinuation of contraceptives:*** The primary reasons for discontinuing a contraceptive method are desire to become pregnant (21%), side effects/health concerns (17%), and infrequent sex or the husband being away (17%).
- ***Need and demand for family planning:*** 23% of currently married women and 25% of sexually active unmarried women have an unmet need for family planning. The total demand for family planning that is satisfied with modern methods is 47% among currently married women and 52% among sexually active unmarried women.

Family planning remains a priority for the government of Ghana and is a key factor in several policy and strategic documents such as the National Population Policy, the National Reproductive Health Service Policy and Standards (2014), the Ghana Family Planning Costed Implementation Plan (2016–2020), and the Reproductive, Maternal, Newborn, Child, and Adolescent Health and Nutrition Strategic Plan (2020–2025).

The goal of the national family planning programme in Ghana is to assist couples and individuals in achieving their reproductive goals and improving their general reproductive health. The programme's objectives include provision of information, education, and counselling to individuals and couples on starting, spacing, and limiting childbearing; provision of a wide range of affordable, safe, and effective contraceptives; and provision of information on how to manage reproductive tract infections and sexually transmitted infections (STIs), including HIV and AIDS.

7.1 CONTRACEPTIVE KNOWLEDGE AND USE

7.1.1 Contraceptive Knowledge

Acquiring knowledge about contraceptive methods is an important step towards gaining access to family planning services and adopting a suitable contraceptive method. The ability to recognise a family planning method when it is described is a simple test of respondents' knowledge of the method but not necessarily an indication of the extent of their knowledge.

Knowledge of at least one method (traditional or modern) among women and men age 15–49 is nearly universal in Ghana (**Table 7.1** and **Table 7.2**).

Modern methods are more widely known (99% of women and men) than traditional methods (88% of women and men). Overall, knowledge of contraceptive methods is slightly higher among women than men; women know on average 9.5 contraceptive methods, as compared with 8.4 among men.

Knowledge of modern methods is similar among currently married and sexually active unmarried women. Knowledge of traditional methods is higher among sexually active unmarried women (96%) than among their currently married counterparts (89%).

Among men, the most widely known traditional method is withdrawal (84%), while the most widely known modern method is the male condom (99%).

Contraceptive prevalence

Percentage of women who use any contraceptive method.

Sample: All women age 15–49, currently married women age 15–49, and sexually active unmarried women age 15–49

Modern methods

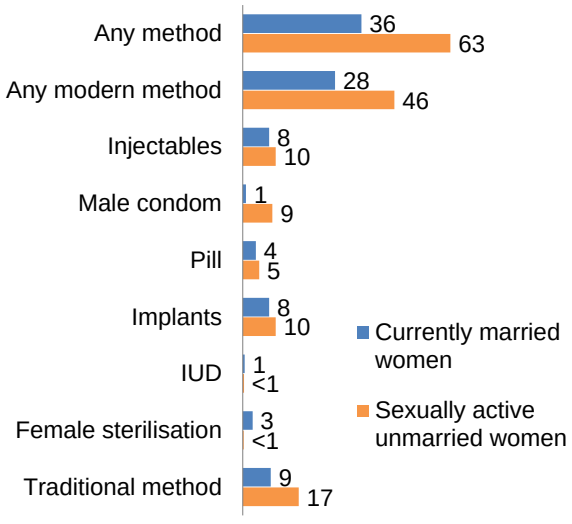
Include male and female sterilisation, intrauterine devices (IUDs), injectables, implants, contraceptive pills, male and female condoms, emergency contraception, the standard days method, and the lactational amenorrhoea method.

7.1.2 Contraceptive Prevalence

More than a third of currently married women (36%) and more than 6 in 10 (63%) sexually active unmarried women are using a method of contraception (**Figure 7.1** and **Tables 7.3.1** and **7.4**). Women in both groups are more likely to use modern methods than traditional methods; 28% and 8% of married women use modern and traditional methods, respectively, as compared with 46% and 17% of their sexually active unmarried counterparts. Contraceptive use varies considerably by region, from 17% in North East to 51% in Central for any method and from 15% in North East to 36% in Adafo and Western for modern methods (**Maps 7.1a** and **7.1.b**). **Table 7.3.2** presents data on condom use by age among all men and among currently married men. Condom use is less common among currently married men than among all men (5% versus 9%).

Figure 7.1 **Contraceptive use**

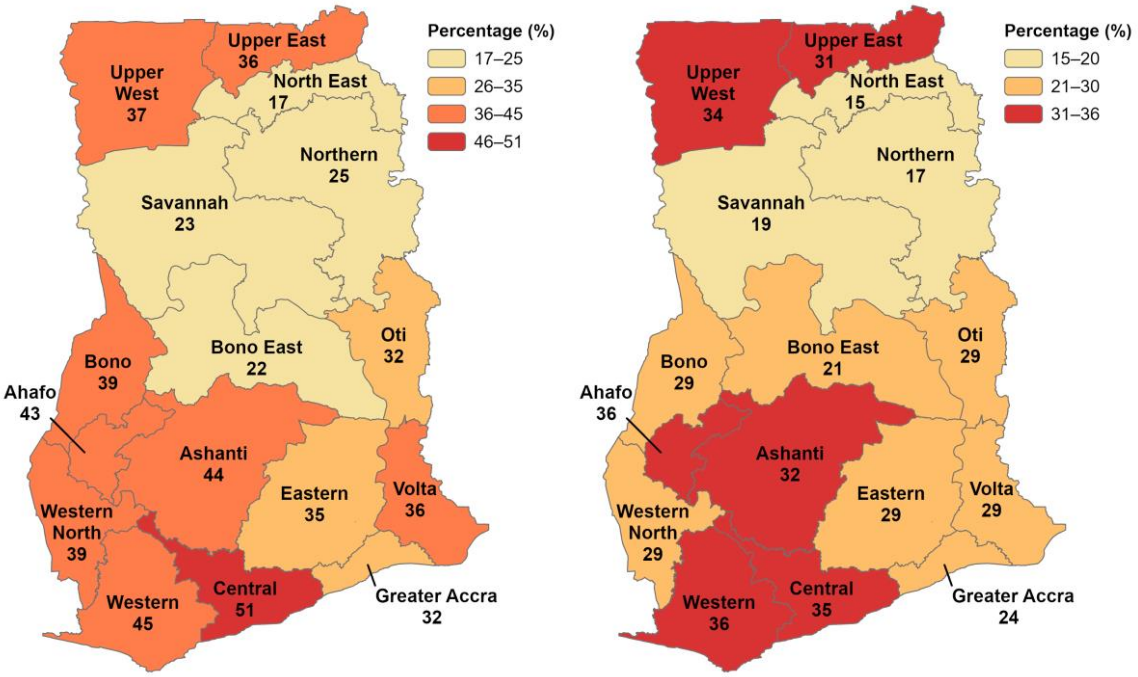
Percentage of women age 15–49 currently using a contraceptive method



Use of condoms decreases with age among all men as well as currently married men.

Maps 7.1a and 7.1b Contraceptive use by region

Percentage of currently married women age 15–49 using any contraceptive method and percentage using modern methods



Among currently married women, injectables and implants are the most used modern contraceptives (8% each), while IUDs and the standard days method are least commonly used (less than 1% each).

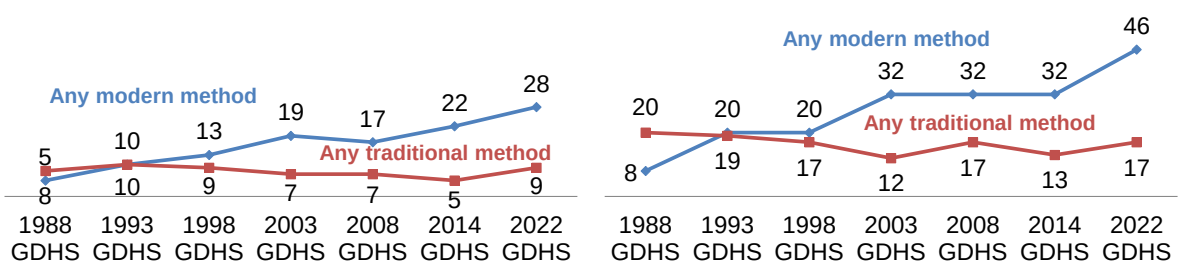
Emergency contraceptives are the most used method (12%) among sexually active unmarried women, followed by implants and injectables (10% each). Less than 1% of sexually active unmarried women use female sterilisation, IUDs, the standard days method, or the lactational amenorrhoea method. Among all men, 9% use condoms, as compared with 5% among those who are currently married (**Table 7.3.2**).

Trends: Data from seven DHS surveys conducted in Ghana since 1988 show that contraceptive use among all women, currently married women, and sexually active unmarried women has been increasing over time (**Figure 7.2**).

Figure 7.2 Trends in contraceptive use

Percentage of currently married women currently using a contraceptive method

Percentage of sexually active unmarried women currently using a contraceptive method



Use of any method of contraception among currently married women increased from 27% in 2014 to 36% in 2022. Similarly, use of modern methods increased from 22% in 2014 to 28% in 2022. After having fluctuated since 1988, use of traditional methods increased from 5% in 2014 to 9% in 2022.

Among sexually active unmarried women, contraceptive use also increased between the 2014 and 2022 surveys, from 45% to 63%. Both modern and traditional contraceptive use increased within this period, with a higher increase for modern contraception (32% in 2014 and 46% in 2022) than traditional methods (13% in 2014 and 17% in 2022).

7.1.3 Timing of Sterilisation

Use of female sterilisation as a method of contraception among women age 15–49 is very low in Ghana (3% among currently married women and less than 1% among sexually active unmarried women) (**Table 7.3.1**).

Women are most likely to undergo female sterilisation at age 35–39 (40%) and age 30–34 (29%) (**Table 7.5**).

7.1.4 Use of DMPA-SC/Sayana Press

Subcutaneous depot medroxyprogesterone acetate (DMPA-SC) was introduced in Ghana in 2019 (for both provider-administered injections and self-injections) through a two-phase national introduction and scale-up plan. Phase 1 provides DMPA-SC through public and private sector health facilities across the country and Phase 2 through social marketing. The country has been implementing Phase 1 since 2019 and is piloting Phase 2 in selected regions.

Nearly 7 in 10 current users of injectables are using DMPA-SC (68%) (**Table 7.6**).

7.1.5 Use of Emergency Contraception

Emergency contraception is defined as use of any medicine or device after unprotected sexual intercourse to prevent an unintended pregnancy. Per national policies and service protocols, emergency contraception should be used only in "emergencies" and not as a regular family planning method. Indications for use include unprotected sexual intercourse within the previous 120 hours, sexual assault when the victim is not regularly taking effective contraceptives, and contraceptive failure such as condom breakage, missed oral contraceptive pills, and lateness for scheduled injectables.

One in 10 women age 15–49 used emergency contraception in the 12 months preceding the survey (**Table 7.7**). Emergency contraceptive use was most common among women age 20–24 (19%) and least common among women age 45–49 (2%).

7.1.6 Knowledge of the Fertile Period

Basic knowledge of reproductive physiology provides a useful background for the successful practice of methods based on fertility awareness (for example, the rhythm method and the standard days method). Knowledge of the fertile period among women using family planning is also important with respect to emergency contraceptive use in the event of unprotected sexual intercourse and method failure.

Overall, 44% of women age 15–49 correctly report that the fertile period during the ovulatory cycle is halfway between two menstrual periods (**Table 7.8** and **Table 7.9**).

Effective use of the rhythm method requires accurate knowledge of the fertile method. While more than half of rhythm users (59%) were able to correctly identify a woman's fertile period, 27% incorrectly reported that a woman's most fertile period is directly after menstruation has ended (**Table 7.8**).

These results indicate a sustained need for education about women's reproductive physiology and its importance for the effective use of contraceptive methods.

7.2 SOURCE OF MODERN CONTRACEPTIVE METHODS

Source of modern contraceptives

The place where the modern method currently being used was obtained the last time it was acquired.

Sample: Women age 15–49 currently using a modern contraceptive method

Information on the main sources of contraception is important for programme managers and implementers who design service delivery strategies, as well as for monitoring, evaluation, and demographic forecasting.

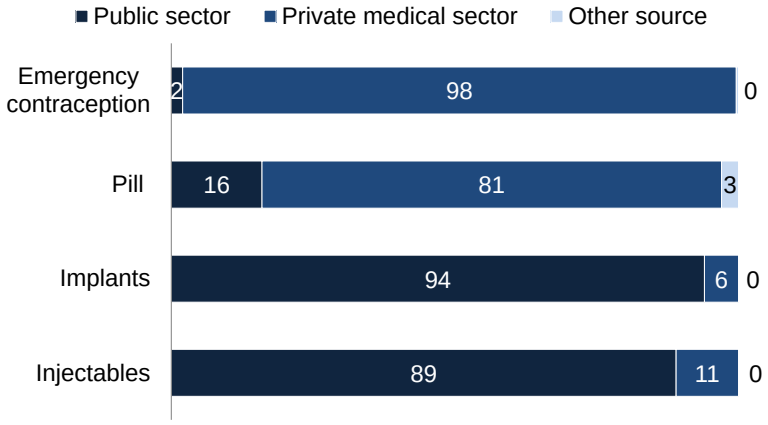
The public sector remains the major source of contraceptive methods in Ghana, providing methods to 59% of current contraceptive users (**Table 7.10**). Within the public sector, the main sources are government hospitals or polyclinics (26%) and government health centres and clinics (19%).

Almost 4 in 10 users (39%) obtain their methods from the private medical sector (both nongovernmental organisation [NGO] and non-NGO sources), with drug stores (18%) and pharmacies (16%) being the most common sources.

More than 8 in 10 long-acting reversible and permanent methods (implants, 94%; IUDs, 94%; injectables, 89%; female sterilisation, 86%) are obtained at or provided by public sector facilities in conformity with the standards outlined in the National Reproductive Health Service Policy and Standards (**Figure 7.3**).

Figure 7.3 **Source of modern contraceptive methods**

Percent distribution of current users of modern methods age 15–49 by most recent source of method



On the other hand, 8 in 10 pill users (81%), 9 in 10 male condom users (92%), and almost all emergency contraceptive pill users (98%) obtain their contraceptives from private medical sector non-NGO sources (**Figure 7.3**).

Use of Social Marketing Brand Pills and Condoms

Information about use of social marketing brands of pills and condoms in Ghana is used to monitor social marketing programmes within the comprehensive family planning programme.

Among pill users, the most common brands used are Secure (60%) and Microgynon (10%), and the least common brands used are Duofem (less than 1%) and Microlut (1%) (**Table 7.11**).

The most used brands of male condoms among condom users are Kiss (68%), Fiesta (21%), and Durex (6%). Gold Circle (1%) and Be Safe/no label (less than 1%) are the least commonly used brands.

7.3 INFORMED CHOICE

Informed choice

Informed choice indicates that women were informed about their method's side effects, about what to do if they experience side effects, and about other methods they could use.

Sample: Women age 15–49 who are currently using selected modern contraceptive methods and who started the last episode of use within the 5 years before the survey

Informed choice is an important metric of the quality of family planning services. Family planning clients have a right to information about their choice of contraceptive method. Being informed assists users in coping with side effects and decreases unnecessary discontinuations.

About 6 in 10 modern contraceptive users were informed by a health or family planning worker about potential side effects of the method they use (60%) and about what to do if they experienced side effects (64%), and almost 7 in 10 (66%) were informed of other available methods of contraception (**Table 7.12**). Overall, half of users (50%) received all three types of information. This information was most likely to be received by IUD users (75%) and least likely to be received by pill users (23%).

Users were less likely to receive information about side effects or problems of the method used from a private sector non-NGO facility than from a public medical facility (31% versus 69%). Similarly, they were less likely to receive information about what to do if they experienced side effects (34% versus 73%) and information about other methods that could be used (37% versus 76%) from a private facility than from a public facility.

Sixty-five percent of users received information about switching to another method if they wanted to or needed to. Users were less likely to receive information about switching to another method from a private facility than a public medical facility (36% versus 74%).

7.4 DISCONTINUATION OF CONTRACEPTIVES

Contraceptive discontinuation rate

Percentage of contraceptive use episodes discontinued within 12 months.

Sample: Episodes of contraceptive use in the 5 years before the survey experienced by women who are currently age 15–49 (one woman may contribute more than one episode)

Couples can fulfil their reproductive goals only when they consistently and correctly use contraceptive methods. A prominent concern for family planning programmes is the rate at which contraceptive users discontinue using their methods, particularly while they are still in need.

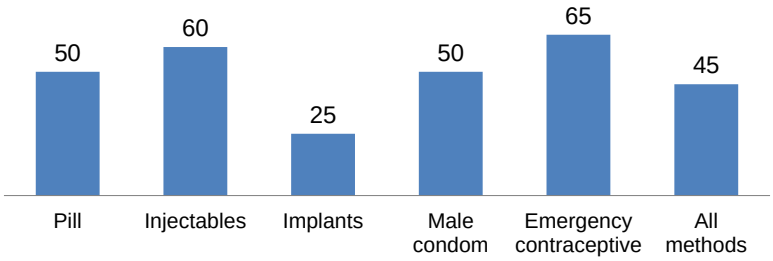
Overall, 45% of all episodes of contraceptive use were discontinued within 12 months (**Table 7.13**). Apart from emergency contraceptive pills (65%), the discontinuation rate was highest for injectables (60%); the rate was lowest for implants (25%).

The primary reasons for discontinuing a method (**Table 7.14** and **Figure 7.4**) were desire to become pregnant (21%), side effects/health concerns (17%), and infrequent sex or the husband being away (17%).

Side effects/health concerns were most often reported as the reason for discontinuing use of injectables (28%) and implants (39%), while the main reason cited for discontinuing pill use was desire to become pregnant (26%).

***Figure 7.4* Contraceptive discontinuation rates**

Percentage of contraceptive episodes discontinued within 12 months



7.5 Demand for Family Planning

Unmet need for family planning

Proportion of women who (1) are not pregnant and not postpartum amenorrheic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrheic and their last birth in the last 2 years was mistimed or unwanted.

Sample: All women age 15-49, currently married women age 15-49, and sexually active unmarried women age 15-49

Demand for family planning:

Unmet need for family planning
+ current contraceptive use (any method)

Proportion of demand satisfied:

$$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Proportion of demand satisfied by modern methods:

$$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Twenty-three percent of currently married women have an unmet need for family planning (14% for spacing and 9% for limiting) (**Table 7.15.1**). Twenty-five percent of sexually active unmarried women have an unmet need (21% for spacing and 4% for limiting) (**Table 7.15.2**). By region, the percentage of married women who have an unmet need for family planning ranges from 18% in Upper East and Upper West to 30% in Bono East (**Map 7.2**).

Thirty-six percent of currently married women and 63% of sexually active unmarried women are using a method and have a met need for family planning. The total demand for family planning that is satisfied with modern methods is lower among currently married women (47%) than among sexually active unmarried women (52%).

Among sexually active unmarried women, the total demand for spacing is 79% and the total demand for limiting is 9%.

Trends: Unmet need for family planning among currently married women fluctuated from 1993 to 2008 (35%–37%) before decreasing to 30% in 2014 and 23% in 2022 (**Figure 7.5**). This trend is reversed for the demand for family planning satisfied by modern methods. The demand satisfied by modern methods increased from 18% in 1993 to 39% in 2014 and 47% in 2022. Among sexually active unmarried women age 15–49, total demand for family planning increased from 81% in 1998 to 90% in 2008 and then decreased slightly to 88% in 2022.

Map 7.2 Unmet need by region

Percentage of currently married women age 15–49 with unmet need for family planning

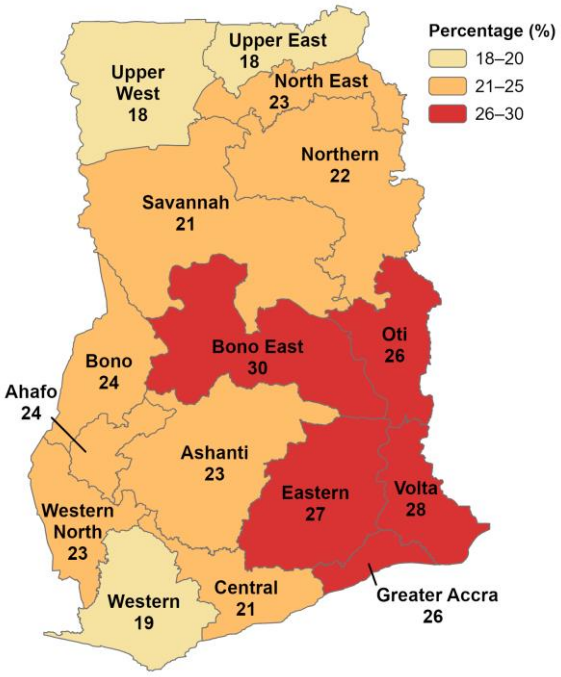
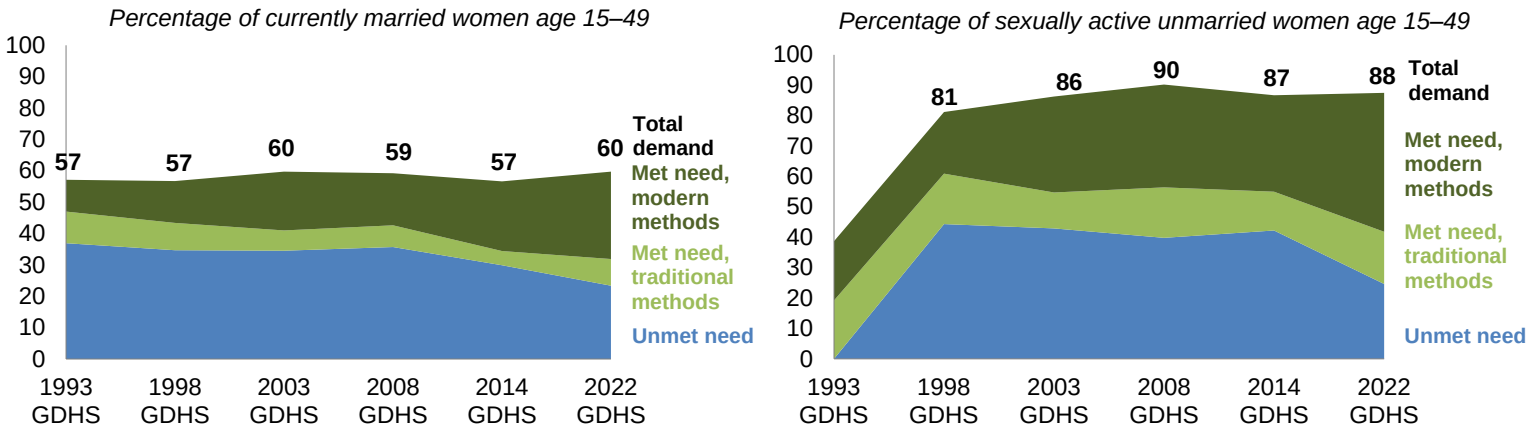


Figure 7.5 Trends in demand for family planning among currently married women and sexually active unmarried women



7.6 Decision Making about Family Planning

The decision to use or not use family planning is often not made only by the user; rather, in many cases the opinions of other family members are considered. **Tables 7.16** and **7.17** present data on decision making about family planning.

The majority of the time, the decision to use or not use family planning is made either solely by the wife or by the wife and husband/partner jointly (42% each). Women more often report that the opinions of both parties are equally important (33%) than that their opinion is less or more important (5% and 4%, respectively) (**Table 7.16**).

Forty-nine percent of women currently using contraception reported that they made the decision to use family planning methods jointly with their husband/partner, and 39% reported that they made their own

decision. Conversely, the decision to not use contraception was more often made solely by the wife (43%) than jointly by the wife and her husband/partner (39%).

7.7 Pressure to Become Pregnant and Future Use of Contraception

Cultural and religious values as well as societal influences may lead to women being pressured to become pregnant when they do not want to. In many cases, the pressure comes from women's husband/partner or other family members such as parents, in-laws, and siblings.

About 1 in 10 women (11%) have ever been pressured to become pregnant by a partner or other family member. Older women and women with no living children are more likely to be pressured to become pregnant than younger women and women with three or more children. Pressure to become pregnant is similar among women who are using and not using contraception (11% and 10%, respectively) (**Table 7.18**).

An important indicator of changes in demand for family planning is the extent to which nonusers plan to use contraceptive methods in the future. In the 2022 GDHS, women age 15–49 who were not using any contraceptive method at the time of the survey were asked about their intention to use family planning in the future.

Sixty-five percent of women who are not currently using a contraceptive method do not intend to use contraception in the future, 33% intend to use contraception in the future, and 2% are unsure about future use (**Table 7.19**). The proportion of nonusers who intend to use contraception in the future is highest among those with one or two children (34%–35%), whereas the proportion of nonusers who do not intend to use contraception in the future is highest among those with no children (68%) and those with 4 or more children (66%).

7.8 Exposure to Family Planning Messages

Exposure to family planning messages is more common among men than women; roughly one in three women (30%) and one in five men (20%) were not exposed to family planning messages in the 12 months before the survey (**Table 7.20.1** and **Table 7.20.2**).

Radio is the most common source of family planning messages among men (50%), while television is the most common source among women (46%). Newspapers/magazines and mobile phones are the least common source of family planning messages among both women (5% and 7%, respectively) and men (9% and 11%, respectively).

7.9 Contact of Nonusers with Family Planning Providers

Contact of nonusers with family planning providers

Respondent discussed family planning in the 12 months before the survey with a fieldworker or during a visit to a health facility.

Sample: Women age 15–49 who are not currently using any contraceptive methods

When family planning providers visit women in the field or when women visit health facilities, service providers are expected to discuss reproductive health needs and the contraceptive options available and to counsel women to adopt a method of family planning. **Table 7.21** shows that, in the 12 months before the survey, 3% of women not using contraception were visited by a fieldworker who discussed family planning with them; 13% of women visited a health facility and discussed family planning, while 37% visited a health facility but did not discuss family planning. More than 8 in 10 women did not discuss family planning either with a fieldworker or at a health facility.

List of Tables

For more information on family planning, see the following tables:

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15–49 who have heard of any contraceptive method, according to specific method, Ghana DHS 2022

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women[1]	All men	Currently married men	Sexually active unmarried men[1]
Any method	99.0	99.1	99.9	99.0	99.8	99.4
Any modern method	99.0	99.0	99.9	99.0	99.6	99.4
Female sterilisation	80.0	81.1	85.8	65.2	70.9	64.8
Male sterilisation	40.2	41.6	41.8	43.0	47.6	43.3
IUD	54.7	59.8	56.5	37.1	42.3	42.1
Injectables	92.9	96.7	94.5	81.5	90.2	84.8
Implants	91.5	95.9	94.3	78.7	87.7	84.9
Pill	89.2	94.4	89.8	83.3	89.0	89.0
Male condom	96.8	96.2	99.5	98.6	99.3	99.4
Female condom	79.3	79.8	84.4	83.7	89.5	89.5
Emergency contraception	75.5	74.7	86.4	70.6	73.8	81.7
Standard days method (SDM)	32.6	34.8	32.8	23.1	27.7	22.0
Lactational amenorrhoea method (LAM)	55.3	65.5	52.6	24.8	34.3	19.5
Other modern method	1.3	1.2	2.5	0.9	0.4	2.2
Any traditional method	88.0	89.0	96.0	87.6	93.1	95.2
Rhythm	77.5	78.8	84.5	61.9	69.2	66.7
Withdrawal	78.9	81.5	90.5	83.5	90.1	93.2
Other traditional method	9.1	10.6	11.1	3.8	4.7	5.5
Mean number of methods known by respondents 15–49	9.5	9.9	10.1	8.4	9.2	8.9
Number of respondents	15,014	8,205	1,323	6,277	2,828	663
Mean number of methods known by respondents 15–59	na	na	na	8.5	9.2	8.9
Number of respondents	na	na	na	7,044	3,485	686

na = not applicable
[1] Had last sexual intercourse within 30 days preceding the survey

Table 7.2 Knowledge of contraceptive methods according to background characteristics

Percentage of currently married women and currently married men age 15–49 who have heard of at least one contraceptive method and who have heard of at least one modern method, according to background characteristics, Ghana DHS 2022

	Women			Men		
Background characteristic	Heard of any method	Heard of any modern method[1]	Number	Heard of any method	Heard of any modern method[1]	Number
Age						
15–19	95.5	95.5	194	*	*	13
20–24	98.9	98.9	1,013	99.0	99.0	126
25–29	99.2	99.2	1,457	99.7	99.7	383
30–34	99.2	99.2	1,719	100.0	99.4	568
35–39	99.0	99.0	1,641	99.9	99.9	665
40–44	99.2	99.0	1,239	99.8	99.8	597
45–49	99.5	99.5	941	99.7	99.5	475
Residence						
Urban	99.6	99.6	4,248	100.0	100.0	1,479
Rural	98.5	98.5	3,956	99.6	99.3	1,349
Region						
Western	100.0	100.0	487	100.0	100.0	190
Central	100.0	100.0	816	100.0	100.0	256
Greater Accra	100.0	100.0	1,144	100.0	100.0	509
Volta	100.0	100.0	375	100.0	100.0	113
Eastern	100.0	100.0	633	100.0	100.0	192
Ashanti	99.8	99.8	1,426	100.0	99.2	442
Western North	99.3	99.3	231	98.5	98.5	82
Ahafo	100.0	100.0	183	100.0	100.0	69
Bono	100.0	100.0	284	100.0	100.0	87
Bono East	99.2	99.2	376	99.8	99.8	143
Oti	98.9	98.9	248	100.0	100.0	87
Northern	94.2	94.0	870	99.5	99.1	276
Savannah	96.9	96.9	218	98.2	97.9	86
North East	97.6	97.6	229	99.4	99.4	74
Upper East	99.7	99.7	426	100.0	100.0	137
Upper West	99.4	99.4	258	99.2	99.2	86
Education						
No education	96.5	96.4	2,015	98.8	97.8	469
Primary	99.8	99.8	1,233	100.0	99.9	335
Secondary	99.9	99.9	4,174	100.0	100.0	1,580
More than secondary	99.9	99.9	783	100.0	100.0	444
Wealth quintile						
Lowest	96.7	96.5	1,662	99.3	98.4	548
Second	99.1	99.1	1,513	99.8	99.8	491
Middle	99.7	99.7	1,545	99.9	99.9	447
Fourth	99.9	99.9	1,743	100.0	100.0	684
Highest	100.0	100.0	1,742	100.0	100.0	657
Total 15–49	99.1	99.0	8,205	99.8	99.6	2,828
50–59	na	na	na	99.1	99.1	658
Total 15–59	na	na	na	99.7	99.5	3,485

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = not applicable
[1] Female sterilisation, male sterilisation, IUD, injectables, implants, pill, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods

Table 7.3.1 Current use of contraception according to age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15–49 by contraceptive method currently used, according to age, Ghana DHS 2022

			Modern method											Traditional method						
Age	Any method	Any modern method	Female sterilisation	Male sterilisation	IUD	Injectables	Implants	Pill	Male condom	Emergency contraception	SDM	LAM	Other	Any traditional method	Rhythm	Withdrawal	Other	Not currently using	Total	Number of women
ALL WOMEN																				
15–19	16.3	11.2	0.0	0.0	0.0	1.3	2.4	0.8	3.3	2.9	0.0	0.4	0.0	5.1	2.5	2.2	0.4	83.7	100.0	2,682
20–24	37.3	27.7	0.0	0.0	0.2	7.2	6.4	2.8	3.9	6.5	0.0	0.6	0.1	9.6	4.8	3.4	1.3	62.7	100.0	2,695
25–29	37.0	27.5	0.3	0.0	0.1	9.3	6.4	3.8	3.0	2.9	0.4	1.3	0.1	9.4	6.0	2.5	0.9	63.0	100.0	2,340
30–34	37.9	30.0	1.4	0.0	0.5	8.2	9.1	4.8	2.3	2.3	0.6	1.0	0.0	7.9	5.2	1.6	1.1	62.1	100.0	2,252
35–39	36.7	26.4	2.6	0.0	1.3	5.6	7.3	5.0	1.4	1.3	0.6	1.3	0.0	10.3	6.3	2.3	1.6	63.3	100.0	2,059
40–44	31.5	23.8	6.1	0.0	0.5	5.2	6.1	3.6	0.8	0.7	0.2	0.5	0.0	7.7	5.8	1.2	0.7	68.5	100.0	1,675
45–49	21.4	15.9	6.2	0.0	0.9	2.7	3.2	1.6	0.5	0.6	0.1	0.1	0.1	5.6	3.1	0.6	1.8	78.6	100.0	1,312
Total	31.5	23.4	1.8	0.0	0.4	5.8	5.9	3.2	2.4	2.8	0.3	0.8	0.0	8.0	4.8	2.1	1.1	68.5	100.0	15,014
CURRENTLY MARRIED WOMEN																				
15–19	34.3	27.0	0.0	0.0	0.0	4.1	12.0	2.1	4.3	0.7	0.4	3.4	0.0	7.3	3.0	3.3	1.0	65.7	100.0	194
20–24	37.5	29.8	0.1	0.1	0.4	11.7	10.0	2.2	1.7	2.2	0.0	1.2	0.2	7.7	4.1	2.5	1.1	62.5	100.0	1,013
25–29	37.1	29.0	0.3	0.0	0.2	11.8	7.7	4.4	1.5	1.1	0.1	2.0	0.1	8.1	5.0	2.1	1.0	62.9	100.0	1,457
30–34	38.5	30.4	1.6	0.0	0.5	8.8	9.7	4.9	1.8	1.2	0.5	1.4	0.0	8.1	5.4	1.5	1.2	61.5	100.0	1,719
35–39	39.4	28.4	2.8	0.0	1.4	6.2	7.4	5.9	1.3	1.2	0.7	1.6	0.0	11.0	6.5	2.8	1.7	60.6	100.0	1,641
40–44	35.2	26.9	7.6	0.0	0.3	5.8	7.1	4.0	0.9	0.4	0.2	0.5	0.0	8.4	6.5	1.1	0.8	64.8	100.0	1,239
45–49	26.5	19.4	8.1	0.0	0.9	3.0	4.0	2.0	0.7	0.5	0.1	0.1	0.1	7.1	4.0	0.7	2.5	73.5	100.0	941
Total	36.3	27.8	3.0	0.0	0.6	7.9	7.9	4.1	1.4	1.1	0.3	1.3	0.1	8.5	5.3	1.9	1.3	63.7	100.0	8,205
SEXUALLY ACTIVE UNMARRIED WOMEN[1]																				
15–19	63.3	44.4	0.0	0.0	0.1	6.3	10.5	3.2	13.6	10.8	0.0	0.0	0.0	18.9	9.3	9.1	0.4	36.7	100.0	317
20–24	70.8	52.5	0.0	0.0	0.1	12.1	9.6	5.2	9.1	16.0	0.0	0.5	0.0	18.3	7.4	7.8	3.0	29.2	100.0	423
25+	57.0	41.4	0.7	0.0	0.8	9.8	9.8	5.4	5.3	8.7	0.6	0.0	0.2	15.6	10.7	4.7	0.2	43.0	100.0	583
Total	62.9	45.7	0.3	0.0	0.4	9.7	9.9	4.8	8.5	11.5	0.3	0.2	0.1	17.2	9.3	6.7	1.2	37.1	100.0	1,323

Note: If more than one method is used, only the most effective method is considered in this tabulation.
SDM = standard days method
LAM = lactational amenorrhoea method
[1] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.3.2 Current use of male condoms among men according to age

Percent distribution of all men and currently married men age 15–49 by current use of male condoms, according to age, Ghana DHS 2022

Age	Percentage using male condoms	Number of men
ALL MEN		
15–19	4.2	1,424
20–24	17.5	1,033
25–29	17.2	888
30–34	10.1	853
35–39	7.6	809
40–44	5.6	713
45–49	5.8	557
Total	9.2	7,044
CURRENTLY MARRIED MEN		
15–19	*	13
20–24	9.1	126
25–29	6.2	383
30–34	4.8	568
35–39	5.1	665
40–44	4.7	597
45–49	4.0	475
Total	4.9	3,485

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.4 Current use of contraception according to background characteristics

Percent distribution of currently married women age 15–49 by contraceptive method currently used, according to background characteristics, Ghana DHS 2022

			Modern method											Traditional method						
Background characteristic	Any method	Any modern method	Female sterilisation	Male sterilisation	IUD	Injectables	Implants	Pill	Male condom	Emergency contraception	SDM	LAM	Other	Any traditional method	Rhythm	Withdrawal	Other	Not currently using	Total	Number of women
Number of living children																				
0	19.8	12.0	0.2	0.1	0.3	2.6	1.9	1.7	3.4	1.6	0.1	0.0	0.0	7.8	5.8	2.0	0.0	80.2	100.0	593
1–2	33.1	23.9	0.2	0.0	0.3	8.4	6.8	3.6	1.7	1.2	0.3	1.1	0.1	9.2	5.7	2.4	1.1	66.9	100.0	3,018
3–4	41.5	32.4	4.6	0.0	1.0	8.5	8.6	5.1	1.3	0.9	0.6	1.8	0.0	9.1	5.9	1.6	1.5	58.5	100.0	2,792
5+	39.1	32.3	6.2	0.0	0.5	8.0	10.8	4.2	0.4	0.9	0.1	1.2	0.1	6.7	3.6	1.3	1.8	60.9	100.0	1,801
Residence																				
Urban	37.1	26.6	3.8	0.0	0.8	6.6	6.5	4.0	2.0	1.0	0.5	1.2	0.1	10.4	6.6	2.5	1.4	62.9	100.0	4,248
Rural	35.5	29.1	2.2	0.0	0.3	9.4	9.4	4.3	0.8	1.1	0.1	1.3	0.0	6.5	4.0	1.2	1.2	64.5	100.0	3,956
Region																				
Western	44.8	35.5	3.2	0.0	0.4	9.8	11.3	3.6	2.6	2.2	0.0	1.9	0.5	9.3	5.2	2.1	2.0	55.2	100.0	487
Central	50.8	34.5	4.5	0.0	0.1	9.7	8.2	3.8	1.5	2.2	0.0	4.5	0.0	16.3	7.6	5.7	3.0	49.2	100.0	816
Greater Accra	32.0	23.8	4.2	0.0	1.6	4.5	5.0	2.4	2.0	0.4	1.6	2.0	0.0	8.3	5.4	2.0	0.8	68.0	100.0	1,144
Volta	35.6	29.3	2.0	0.0	0.5	8.0	11.0	3.3	1.9	1.0	0.0	1.3	0.3	6.3	4.8	1.0	0.5	64.4	100.0	375
Eastern	35.3	28.6	4.3	0.0	0.6	5.4	9.2	5.0	2.3	1.2	0.0	0.6	0.0	6.7	5.0	0.7	1.0	64.7	100.0	633
Ashanti	44.4	32.1	4.2	0.0	0.5	9.9	7.0	6.3	1.4	2.1	0.0	0.8	0.0	12.3	10.0	1.1	1.1	55.6	100.0	1,426
Western North	39.2	29.1	4.6	0.0	0.0	10.2	6.1	4.5	1.0	1.6	0.9	0.0	0.0	10.2	5.3	3.0	1.8	60.8	100.0	231
Ahafo	42.8	35.8	3.3	0.0	1.3	11.3	8.8	5.0	0.5	1.6	0.2	4.0	0.0	7.0	3.0	2.5	1.5	57.2	100.0	183
Bono	38.5	28.3	4.1	0.0	0.2	7.0	8.9	5.3	1.1	1.3	0.2	0.2	0.0	10.3	9.5	0.4	0.3	61.5	100.0	284
Bono East	22.1	20.7	1.0	0.2	0.4	7.0	6.2	4.5	0.5	0.4	0.3	0.2	0.0	1.4	0.9	0.4	0.1	77.9	100.0	376
Oti	32.0	28.5	3.5	0.0	1.3	7.3	7.0	6.8	0.8	0.4	0.4	1.0	0.0	3.5	2.5	0.5	0.4	68.0	100.0	248
Northern	24.6	17.2	0.5	0.0	0.2	6.7	4.4	3.4	1.3	0.0	0.2	0.4	0.1	7.4	0.6	3.2	3.6	75.4	100.0	870
Savannah	23.4	19.1	0.8	0.0	0.1	5.7	7.9	3.8	0.4	0.3	0.0	0.3	0.0	4.3	4.0	0.1	0.2	76.6	100.0	218
North East	17.1	14.9	0.5	0.2	0.1	5.6	5.2	2.8	0.3	0.2	0.0	0.0	0.0	2.2	1.5	0.6	0.0	82.9	100.0	229
Upper East	35.5	30.9	0.7	0.0	0.7	9.0	16.6	2.3	1.0	0.0	0.3	0.1	0.1	4.6	4.0	0.6	0.0	64.5	100.0	426
Upper West	36.8	33.8	1.4	0.0	0.3	14.6	14.4	2.2	0.5	0.2	0.0	0.1	0.0	3.0	2.4	0.6	0.0	63.2	100.0	258
Education																				
No education	26.7	22.6	2.5	0.0	0.3	7.2	8.9	2.7	0.3	0.2	0.0	0.5	0.1	4.1	1.7	1.0	1.4	73.3	100.0	2,015
Primary	35.8	29.6	2.6	0.0	0.3	8.7	11.3	4.1	0.5	0.7	0.1	1.2	0.0	6.2	2.7	1.4	2.1	64.2	100.0	1,233
Secondary	40.7	30.3	3.1	0.0	0.7	9.1	7.2	4.8	1.8	1.7	0.4	1.5	0.1	10.4	7.1	2.1	1.3	59.3	100.0	4,174
More than secondary	38.6	25.0	4.9	0.0	1.4	2.4	4.2	4.1	4.0	1.0	1.0	2.1	0.1	13.6	9.5	3.8	0.4	61.4	100.0	783
Wealth quintile																				
Lowest	27.6	24.4	1.6	0.0	0.3	8.9	9.2	2.9	0.3	0.5	0.1	0.6	0.0	3.2	1.5	0.5	1.2	72.4	100.0	1,662
Second	36.1	30.8	2.8	0.0	0.5	9.9	10.2	4.1	0.8	0.7	0.1	1.7	0.0	5.4	2.6	1.2	1.6	63.9	100.0	1,513
Middle	41.5	31.2	1.9	0.0	0.1	8.9	9.6	6.0	1.0	1.2	0.6	1.7	0.2	10.3	5.9	2.6	1.8	58.5	100.0	1,545
Fourth	39.1	28.0	3.6	0.0	0.4	7.6	7.0	4.2	1.9	1.8	0.2	1.3	0.1	11.1	7.4	2.3	1.4	60.9	100.0	1,743
Highest	37.5	25.3	5.0	0.0	1.6	4.7	4.3	3.5	3.0	1.2	0.7	1.3	0.0	12.2	8.7	2.7	0.8	62.5	100.0	1,742
Total	36.3	27.8	3.0	0.0	0.6	7.9	7.9	4.1	1.4	1.1	0.3	1.3	0.1	8.5	5.3	1.9	1.3	63.7	100.0	8,205

Note: If more than one method is used, only the most effective method is considered in this tabulation.
SDM = standard days method
LAM = lactational amenorrhoea method
[1] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.5 Timing of sterilisation

Percent distribution of sterilised women age 15–49 by age at the time of sterilisation and median age at sterilisation, according to the number of years since the operation, Ghana DHS 2022

	Age at time of sterilisation								
Years since operation	<25	25–29	30–34	35–39	40–44	45–49	Total	Number of women	Median age[1]
<2	(1.5)	(10.8)	(27.4)	(21.6)	(23.7)	(14.9)	100.0	57	(33.1)
2–3	0.0	12.6	23.0	40.2	18.2	6.1	100.0	65	35.5
4–5	2.4	0.8	20.6	46.0	28.7	1.5	100.0	71	35.9
6–7	(0.0)	(1.4)	(28.4)	(63.3)	(6.9)	(0.0)	100.0	30	(37.0)
8–9	*	*	*	*	*	*	100.0	19	*
10+	(9.8)	(9.0)	(59.2)	(22.0)	(0.0)	(0.0)	100.0	33	(32.9)
Total	2.3	7.0	28.5	39.5	17.8	4.9	100.0	276	35.1

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Median age at sterilisation is calculated only for women sterilised before age 40 to avoid problems of censoring.

Table 7.6 Use of DMPA-SC/Sayana Press

Percentage of current injectable users age 15–49 using DMPA-SC/Sayana Press, and among women using DMPA-SC/Sayana Press, percent distribution by the person administering the injection the last time, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage using DMPA-SC/ Sayana Press	Number of women using injectables	Among DMPA-SC/Sayana Press users, person administering injection the last time:				
			Self-injection	Injection given by health care provider	Don't know	Total	Number of women
Age							
15–19	(76.1)	35	(0.0)	(100.0)	(0.0)	100.0	26
20–24	66.1	194	5.0	95.0	0.0	100.0	129
25–29	69.1	217	1.8	98.2	0.0	100.0	150
30–34	72.9	184	0.7	99.3	0.0	100.0	134
35–39	64.9	114	2.2	97.8	0.0	100.0	74
40–44	60.5	88	1.0	99.0	0.0	100.0	53
45–49	(68.2)	35	(0.0)	(100.0)	(0.0)	100.0	24
Residence							
Urban	65.1	395	0.4	99.6	0.0	100.0	257
Rural	70.5	472	3.3	96.7	0.0	100.0	333
Region							
Western	93.8	68	0.0	100.0	0.0	100.0	64
Central	75.4	109	(2.0)	(98.0)	(0.0)	100.0	82
Greater Accra	(54.9)	67	*	*	*	100.0	37
Volta	(82.2)	40	(0.0)	(100.0)	(0.0)	100.0	33
Eastern	(63.3)	64	(0.0)	(100.0)	(0.0)	100.0	40
Ashanti	71.8	195	3.2	96.8	0.0	100.0	140
Western North	81.1	29	(7.1)	(92.9)	(0.0)	100.0	24
Ahafo	82.5	27	2.4	97.6	0.0	100.0	22
Bono	(45.5)	30	*	*	*	100.0	14
Bono East	53.6	35	(0.0)	(100.0)	(0.0)	100.0	19
Oti	75.6	24	(2.5)	(97.5)	(0.0)	100.0	18
Northern	57.3	63	(0.0)	(100.0)	(0.0)	100.0	36
Savannah	(66.7)	14	(0.0)	(100.0)	(0.0)	100.0	9
North East	47.6	14	(3.4)	(96.6)	(0.0)	100.0	7
Upper East	25.3	44	*	*	*	100.0	11
Upper West	78.6	42	2.6	97.4	0.0	100.0	33
Education							
No education	67.7	157	0.9	99.1	0.0	100.0	106
Primary	70.7	153	2.2	97.8	0.0	100.0	108
Secondary	67.9	529	2.0	98.0	0.0	100.0	359
More than secondary	(58.4)	28	*	*	*	100.0	16
Wealth quintile							
Lowest	63.2	174	2.1	97.9	0.0	100.0	110
Second	70.4	209	3.0	97.0	0.0	100.0	147
Middle	70.7	211	2.6	97.4	0.0	100.0	149
Fourth	70.9	175	1.3	98.7	0.0	100.0	124
Highest	61.0	98	(0.0)	(100.0)	(0.0)	100.0	60
Total	68.1	867	2.1	97.9	0.0	100.0	590

Note: Subcutaneous (SC) depot medroxyprogesterone acetate (DMPA) is a self-injectable contraceptive; its brand name is Sayana Press. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.7 Use of emergency contraception

Percentage of women age 15–49 who used emergency contraception in the last 12 months, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who used emergency contraception	Number of women
Age		
15–19	7.1	2,682
20–24	19.1	2,695
25–29	14.1	2,340
30–34	10.8	2,252
35–39	7.8	2,059
40–44	6.0	1,675
45–49	2.2	1,312
Residence		
Urban	12.0	8,557
Rural	8.3	6,457
Region		
Western	12.3	955
Central	11.1	1,703
Greater Accra	7.5	2,327
Volta	8.0	713
Eastern	14.4	1,220
Ashanti	16.7	2,928
Western North	11.5	411
Ahafo	15.3	317
Bono	7.9	567
Bono East	5.2	676
Oti	6.0	403
Northern	9.7	1,149
Savannah	2.1	319
North East	3.2	290
Upper East	4.0	640
Upper West	3.4	398
Education		
No education	4.2	2,411
Primary	5.2	2,071
Secondary	12.4	8,999
More than secondary	16.0	1,533
Wealth quintile		
Lowest	4.8	2,447
Second	8.6	2,712
Middle	10.8	3,121
Fourth	13.6	3,379
Highest	12.5	3,355
Total	10.4	15,014

Table 7.8 Knowledge of fertile period

Percent distribution of rhythm users, SDM users, and all women age 15–49 by knowledge of the fertile period during the ovulatory cycle, Ghana DHS 2022

Perceived fertile period	Users of rhythm method	Users of SDM	All women
Just before her menstrual period begins	7.6	(3.7)	9.6
During her menstrual period	2.3	(0.0)	3.3
Right after her menstrual period has ended	27.3	(8.3)	30.7
Halfway between two menstrual periods	59.3	(83.4)	43.7
Other	0.6	(0.0)	0.2
No specific time	1.3	(4.7)	6.0
Don't know	1.7	(0.0)	6.4
Missing	0.0	(0.0)	0.0
Total	100.0	100.0	100.0
Number of women	724	39	15,014

Note: Figures in parentheses are based on 25–49 unweighted cases.
SDM = standard days method

Table 7.9 Knowledge of fertile period by age

Percentage of women age 15–49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, Ghana DHS 2022

Age	Percentage with correct knowledge of the fertile period	Number of women
15–19	26.5	2,682
20–24	42.7	2,695
25–29	47.6	2,340
30–34	48.4	2,252
35–39	49.9	2,059
40–44	48.1	1,675
45–49	51.0	1,312
Total	43.7	15,014

Note: Correct knowledge of the fertile period is defined as "halfway between two menstrual periods."

Table 7.10 Source of modern contraceptive methods

Percent distribution of users of modern contraceptive methods age 15–49 by most recent source of the method, according to method, Ghana DHS 2022

Source	Female sterilisation	IUD	Injectables	Implants	Pill	Male condom	Emergency contraception	SDM	Other modern method	Total
Public sector	86.2	93.6	89.1	94.2	16.3	2.6	1.6	(35.1)	*	59.3
Government hospital	80.6	67.3	28.7	34.3	7.2	1.5	0.5	(18.5)	*	25.6
Government polyclinic	1.3	8.6	3.4	7.1	1.5	0.3	0.0	(12.4)	*	3.4
Government health centre	2.7	6.3	20.3	21.2	3.3	0.5	0.5	(0.8)	*	11.6
Government clinic	0.2	9.8	13.4	13.8	1.5	0.0	0.6	(1.8)	*	7.5
CHPS centre/government health post	1.4	1.5	19.2	16.1	2.5	0.4	0.0	(1.5)	*	9.6
Community health service (outreach)	0.0	0.0	4.0	1.7	0.3	0.0	0.0	(0.0)	*	1.5
Other public sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	*	0.0
Private medical sector (non-NGO)	13.5	6.4	10.7	5.8	80.8	91.6	98.0	(7.0)	*	38.8
Private hospital	13.4	4.0	4.8	3.3	0.1	0.0	0.0	(2.2)	*	3.3
Private clinic	0.1	2.4	3.2	1.7	0.8	0.5	0.0	(0.0)	*	1.5
Pharmacy	0.0	0.0	0.7	0.0	36.4	50.3	41.3	(0.0)	*	15.8
Drug store	0.0	0.0	1.3	0.0	43.3	40.5	56.7	(0.4)	*	17.8
Community health service (mobile clinic)	0.0	0.0	0.1	0.4	0.2	0.1	0.0	(4.4)	*	0.2
Maternity home	0.0	0.0	0.3	0.4	0.0	0.3	0.0	(0.0)	*	0.2
Other private medical sector	0.0	0.0	0.2	0.0	0.0	0.0	0.0	(0.0)	*	0.0
Private medical sector (NGO)	0.3	0.0	0.2	0.0	0.0	0.0	0.0	(0.0)	*	0.1
NGO hospital/clinic	0.3	0.0	0.2	0.0	0.0	0.0	0.0	(0.0)	*	0.1
Other NGO medical sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	*	0.0
Other source	0.0	0.0	0.0	0.0	2.9	5.8	0.4	(57.9)	*	1.7
Shop	0.0	0.0	0.0	0.0	0.4	0.6	0.0	(0.0)	*	0.1
Church	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	*	0.0
Friend/relative	0.0	0.0	0.0	0.0	0.9	4.2	0.4	(15.1)	*	0.8
Drug peddler	0.0	0.0	0.0	0.0	1.6	0.2	0.0	(0.0)	*	0.3
Other	0.0	0.0	0.0	0.0	0.0	0.7	0.0	(42.8)	*	0.6
Don't know	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	*	0.0
Missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	*	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.5	100.0
Number of women	276	67	867	887	478	363	419	39	7	3,402

Note: Total includes other modern methods but excludes lactational amenorrhoea method (LAM). Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
SDM = standard days method
CHPS = community-based health planning and services
NGO = nongovernmental organisation

Table 7.11 Use of social marketing brand pills and condoms

Percentage of pill and condom users age 15–49 using a specific social marketing brand, according to background characteristics, Ghana DHS 2022

Background characteristic	Among pill users						Among condom users[1]					
	Secure	Micro-gynon	Duofem	N/M tablets	Microlut	Number of women	Fiesta	Kiss	Durex	Gold Circle	Be Safe/ no label	Number of women
Age												
15–19	(20.2)	(13.3)	(2.3)	(15.9)	(0.0)	20	9.3	85.1	5.6	0.0	0.0	77
20–24	47.2	6.1	1.2	5.1	2.0	75	19.9	72.1	3.4	0.0	0.0	98
25–29	64.1	5.6	0.0	6.4	0.0	86	32.2	56.5	5.8	0.0	0.4	64
30–34	65.0	9.2	0.9	0.9	1.1	106	(21.5)	(63.9)	(6.4)	(1.9)	(0.0)	47
35–39	58.9	16.8	0.0	15.2	0.6	101	*	*	*	*	*	18
40–44	65.2	12.4	0.0	12.2	0.0	59	*	*	*	*	*	13
45–49	*	*	*	*	*	18	*	*	*	*	*	4
Residence												
Urban	55.2	10.4	0.5	5.4	0.7	260	21.3	64.7	8.3	1.6	0.1	228
Rural	65.0	10.2	0.5	11.1	0.7	205	21.5	75.6	0.3	0.6	0.0	93
Region												
Western	*	*	*	*	*	19	(17.8)	(75.8)	(3.8)	(2.7)	(0.0)	33
Central	*	*	*	*	*	42	(11.8)	(88.2)	(0.0)	(0.0)	(0.0)	44
Greater Accra	(24.1)	(6.7)	(0.0)	(4.8)	(0.0)	59	*	*	*	*	*	56
Volta	*	*	*	*	*	20	*	*	*	*	*	16
Eastern	(66.5)	(8.8)	(0.0)	(4.1)	(0.0)	41	*	*	*	*	*	27
Ashanti	(69.9)	(7.8)	(0.0)	(15.4)	(0.0)	124	(16.5)	(80.2)	(3.3)	(0.0)	(0.0)	68
Western North	(55.1)	(7.7)	(0.0)	(5.4)	(5.4)	18	*	*	*	*	*	6
Ahafo	(64.1)	(1.6)	(0.0)	(10.0)	(0.0)	16	*	*	*	*	*	3
Bono	(60.2)	(19.8)	(2.4)	(8.0)	(3.0)	19	*	*	*	*	*	11
Bono East	(69.0)	(6.4)	(0.0)	(5.1)	(0.0)	25	*	*	*	*	*	6
Oti	(81.6)	(7.8)	(0.0)	(10.6)	(0.0)	21	*	*	*	*	*	6
Northern	(38.9)	(37.8)	(3.0)	(4.1)	(2.4)	30	*	*	*	*	*	23
Savannah	(32.8)	(32.3)	(0.0)	(4.5)	(0.0)	9	*	*	*	*	*	2
North East	*	*	*	*	*	6	*	*	*	*	*	3
Upper East	*	*	*	*	*	9	(20.0)	(80.0)	(0.0)	(0.0)	(0.0)	13
Upper West	*	*	*	*	*	8	*	*	*	*	*	4
Education												
No education	47.3	21.7	1.9	22.0	0.0	54	*	*	*	*	*	8
Primary	66.9	9.9	0.0	9.7	0.4	58	*	*	*	*	*	15
Secondary	62.2	7.4	0.4	6.1	0.8	304	20.5	69.7	5.3	0.4	0.1	214
More than secondary	47.2	16.6	0.0	1.6	1.5	49	26.5	58.0	9.4	3.4	0.0	84
Wealth quintile												
Lowest	70.5	11.3	0.0	7.1	1.6	51	(36.8)	(63.2)	(0.0)	(0.0)	(0.0)	19
Second	67.5	7.2	1.5	11.3	0.7	91	(21.7)	(77.4)	(0.0)	(0.0)	(0.9)	26
Middle	71.7	4.1	0.9	12.1	0.2	109	14.9	77.7	3.4	1.0	0.0	58
Fourth	45.3	13.5	0.0	5.7	0.9	128	15.8	72.4	6.5	0.9	0.0	98
Highest	49.8	16.1	0.0	2.6	0.5	85	26.5	58.0	9.1	2.4	0.0	119
Total	59.5	10.3	0.5	7.9	0.7	465	21.4	67.9	6.0	1.3	0.1	321

Note: Table excludes pill and condom users who do not know the brand name. Condom use is based on women's reports. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Among condom users not also using the pill

Table 7.12 Informed choice

Among current users of selected modern methods age 15–49 who started the last episode of use within the 5 years preceding the survey, percentage who were informed about possible side effects or problems of that method, percentage who were informed about what to do if they experienced side effects, percentage who were informed about other methods they could use, percentage who received all three types of information, and percentage who were informed that they could switch to another method if they wanted to or needed to, according to method and initial source, Ghana DHS 2022

	Among women who started last episode of modern contraceptive method within 5 years preceding the survey:					
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if they experienced side effects	Percentage who were informed of other methods that could be used	Percentage who received all three types of information (method information index)[1]	Percentage who were informed that they could switch to another method if they wanted to or needed to	Number of women
Method						
Female sterilisation	52.0	50.9	45.4	34.8	na	160
IUD	(80.8)	(89.9)	(89.1)	(74.5)	(84.5)	52
Injectables	63.7	70.7	75.8	56.1	78.8	815
Implants	72.4	76.0	77.7	60.7	79.9	797
Pill	29.1	29.3	32.1	23.4	34.1	429
Initial source of method[2]						
Public sector	68.7	73.0	75.5	58.5	74.4	1,708
Government hospital	71.3	75.6	76.8	61.2	69.2	659
Government polyclinic	75.2	76.6	78.0	62.1	81.9	100
Government health centre	68.6	75.4	77.6	63.4	78.1	364
Government clinic	63.5	64.5	73.2	52.3	79.2	230
CHPS centre/government health post	65.5	71.6	71.6	51.9	75.8	309
Community health service (outreach)	(65.1)	(61.9)	(74.3)	(50.5)	(70.9)	47
Private medical sector (non-NGO)	31.2	34.2	36.7	24.4	35.9	529
Private hospital	61.3	70.9	70.1	48.3	53.1	98
Private clinic	(66.5)	(70.9)	(79.0)	(60.8)	(83.8)	47
Pharmacy	23.6	21.1	30.4	18.8	34.0	164
Drug store	12.7	16.2	13.2	6.7	15.3	208
Community health service (mobile clinic)	*	*	*	*	*	3
Maternity home	*	*	*	*	*	7
Other private medical sector	*	*	*	*	*	3
Private medical sector (NGO)	*	*	*	*	*	4
NGO hospital/clinic	*	*	*	*	*	4
Other source	*	*	*	*	*	10
Shop	*	*	*	*	*	1
Friend/relative	*	*	*	*	*	2
Drug peddler	*	*	*	*	*	7
Other	*	*	*	*	*	1
Total	59.8	63.7	66.3	50.4	65.2	2,252

Note: Table includes users of only the methods listed individually. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = not applicable
CHPS = community-based health planning and services
NGO = nongovernmental organisation
[1] The method information index is the percentage of women who were informed about (1) side effects or problems of the method used, (2) what to do if they experienced side effects, and (3) other methods that could be used.
[2] Source at start of current episode of use

Table 7.13 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, Ghana DHS 2022

Method	Method failure	Desire to become pregnant	Other fertility-related reasons[1]	Changes in menstrual bleeding	Other side effects/ health concerns	Wanted more effective method	Other method-related reasons[2]	Husband/ partner disapproved	Other reasons[3]	Any reason[4]	Switched to another method[5]	Number of episodes of use[6]
Female sterilisation	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	186
Injectables	0.7	8.6	6.9	15.5	17.1	2.2	4.4	1.5	2.7	59.6	4.8	2,021
Implants	0.1	3.1	1.2	5.0	11.6	0.7	1.0	1.2	1.0	24.9	2.2	1,428
Pill	3.2	10.0	8.8	6.4	11.4	1.9	3.6	1.1	3.2	49.7	6.8	1,086
Male condom	3.0	5.4	23.0	0.9	0.8	4.8	6.8	3.0	2.3	50.0	8.7	604
Emergency contraception	4.5	5.3	22.8	7.8	9.5	3.9	4.3	1.2	5.3	64.6	8.3	1,249
Rhythm	6.7	6.7	7.4	0.4	0.1	4.8	0.8	0.0	2.5	29.4	4.9	1,190
Withdrawal	6.7	4.4	17.0	0.0	0.0	6.9	2.4	3.1	1.5	42.0	7.4	621
Other[7]	5.4	7.0	7.1	1.8	2.1	16.1	5.4	1.6	3.6	50.0	17.8	539
All methods	3.1	6.5	10.0	6.4	8.6	3.7	3.2	1.3	2.7	45.4	6.1	9,089

Note: Figures are based on life table calculations using information on episodes of use that occurred 3–62 months preceding the survey.
[1] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
[2] Includes lack of access/too far, costs too much, and inconvenient to use
[3] Includes up to God/fatalistic and other reasons
[4] Reasons for discontinuation are mutually exclusive and add to the total given in this column.
[5] A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.
[6] All episodes of use that occurred within the 5 years preceding the survey are included. Episodes of use include both episodes that were discontinued during the period of observation and episodes that were not discontinued during the period of observation.
[7] Includes lactational amenorrhoea method (LAM).

Table 7.14 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, Ghana DHS 2022

Reason	IUD	Injectables	Implants	Pill	Male condom	Emergency contraception	SDM	Rhythm	Withdrawal	Other[1]	All methods
Became pregnant while using	(10.1)	2.4	1.1	10.4	6.8	10.5	(14.0)	27.2	19.7	15.7	10.0
Wanted to become pregnant	(34.2)	21.7	25.0	25.5	12.8	8.5	(54.9)	28.7	14.0	15.8	20.5
Husband/partner disapproved	(0.5)	2.3	4.2	2.0	7.6	1.6	(0.0)	1.8	6.5	6.9	3.2
Wanted a more effective method	(2.4)	3.1	2.2	4.8	15.3	7.2	(0.0)	16.4	19.1	23.2	8.4
Changes in menstrual bleeding	(8.0)	22.2	13.6	11.4	1.0	10.8	(8.1)	0.9	0.0	3.0	11.0
Other side effects/ health concerns	(35.5)	27.6	38.7	19.0	1.0	13.9	(0.0)	0.2	0.0	2.2	17.4
Lack of access/too far	(0.0)	3.0	0.0	2.5	2.6	1.8	(0.0)	0.0	0.0	2.1	1.6
Cost too much	(0.0)	0.5	0.0	1.5	0.2	2.1	(1.0)	0.0	0.0	0.0	0.7
Inconvenient to use	(0.9)	2.6	2.5	2.9	10.3	2.7	(14.9)	3.1	4.7	6.6	3.6
Up to God/fatalistic	(0.0)	0.2	0.0	0.0	0.1	0.2	(0.0)	0.0	0.4	1.2	0.2
Difficult to get pregnant/ menopausal	(0.0)	0.0	0.6	0.1	0.0	0.0	(0.0)	0.4	0.0	0.0	0.2
Infrequent sex/ husband away	(1.7)	9.7	4.2	14.2	34.2	32.6	(7.1)	16.2	28.6	16.4	16.9
Marital dissolution/ separation	(0.0)	0.8	0.1	0.2	2.9	0.8	(0.0)	0.7	3.7	0.1	0.9
Other	(4.4)	3.1	7.2	3.7	4.6	6.6	(0.0)	1.8	1.6	6.4	4.3
Don't know	(2.3)	0.3	0.2	0.7	0.2	0.2	(0.0)	0.8	0.5	0.5	0.4
Missing	(0.0)	0.7	0.3	1.1	0.5	0.4	(0.0)	1.9	1.1	0.0	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	44	1,575	938	860	386	1,025	42	841	407	375	6,494

Note: Figures in parentheses are based on 25–49 unweighted cases.
SDM = standard days method
[1] Lactational amenorrhoea method (LAM), male sterilisation, and female condom

Table 7.15.1 Need and demand for family planning among currently married women

Percentage of currently married women age 15–49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, percentage of the demand for family planning that is satisfied, and percentage of the demand for family planning that is satisfied by modern methods, according to background characteristics, Ghana DHS 2022

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15–19	28.7	2.3	31.0	32.3	2.0	34.3	61.0	4.3	65.3	194	52.6	41.4
20–24	26.1	1.4	27.5	34.9	2.6	37.5	61.0	4.0	65.0	1,013	57.7	45.8
25–29	20.7	2.5	23.2	32.2	4.9	37.1	52.9	7.4	60.3	1,457	61.5	48.1
30–34	17.1	5.7	22.8	26.9	11.6	38.5	44.0	17.3	61.3	1,719	62.8	49.6
35–39	9.8	14.9	24.7	19.5	19.9	39.4	29.3	34.8	64.1	1,641	61.5	44.3
40–44	5.9	16.9	22.9	6.8	28.5	35.2	12.7	45.4	58.1	1,239	60.7	46.2
45–49	1.9	15.5	17.4	3.0	23.5	26.5	4.9	39.0	43.9	941	60.3	44.1
Residence												
Urban	12.8	9.6	22.3	21.4	15.7	37.1	34.2	25.2	59.4	4,248	62.4	44.8
Rural	15.8	8.8	24.6	22.0	13.5	35.5	37.8	22.3	60.1	3,956	59.1	48.3
Region												
Western	8.4	10.2	18.5	24.1	20.7	44.8	32.5	30.9	63.4	487	70.8	56.1
Central	11.7	9.6	21.3	28.1	22.7	50.8	39.8	32.3	72.1	816	70.4	47.9
Greater Accra	12.9	13.1	26.0	14.0	18.0	32.0	27.0	31.1	58.1	1,144	55.2	41.0
Volta	16.7	11.4	28.1	21.0	14.6	35.6	37.7	26.0	63.7	375	55.9	46.0
Eastern	14.3	13.1	27.3	21.7	13.7	35.3	35.9	26.7	62.7	633	56.4	45.6
Ashanti	14.8	8.2	23.0	25.8	18.6	44.4	40.5	26.8	67.4	1,426	65.9	47.7
Western North	14.9	7.8	22.7	19.5	19.7	39.2	34.5	27.5	62.0	231	63.3	46.9
Ahafo	14.6	9.6	24.1	25.8	17.0	42.8	40.4	26.5	66.9	183	64.0	53.5
Bono	14.7	9.0	23.7	22.1	16.4	38.5	36.9	25.4	62.2	284	61.9	45.4
Bono East	18.2	11.4	29.6	14.8	7.3	22.1	33.0	18.7	51.7	376	42.8	40.0
Oti	18.6	7.1	25.7	19.5	12.5	32.0	38.2	19.6	57.8	248	55.5	49.4
Northern	16.0	6.3	22.3	21.1	3.5	24.6	37.0	9.8	46.8	870	52.4	36.6
Savannah	17.0	4.4	21.4	18.1	5.3	23.4	35.1	9.7	44.8	218	52.2	42.7
North East	17.5	5.0	22.5	13.7	3.4	17.1	31.2	8.4	39.6	229	43.1	37.7
Upper East	13.3	4.6	17.9	25.9	9.6	35.5	39.2	14.2	53.4	426	66.5	57.9
Upper West	11.4	6.4	17.8	25.3	11.5	36.8	36.8	17.8	54.6	258	67.4	61.9
Education												
No education	12.6	10.8	23.4	14.6	12.1	26.7	27.2	22.8	50.0	2,015	53.3	45.1
Primary	14.8	10.9	25.7	20.3	15.5	35.8	35.1	26.4	61.4	1,233	58.2	48.1
Secondary	15.8	8.1	23.8	25.2	15.5	40.7	41.0	23.6	64.6	4,174	63.1	47.0
More than secondary	9.3	8.4	17.7	23.5	15.0	38.6	32.8	23.5	56.3	783	68.5	44.4
Wealth quintile												
Lowest	16.6	9.3	25.9	18.3	9.3	27.6	35.0	18.5	53.5	1,662	51.5	45.6
Second	16.3	8.6	24.9	21.1	15.0	36.1	37.5	23.6	61.1	1,513	59.2	50.4
Middle	14.5	10.8	25.2	26.4	15.1	41.5	40.9	25.9	66.7	1,545	62.2	46.8
Fourth	14.2	8.0	22.2	24.3	14.8	39.1	38.5	22.8	61.3	1,743	63.8	45.6
Highest	9.9	9.4	19.3	18.7	18.8	37.5	28.6	28.2	56.8	1,742	66.0	44.5
Total	14.2	9.2	23.4	21.7	14.6	36.3	35.9	23.8	59.7	8,205	60.8	46.5

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilisation, male sterilisation, IUD, injectables, implants, pill, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods.

Table 7.15.2 Need and demand for family planning among all women and among sexually active unmarried women

Percentage of all women and sexually active unmarried women age 15–49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, percentage of the demand for family planning that is satisfied, and percentage of the demand for family planning that is satisfied by modern methods, according to background characteristics, Ghana DHS 2022

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
					ALL WOMEN							
Age												
15–19	7.4	0.3	7.7	16.0	0.2	16.3	23.4	0.5	23.9	2,682	67.9	46.7
20–24	14.6	0.8	15.4	35.9	1.4	37.3	50.5	2.2	52.7	2,695	70.8	52.6
25–29	16.0	2.0	18.0	33.4	3.6	37.0	49.4	5.6	55.0	2,340	67.3	50.1
30–34	14.2	4.7	18.9	27.8	10.1	37.9	42.0	14.8	56.9	2,252	66.7	52.9
35–39	8.4	12.2	20.6	19.3	17.4	36.7	27.7	29.6	57.3	2,059	64.0	46.1
40–44	4.8	13.9	18.7	6.5	25.0	31.5	11.3	38.9	50.3	1,675	62.7	47.3
45–49	1.5	12.2	13.7	2.4	19.1	21.4	3.9	31.3	35.1	1,312	61.0	45.2
Residence												
Urban	8.8	5.3	14.1	22.2	9.0	31.2	31.0	14.3	45.3	8,557	68.9	49.0
Rural	12.5	5.7	18.3	22.4	9.5	31.8	34.9	15.2	50.1	6,457	63.5	50.0
Region												
Western	7.2	5.3	12.5	26.5	11.7	38.2	33.7	17.0	50.7	955	75.3	55.4
Central	8.8	5.1	13.9	27.8	12.4	40.2	36.5	17.6	54.1	1,703	74.3	50.2
Greater Accra	7.8	7.3	15.2	15.8	9.7	25.5	23.6	17.0	40.6	2,327	62.7	46.8
Volta	11.8	6.4	18.3	20.4	8.8	29.2	32.3	15.2	47.5	713	61.6	49.9
Eastern	10.2	8.0	18.2	21.6	9.7	31.3	31.8	17.7	49.5	1,220	63.2	49.8
Ashanti	9.9	4.3	14.2	26.4	10.7	37.1	36.3	15.0	51.3	2,928	72.3	52.4
Western North	11.7	4.9	16.6	22.4	12.1	34.5	34.1	17.0	51.1	411	67.5	49.3
Ahafo	11.4	6.4	17.8	27.4	11.2	38.6	38.8	17.6	56.4	317	68.4	52.9
Bono	10.9	4.9	15.8	22.2	9.5	31.7	33.1	14.3	47.5	567	66.7	46.7
Bono East	14.8	6.9	21.8	15.2	4.8	20.0	30.1	11.7	41.8	676	47.9	42.3
Oti	14.3	4.8	19.2	19.6	8.9	28.5	34.0	13.7	47.7	403	59.8	49.6
Northern	13.4	5.0	18.4	22.4	3.1	25.4	35.8	8.0	43.8	1,149	58.1	37.9
Savannah	14.5	3.0	17.5	16.7	3.8	20.5	31.2	6.8	38.0	319	54.0	43.7
North East	15.4	4.0	19.4	14.0	2.9	16.9	29.4	6.8	36.3	290	46.6	40.7
Upper East	11.7	3.1	14.8	22.6	6.9	29.5	34.3	10.0	44.3	640	66.6	55.8
Upper West	9.6	4.1	13.7	21.6	8.0	29.7	31.2	12.1	43.4	398	68.4	61.7
Education												
No education	11.3	9.4	20.7	13.7	11.3	24.9	25.0	20.7	45.6	2,411	54.6	45.8
Primary	11.7	7.3	19.1	19.2	11.2	30.3	30.9	18.5	49.4	2,071	61.4	50.7
Secondary	10.6	4.2	14.9	24.5	8.4	32.9	35.1	12.7	47.8	8,999	68.9	50.0
More than secondary	5.8	4.3	10.1	26.9	7.9	34.8	32.7	12.2	44.9	1,533	77.6	50.4
Wealth quintile												
Lowest	14.4	6.7	21.1	18.4	6.9	25.3	32.8	13.6	46.4	2,447	54.5	46.0
Second	12.5	5.4	18.0	21.0	10.4	31.5	33.6	15.9	49.5	2,712	63.7	51.5
Middle	10.4	6.3	16.7	25.1	8.7	33.8	35.5	14.9	50.5	3,121	67.0	50.3
Fourth	10.0	4.4	14.4	25.6	9.2	34.7	35.6	13.5	49.2	3,379	70.7	50.2
Highest	6.1	5.1	11.2	20.1	10.4	30.5	26.1	15.6	41.7	3,355	73.1	48.6
Total	10.4	5.5	15.9	22.3	9.2	31.5	32.7	14.7	47.4	15,014	66.4	49.5

Continued...

Table 7.15.2—*Continued*

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
SEXUALLY ACTIVE UNMARRIED WOMEN[4]												
Age												
15–19	33.6	0.2	33.8	63.3	0.0	63.3	96.9	0.2	97.1	317	65.2	45.8
20–24	19.1	0.4	19.5	68.8	2.0	70.8	87.9	2.4	90.3	423	78.4	58.2
25–29	22.3	1.6	23.9	62.9	2.5	65.5	85.3	4.1	89.4	234	73.3	49.7
30–34	13.0	3.0	16.0	50.6	4.5	55.1	63.6	7.6	71.2	147	77.5	68.1
35–39	9.7	7.2	16.9	41.8	13.3	55.1	51.6	20.4	72.0	85	76.5	53.8
40–44	5.8	23.6	29.4	16.2	35.0	51.2	22.0	58.6	80.6	96	63.5	40.7
45–49	*	*	*	*	*	*	*	*	*	21	*	*
Residence												
Urban	19.0	4.6	23.6	57.7	5.0	62.7	76.7	9.6	86.3	812	72.7	52.8
Rural	23.3	3.0	26.3	58.0	5.3	63.3	81.3	8.3	89.6	511	70.6	51.2
Region												
Western	17.0	0.9	17.9	66.4	3.0	69.4	83.4	3.9	87.3	104	79.5	43.9
Central	12.2	4.3	16.5	65.4	7.6	73.0	77.6	12.0	89.5	170	81.5	52.4
Greater Accra	16.0	7.5	23.5	53.7	2.8	56.5	69.7	10.3	80.0	187	70.6	57.0
Volta	25.0	4.7	29.7	56.7	3.4	60.1	81.7	8.1	89.8	65	66.9	54.4
Eastern	18.7	8.3	27.0	52.2	11.2	63.4	70.9	19.6	90.4	136	70.1	53.5
Ashanti	16.1	2.2	18.3	63.5	6.5	70.0	79.6	8.7	88.3	314	79.2	59.7
Western North	28.2	1.5	29.7	57.2	1.4	58.6	85.4	2.9	88.3	35	66.3	50.3
Ahafo	24.8	6.1	31.0	62.3	2.2	64.5	87.1	8.4	95.4	29	67.6	55.2
Bono	25.3	2.1	27.4	50.4	3.7	54.1	75.6	5.9	81.5	71	66.4	47.3
Bono East	42.7	5.4	48.1	36.5	2.0	38.5	79.2	7.4	86.6	66	44.5	33.0
Oti	27.4	3.4	30.8	50.4	5.6	56.0	77.8	9.0	86.8	29	64.6	43.7
Northern	(25.5)	(0.0)	(25.5)	(70.4)	(1.9)	(72.4)	(96.0)	(1.9)	(97.9)	39	(73.9)	(42.1)
Savannah	33.7	0.0	33.7	39.0	2.2	41.2	72.7	2.2	74.9	15	55.1	43.6
North East	(42.5)	(0.0)	(42.5)	(55.5)	(0.0)	(55.5)	(98.0)	(0.0)	(98.0)	9	(56.6)	(54.3)
Upper East	51.6	0.0	51.6	43.2	0.0	43.2	94.8	0.0	94.8	33	45.6	37.7
Upper West	30.4	0.0	30.4	54.6	3.3	57.8	85.0	3.3	88.3	21	65.5	57.0
Education												
No education	20.9	15.0	35.8	28.2	12.2	40.4	49.0	27.2	76.2	54	53.0	39.9
Primary	20.9	7.3	28.2	53.2	7.8	61.0	74.1	15.1	89.2	181	68.4	54.7
Secondary	21.7	3.1	24.8	58.0	4.6	62.7	79.7	7.8	87.5	984	71.6	51.0
More than secondary	11.0	0.0	11.0	78.9	1.2	80.1	89.8	1.2	91.1	104	88.0	64.3
Wealth quintile												
Lowest	36.0	2.0	38.0	50.6	3.4	54.0	86.5	5.5	92.0	137	58.7	46.5
Second	21.8	5.5	27.3	55.4	7.8	63.1	77.2	13.2	90.4	248	69.8	45.8
Middle	21.6	5.3	27.0	54.7	3.7	58.4	76.4	9.0	85.4	366	68.4	52.1
Fourth	20.0	2.2	22.2	57.7	6.5	64.2	77.7	8.7	86.4	342	74.3	54.0
Highest	10.0	3.7	13.7	69.7	3.5	73.2	79.6	7.3	86.9	230	84.2	60.2
Total	20.7	3.9	24.6	57.8	5.1	62.9	78.5	9.1	87.5	1,323	71.9	52.2

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilisation, male sterilisation, IUD, injectables, implants, pill, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhoea method (LAM), and other modern methods.
[4] Women who have had sexual intercourse within 30 days preceding the survey

Table 7.16 Decision making about family planning

Percent distribution of currently married women by person who usually makes the decision to use or not use family planning, Ghana DHS 2022

Decision maker	Percentage
Mainly wife	41.7
Wife and husband/partner jointly	42.4
Wife's opinion more important	4.1
Wife's and husband's/partner's opinion equally important	33.3
Wife's opinion less important than husband's/partner's	4.9
Mainly husband	13.7
Someone else/other	2.1
Missing	0.1
Total	100.0
Number of currently married women	8,205

Table 7.17 Decision making about family planning by background characteristics

Percent distribution of currently married women age 15–49 by person who usually makes the decision to use or not use family planning and percentage who participate in the decision to use or not use family planning, according to background characteristics, Ghana DHS 2022

Background characteristic	Mainly wife	Wife and husband/ partner jointly	Mainly husband/ partner	Someone else/ other	Total	Percentage who participate in decision making about family planning	Number of women
Age							
15–19	38.5	30.5	23.9	7.1	100.0	68.9	194
20–24	39.5	40.2	17.8	2.5	100.0	79.7	1,013
25–29	37.4	44.1	16.2	2.3	100.0	81.5	1,457
30–34	39.9	44.7	14.0	1.4	100.0	84.6	1,719
35–39	41.7	44.6	12.0	1.8	100.0	86.2	1,641
40–44	45.6	40.4	11.9	2.1	100.0	86.0	1,239
45–49	49.7	39.8	8.1	2.4	100.0	89.5	941
Family planning use							
Currently using	39.1	49.3	10.8	0.8	100.0	88.4	2,981
Not currently using[1]	43.2	38.5	15.4	2.9	100.0	81.8	5,224
Number of living children							
0	36.1	46.9	13.1	3.9	100.0	83.0	593
1–2	41.4	42.2	14.1	2.2	100.0	83.7	3,018
3–4	42.3	42.6	13.4	1.7	100.0	84.9	2,792
5+	43.3	41.1	13.7	2.0	100.0	84.4	1,801
Residence							
Urban	42.7	44.1	11.5	1.7	100.0	86.8	4,248
Rural	40.7	40.7	16.1	2.6	100.0	81.3	3,956
Region							
Western	29.7	61.0	8.9	0.3	100.0	90.7	487
Central	39.3	51.1	9.1	0.6	100.0	90.4	816
Greater Accra	45.7	45.4	8.7	0.3	100.0	91.0	1,144
Volta	50.6	32.1	10.2	7.1	100.0	82.7	375
Eastern	41.6	33.5	22.6	2.4	100.0	75.1	633
Ashanti	39.7	50.7	8.3	1.2	100.0	90.5	1,426
Western North	40.2	47.2	10.1	2.6	100.0	87.4	231
Ahafo	40.0	35.8	23.8	0.4	100.0	75.9	183
Bono	46.8	44.9	6.2	2.1	100.0	91.7	284
Bono East	46.5	30.6	22.6	0.2	100.0	77.1	376
Oti	50.8	31.0	12.1	6.1	100.0	81.8	248
Northern	32.8	37.4	25.7	4.2	100.0	70.1	870
Savannah	43.1	32.5	22.2	2.3	100.0	75.6	218
North East	40.6	25.4	26.0	8.0	100.0	66.0	229
Upper East	51.1	38.9	8.0	2.0	100.0	90.0	426
Upper West	49.3	31.0	16.2	3.5	100.0	80.3	258
Education							
No education	41.0	33.8	21.0	4.1	100.0	74.9	2,015
Primary	45.4	38.1	15.0	1.4	100.0	83.5	1,233
Secondary	42.0	45.6	11.0	1.4	100.0	87.6	4,174
More than secondary	36.6	54.4	7.2	1.8	100.0	91.0	783
Wealth quintile							
Lowest	42.5	33.9	20.3	3.4	100.0	76.3	1,662
Second	42.9	37.7	16.5	2.9	100.0	80.6	1,513
Middle	41.6	43.9	11.8	2.7	100.0	85.5	1,545
Fourth	42.4	46.1	10.4	1.1	100.0	88.5	1,743
Highest	39.4	49.9	9.9	0.7	100.0	89.3	1,742
Total	41.7	42.5	13.7	2.1	100.0	84.2	8,205

[1] Nonusers include pregnant women.

Table 7.18 Pressure to become pregnant

Percentage of currently married women who were ever pressured by their husbands/partners or any other family member to become pregnant when they did not want to, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of women pressured to become pregnant by their husband/partner or other family member	Number of women
Age		
15–19	7.7	194
20–24	8.4	1,013
25–29	10.4	1,457
30–34	10.9	1,719
35–39	9.8	1,641
40–44	10.6	1,239
45–49	13.4	941
Number of living children		
0	18.4	593
1–2	11.7	3,018
3–4	9.0	2,792
5+	8.1	1,801
Family planning use		
Currently using	10.9	2,981
Not currently using[1]	10.3	5,224
Residence		
Urban	11.2	4,248
Rural	9.7	3,956
Region		
Western	8.3	487
Central	21.2	816
Greater Accra	7.3	1,144
Volta	13.0	375
Eastern	7.3	633
Ashanti	11.0	1,426
Western North	8.1	231
Ahafo	12.2	183
Bono	5.4	284
Bono East	7.5	376
Oti	12.4	248
Northern	13.2	870
Savannah	7.0	218
North East	4.2	229
Upper East	6.8	426
Upper West	10.2	258
Education		
No education	9.2	2,015
Primary	13.2	1,233
Secondary	10.6	4,174
More than secondary	8.9	783
Wealth quintile		
Lowest	8.5	1,662
Second	9.3	1,513
Middle	10.8	1,545
Fourth	12.6	1,743
Highest	11.0	1,742
Total	10.5	8,205

[1] Nonusers include pregnant women.

Table 7.19 Future use of contraception

Percent distribution of currently married women age 15–49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Ghana DHS 2022

	Number of living children[1]					
Intention to use in the future	0	1	2	3	4+	Total
Intends to use	30.2	34.3	35.0	32.7	32.0	33.0
Unsure	2.2	2.1	1.9	2.3	1.8	2.0
Does not intend to use	67.6	63.6	63.1	65.0	66.2	65.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	332	889	1,071	959	1,973	5,224

[1] Includes current pregnancy

Table 7.20.1 Exposure to family planning messages: Women

Percentage of women age 15–49 who heard or saw specific family planning messages in the last 12 months, according to background characteristics, Ghana DHS 2022

Background characteristic	Radio	Television	News-paper/ magazine	Mobile phone	Social media[1]	Poster/ leaflet/ brochure	Outdoor sign or billboard	Com-munity meeting or event	None of these eight sources	Number of women
Age										
15–19	28.6	33.5	3.8	4.7	11.8	12.6	11.3	22.1	41.6	2,682
20–24	37.1	44.4	4.6	9.4	25.3	19.6	18.3	28.2	27.4	2,695
25–29	40.4	49.7	4.7	8.4	20.6	22.3	22.8	31.5	24.4	2,340
30–34	45.5	52.1	6.3	7.1	20.4	23.3	24.0	35.0	24.5	2,252
35–39	44.3	50.6	4.2	6.2	12.5	19.2	18.8	30.8	27.0	2,059
40–44	48.7	48.9	4.1	4.1	8.1	17.3	18.0	31.1	27.3	1,675
45–49	43.5	43.8	2.7	2.9	4.6	13.1	15.2	26.1	34.5	1,312
Residence										
Urban	44.1	55.4	5.9	8.0	21.7	20.0	22.1	27.7	24.1	8,557
Rural	35.1	33.0	2.5	4.4	8.2	16.4	13.3	31.1	36.8	6,457
Region										
Western	58.8	59.3	6.1	6.0	19.9	11.5	20.0	32.0	14.0	955
Central	43.6	51.6	4.8	8.5	17.7	27.3	22.1	43.4	19.0	1,703
Greater Accra	48.4	62.8	6.8	7.9	26.2	15.8	21.8	23.7	19.3	2,327
Volta	36.5	35.7	4.4	5.8	13.3	19.5	13.4	38.4	33.0	713
Eastern	43.2	56.0	3.2	5.9	15.0	30.2	21.6	21.2	21.0	1,220
Ashanti	33.9	42.1	3.8	6.3	16.9	16.9	19.4	18.4	38.6	2,928
Western North	47.9	48.1	5.3	7.2	11.6	19.6	14.2	44.5	26.1	411
Ahafo	51.6	46.2	1.8	6.3	11.5	22.1	17.6	51.6	15.1	317
Bono	40.2	45.8	3.0	5.7	12.9	19.7	15.6	29.5	29.5	567
Bono East	28.2	35.1	3.5	4.8	9.8	14.2	11.6	20.1	45.5	676
Oti	29.9	25.0	2.3	3.8	5.7	12.5	10.4	47.8	36.6	403
Northern	37.0	39.5	5.1	5.8	8.9	16.2	19.7	30.4	39.9	1,149
Savannah	23.2	22.8	1.4	2.3	6.5	7.2	3.3	19.0	49.6	319
North East	21.6	20.1	1.3	2.4	3.8	5.8	5.4	23.4	52.0	290
Upper East	37.3	30.7	5.3	9.3	16.2	21.8	21.2	33.9	35.0	640
Upper West	31.2	17.0	2.6	4.9	8.6	12.1	11.2	42.6	35.6	398
Education										
No education	30.0	24.8	1.1	0.9	1.0	9.0	9.5	29.2	46.0	2,411
Primary	34.5	37.0	1.1	1.4	2.5	12.9	12.1	27.0	37.5	2,071
Secondary	42.3	49.5	3.8	7.0	16.2	18.3	18.1	28.6	26.6	8,999
More than secondary	51.5	68.1	18.5	19.2	56.0	41.3	42.4	34.9	10.6	1,533
Wealth quintile										
Lowest	30.1	15.3	0.9	2.1	3.3	10.9	8.7	28.9	47.7	2,447
Second	34.4	33.2	2.0	2.5	4.6	15.0	14.1	32.6	36.7	2,712
Middle	38.9	47.2	3.2	6.1	10.0	17.5	16.1	29.6	29.5	3,121
Fourth	42.9	56.1	4.4	7.9	19.8	20.5	20.6	29.1	23.2	3,379
Highest	50.7	66.3	10.2	11.8	35.9	25.4	28.6	26.1	17.0	3,355
Total	40.2	45.7	4.5	6.5	15.9	18.4	18.3	29.1	29.6	15,014

[1] Social media includes platforms such as Facebook, Twitter, and Instagram.

Table 7.20.2 Exposure to family planning messages: Men

Percentage of men age 15–49 who heard or saw specific family planning messages in the last 12 months, according to background characteristics, Ghana DHS 2022

Background characteristic	Radio	Television	News-paper/ magazine	Mobile phone	Social media[1]	Poster/ leaflet/ brochure	Outdoor sign or billboard	Com-munity meeting or events	None of these eight sources	Number of men
Age										
15–19	27.8	34.4	4.3	6.2	24.1	18.9	20.5	23.4	34.7	1,424
20–24	48.4	47.2	11.1	14.4	44.5	27.2	33.0	31.6	17.6	1,033
25–29	49.5	51.5	8.6	15.1	44.6	28.3	31.0	27.4	17.5	888
30–34	55.5	56.9	11.0	12.3	37.4	28.8	34.3	30.6	15.4	853
35–39	60.5	59.2	8.7	10.3	32.2	26.9	35.0	32.0	12.5	809
40–44	62.8	57.7	8.6	10.6	24.2	28.2	40.9	31.9	16.5	713
45–49	66.2	56.0	12.3	9.3	20.3	31.0	37.2	34.4	14.6	557
Residence										
Urban	51.1	57.7	10.8	12.0	41.1	27.9	36.8	26.8	15.7	3,442
Rural	47.8	40.0	6.2	9.6	22.9	23.9	25.3	32.5	25.5	2,835
Region										
Western	81.0	83.9	29.3	20.4	53.1	58.9	58.5	20.9	5.8	414
Central	39.7	48.9	7.3	19.1	26.4	21.2	26.5	44.2	15.9	686
Greater Accra	60.9	61.9	9.5	8.1	46.9	14.2	32.6	17.5	11.0	1,076
Volta	48.0	40.8	9.1	9.3	21.9	24.7	26.4	33.7	22.2	235
Eastern	50.7	53.2	6.8	10.4	32.7	31.0	31.1	50.0	14.9	466
Ashanti	38.2	42.3	5.6	5.5	33.8	23.4	30.4	29.6	25.4	1,179
Western North	52.1	45.1	5.5	13.2	23.9	23.8	15.6	31.6	22.4	181
Ahafo	51.6	41.1	3.1	12.7	24.8	26.5	23.9	31.7	24.3	133
Bono	53.5	51.5	7.6	14.7	30.8	25.0	43.0	24.9	21.2	222
Bono East	63.8	63.8	10.2	11.3	41.8	52.7	57.9	20.5	9.0	316
Oti	44.3	37.7	4.8	11.5	17.5	15.6	20.5	23.6	33.0	187
Northern	43.3	39.1	7.2	12.4	24.7	32.4	22.6	32.0	26.0	484
Savannah	37.9	35.1	6.7	11.3	18.4	17.8	19.5	32.0	28.7	155
North East	49.6	34.6	7.0	11.7	18.8	34.5	29.5	43.4	27.2	119
Upper East	40.7	31.5	7.0	6.6	20.6	16.1	26.9	19.1	36.5	267
Upper West	30.4	24.6	5.2	6.8	13.0	12.7	12.5	20.7	51.6	155
Education										
No education	44.2	29.0	2.3	2.1	6.4	17.6	16.6	21.8	35.2	628
Primary	43.7	35.6	1.2	3.2	10.1	13.9	18.9	23.7	32.2	725
Secondary	49.9	51.4	7.4	10.9	32.3	25.2	30.7	30.5	18.9	3,990
More than secondary	56.5	67.3	24.3	23.1	70.8	45.2	55.6	34.2	5.9	935
Wealth quintile										
Lowest	45.1	22.5	2.1	5.4	12.0	18.7	20.0	25.7	35.9	1,089
Second	42.6	40.8	5.8	9.3	19.1	21.4	23.7	31.0	26.6	1,133
Middle	51.2	52.8	7.6	11.4	28.3	28.4	28.4	33.1	19.7	1,137
Fourth	54.1	61.3	10.0	12.1	39.1	28.9	35.1	29.7	13.2	1,466
Highest	52.7	63.1	15.5	14.9	56.6	30.7	45.4	27.4	10.6	1,453
Total 15–49	49.6	49.7	8.7	11.0	32.9	26.1	31.6	29.4	20.1	6,277
50–59	62.6	53.3	8.9	8.4	12.5	26.3	34.7	42.0	16.0	767
Total 15–59	51.0	50.1	8.7	10.7	30.7	26.1	31.9	30.7	19.7	7,044

[1] Social media includes platforms such as Facebook, Twitter, and Instagram.

Table 7.21 Contact of nonusers with family planning providers

Among women age 15–49 who are not using contraception, percentage who during the last 12 months were visited by a fieldworker who discussed family planning, percentage who visited a health facility and discussed family planning, percentage who visited a health facility but did not discuss family planning, and percentage who did not discuss family planning either with a fieldworker or at a health facility, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of women who were visited by a fieldworker who discussed family planning	Percentage of women who visited a health facility in the last 12 months and who:		Percentage of women who did not discuss family planning either with a fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15–19	2.3	4.3	25.4	94.3	2,246
20–24	2.7	13.1	38.0	85.5	1,689
25–29	4.2	20.4	43.7	78.0	1,474
30–34	4.8	23.5	40.3	74.4	1,399
35–39	3.0	17.5	38.3	81.0	1,303
40–44	3.4	10.0	40.1	87.9	1,147
45–49	3.7	6.8	42.6	90.7	1,031
Residence					
Urban	2.7	12.5	37.5	86.1	5,888
Rural	4.1	14.2	36.5	83.6	4,401
Region					
Western	3.9	13.8	36.7	84.5	590
Central	2.1	13.3	37.4	85.0	1,018
Greater Accra	1.1	11.5	36.8	88.1	1,735
Volta	4.5	15.8	34.4	81.2	504
Eastern	4.5	13.4	40.2	84.0	838
Ashanti	1.7	10.1	41.8	88.9	1,841
Western North	4.5	13.9	43.3	82.7	269
Ahafo	8.5	18.9	35.3	78.9	195
Bono	1.7	15.5	31.4	83.1	387
Bono East	3.6	17.7	36.3	80.0	541
Oti	8.9	12.6	32.0	80.9	288
Northern	7.5	13.8	34.7	84.0	856
Savannah	3.2	16.7	35.0	81.7	254
North East	5.6	18.2	32.7	79.5	241
Upper East	3.6	14.1	34.4	85.0	451
Upper West	1.1	11.7	30.7	87.6	280
Education					
No education	4.3	14.4	35.6	83.4	1,810
Primary	3.6	12.0	33.7	86.0	1,442
Secondary	3.0	12.4	36.2	86.0	6,036
More than secondary	3.1	17.6	50.4	80.8	1,000
Wealth quintile					
Lowest	3.6	15.4	31.9	82.9	1,828
Second	4.5	14.6	32.4	83.0	1,858
Middle	3.2	12.0	35.8	86.4	2,066
Fourth	3.1	12.1	39.0	86.1	2,205
Highest	2.5	12.7	44.4	86.2	2,331
Total	3.3	13.2	37.1	85.1	10,289

INFANT AND CHILD MORTALITY 8

Key Findings

- ***Under-5 mortality:*** In the 5 years before the survey, the under-5 mortality rate was 40 deaths per 1,000 live births.
- ***Neonatal mortality:*** In the 5 years before the survey, the neonatal mortality rate was 17 deaths per 1,000 live births.
- ***Infant mortality:*** The infant mortality rate was 28 deaths per 1,000 live births in the 5 years before the survey.
- ***Trends:*** Under-5 mortality declined from 155 deaths per 1,000 live births in 1988 to 40 deaths per 1,000 live births in 2022. Over the same period, infant mortality declined from 77 deaths per 1,000 live births to 28 deaths per 1,000 live births.
- ***High-risk fertility behaviour:*** 30% of births in the 5 years preceding the survey were not in any high-risk category, 23% were in an unavoidable risk category, and 48% were in any avoidable high-risk category. Seventy-four percent of currently married women age 15–49 would have been in an avoidable high-risk category if they had conceived at the time of the survey; 28% would have been in a single high-risk category, and 46% would have been in a multiple high-risk category.

Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an important indicator of the country's socioeconomic development and people's quality of life. It can also help identify children who may be at higher risk of death and lead to strategies to reduce this risk, such as promoting birth spacing.

This chapter presents information on levels, trends, and differentials in perinatal, neonatal, infant, and under-5 mortality rates. It also examines biodemographic factors and fertility behaviours that increase mortality risks for infants and children. The information was collected as part of a retrospective pregnancy history in which female respondents listed all of the children to whom they have given birth, along with each child's date of birth, survivorship status, and current age or age at death.

The quality of mortality estimates calculated from pregnancy histories depends on the mother's ability to recall all of the children she has given birth to, as well as their birth dates and ages at death. Potential data quality problems include:

- The selective omission from pregnancy histories of those births that did not survive, which can result in underestimation of childhood mortality.
- The displacement of birth dates, which could distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This could happen if an interviewer is trying to cut down on his or her overall workload, because live births occurring during the 3 years before the interview are the subject of a lengthy set of additional questions.

- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.
- Any method of measuring childhood mortality that relies on mothers' reports (for example, birth histories) assumes that female adult mortality is not high or, if it is high, that there is little or no correlation between the mortality risks of mothers and those of their children.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, **Tables C.5** and **C.6**.

8.1 Infant and Child Mortality

Neonatal mortality: The probability of dying within the first month of life.

Postneonatal mortality: The probability of dying between the first month of life and the first birthday (computed as the difference between infant and neonatal mortality).

Infant mortality: The probability of dying between birth and the first birthday.

Child mortality: The probability of dying between the first and the fifth birthday.

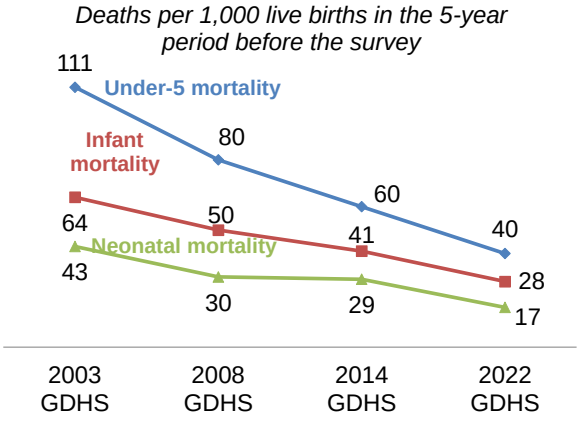
Under-5 mortality: The probability of dying between birth and the fifth birthday.

During the 5 years immediately preceding the survey, the neonatal mortality rate was 17 deaths per 1,000 live births, the infant mortality rate was 28 deaths per 1,000 live births, and the under-5 mortality rate was 40 deaths per 1,000 live births (**Table 8.1**). Neonatal deaths account for 45% of under-5 mortality.

Trends: The under-5 mortality rate decreased from 111 deaths per 1,000 live births in the 2003 GDHS to 40 deaths per 1,000 live births in the 2022 GDHS (**Figure 8.1**).

Table 8.2 presents data on childhood mortality by background characteristics. **Table 8.3** presents data on the relationship between additional characteristics and childhood mortality for the 10-year period preceding the survey. A 10-year period was used to increase the reliability of the estimates calculated.

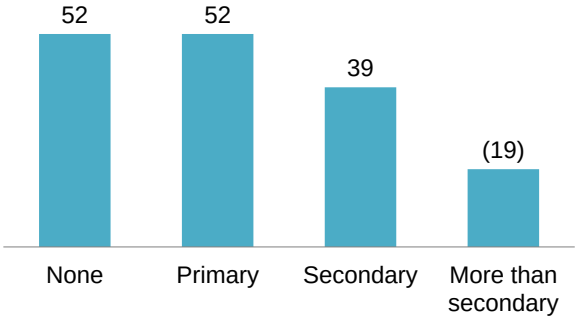
Figure 8.1 **Trends in early childhood mortality rates**



Under-5 mortality is 52 deaths per 1,000 live births among children whose mothers have no education, as compared with 19 deaths per 1,000 live births among children whose mothers have more than a secondary education (**Figure 8.2**). By region, under-5 mortality ranges from 20 deaths per 1,000 live births in Greater Accra to 72 deaths per 1,000 live births in Oti (**Map 8.1**).

Figure 8.2 **Under-5 mortality by mother's education**

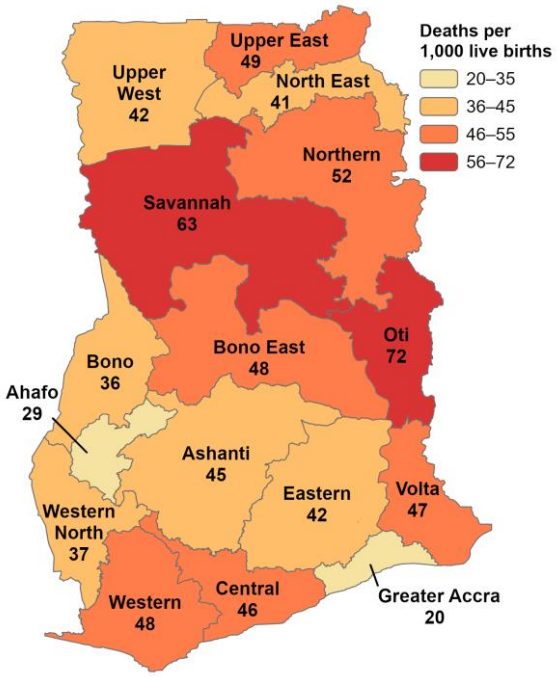
Deaths per 1,000 live births for the 10-year period before the survey



Note: Figures in parentheses are based on 250–499 unweighted children.

Map 8.1 **Under-5 mortality by region**

Deaths per 1,000 live births for the 10-year period before the survey



8.2 PERINATAL MORTALITY

Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy losses occurring after 28 weeks of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 28 or more weeks' duration.

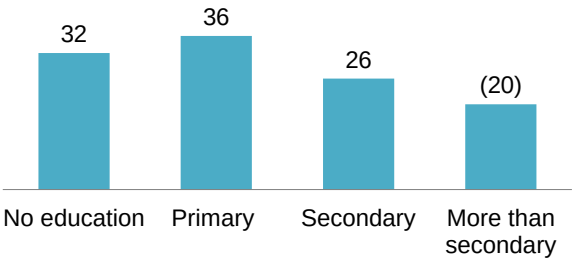
Sample: Number of pregnancies of 28 or more weeks' duration among women age 15–49 in the 5 years before the survey

In 2014 the Every Newborn Action Plan, a global multipartner movement to end preventable maternal and newborn deaths and stillbirths, set a target for national stillbirth rates of 12 or fewer stillbirths per 1,000 births in all countries by 2030 (WHO and UNICEF 2014).

In the 2022 GDHS, 132 stillbirths were recorded, which is equivalent to 15 stillbirths per 1,000 pregnancies of 28 or more weeks' duration. Similarly, there were 114 early neonatal deaths during the 5-year period preceding the survey, with a nearly equivalent rate of 13 early neonatal deaths per 1,000 live births. This leads to a perinatal mortality rate of 28 deaths per 1,000 pregnancies of 28 or more weeks' duration (**Table 8.4**). Perinatal mortality is highest for mothers with a primary education (36 deaths per 1,000 pregnancies) and lowest for mothers with a secondary education (26 deaths per 1,000 pregnancies) (**Figure 8.3**).

***Figure 8.3* Perinatal mortality by mother's education**

Deaths per 1,000 pregnancies of 7 or more months' duration in the 5-year period before the survey



Note: Figures in parentheses are based on 250–499 children.

8.3 High-Risk Fertility Behaviour

The survival of infants and children depends in part on the demographic and biological characteristics of their mothers. Typically, the probability of dying in infancy is much greater among children born to mothers who are too young (under age 18) or too old (over age 34), children born after a short birth interval (less than 24 months after the preceding birth), and children born to mothers of high parity (more than three children). **Table 8.5** gives the percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality (along with risk ratios) and the percent distribution of currently married women by their category of risk if they were to conceive a child at the time of the survey.

Thirty percent of births in the 5 years preceding the survey were not in any high-risk category. Twenty-three percent of births were in an unavoidable risk category. Forty-eight percent of births were in any avoidable high-risk category, 28% were in a single high-risk category (mother's age less than 18 years, mother's age more than 34 years, birth interval less than 24 months, and birth order greater than three), and 19% were in multiple high-risk categories (**Table 8.5**).

The risk ratio denotes the relationship between risk factors and mortality. For example, the risk of dying for a child who falls into any of the avoidable high-risk categories is 1.68 times that for a child not in any high-risk category. Among births in a single high-risk category, the risk ratio is highest for births to mothers less than age 18; children born to mothers less than age 18 have a 1.92 times greater risk of death than those not in any risk category.

Among births in multiple high-risk categories, the risk of dying is highest for births with a birth interval of less than 24 months and a birth order greater than three. Children born to mothers in both categories have a 4.02 times greater risk of death than those born to mothers who are not in any high-risk category.

Seventy-four percent of currently married women age 15–49 would have been in an avoidable high-risk category if they had conceived at the time of the survey; 28% would have been in a single high-risk category, and 46% would have been in a multiple high-risk category (**Table 8.5**).

List of Tables

For more information on infant and child mortality, see the following tables:

- **Table 8.1 Early childhood mortality rates**
- **Table 8.2 Five-year early childhood mortality rates according to background characteristics**
- **Table 8.3 Ten-year early childhood mortality rates according to additional characteristics**
- **Table 8.4 Perinatal mortality**
- **Table 8.5 High-risk fertility behaviour**

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Ghana DHS 2022

Years preceding the survey	Neonatal mortality (NN)	95% CI	Post-neonatal mortality (PNN)[1]	95% CI	Infant mortality ($_1q_0$)	95% CI	Child mortality ($_4q_1$)	95% CI	Under-5 mortality ($_5q_0$)	95% CI
0–4	17	[14, 21]	11	[8, 13]	28	[24, 32]	12	[9, 15]	40	[35, 44]
5–9	20	[16, 24]	11	[9, 14]	32	[27, 36]	16	[13, 20]	47	[42, 53]
10–14	27	[22, 32]	11	[8, 14]	38	[32, 44]	16	[12, 20]	53	[46, 60]

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.2 Five-year early childhood mortality rates according to background characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Child's sex					
Male	20	11	31	12	43
Female	14	10	24	12	36
Residence					
Urban	17	10	27	10	37
Rural	17	11	29	14	42
Total	17	11	28	12	40

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.3 Ten-year early childhood mortality rates according to additional characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to additional characteristics, Ghana DHS 2022

Characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Mother's age at birth					
<20	27	21	48	18	65
20–29	16	10	26	15	40
30–39	19	10	29	12	40
40–49	30	11	41	(11)	(52)
Birth order					
1	20	14	34	12	46
2–3	13	9	23	15	37
4–6	23	11	34	14	48
7+	26	11	37	15	51
Previous birth interval[2]					
<2 years	29	20	49	29	77
2 years	16	8	24	13	37
3 years	15	8	22	10	32
4+ years	18	9	26	12	38
Region					
Western	25	11	36	12	48
Central	14	20	34	13	46
Greater Accra	10	6	16	4	20
Volta	29	9	38	10	47
Eastern	15	11	26	16	42
Ashanti	23	12	34	11	45
Western North	13	9	22	15	37
Ahafo	13	5	17	12	29
Bono	13	11	24	13	36
Bono East	24	12	36	12	48
Oti	32	12	44	29	72
Northern	15	10	25	27	52
Savannah	32	14	46	18	63
North East	11	10	20	21	41
Upper East	27	9	36	13	49
Upper West	16	10	25	17	42
Mother's education					
No education	19	13	32	21	52
Primary	19	17	36	17	52
Secondary	20	9	29	10	39
More than secondary	8	6	15	4	19
Wealth quintile					
Lowest	22	13	35	22	56
Second	22	7	29	18	46
Middle	20	15	36	13	48
Fourth	15	12	26	10	36
Highest	12	8	21	5	25

Note: Figures in parentheses are based on 250–499 children.
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births

Table 8.4 Perinatal mortality

Number of stillbirths, number of early neonatal deaths, stillbirth rate, early neonatal rate, perinatal mortality rate, and the ratio of stillbirths to early neonatal deaths for the 5-year period preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Stillbirth rate[3]	Early neonatal mortality rate[4]	Perinatal mortality rate[5]	Number of pregnancies of 28+ weeks' duration[6]	Ratio of stillbirths to early neonatal deaths
Mother's age at birth							
<20	22	14	25	16	41	868	1.6
20–29	50	49	12	12	24	4,174	1.0
30–39	52	42	16	13	30	3,181	1.2
40–49	8	10	17	21	38	489	0.8
Previous pregnancy interval in months[7]							
First pregnancy	42	32	21	17	37	1,995	1.3
<15	21	19	15	14	29	1,383	1.1
15–26	22	10	12	5	17	1,837	2.3
27–38	13	15	10	11	21	1,328	0.9
39+	34	38	16	18	33	2,169	0.9
Residence							
Urban	56	60	13	14	28	4,229	0.9
Rural	76	54	17	12	29	4,484	1.4
Region							
Western	(9)	(10)	(16)	(18)	(34)	543	0.9
Central	18	11	20	13	33	894	1.6
Greater Accra	(20)	(7)	(18)	(7)	(25)	1,100	2.7
Volta	(7)	(2)	(21)	(6)	(27)	324	3.8
Eastern	(7)	(8)	(10)	(13)	(23)	638	0.8
Ashanti	22	27	14	18	31	1,572	0.8
Western North	(1)	(2)	(6)	(10)	(17)	228	0.6
Ahafo	2	2	(10)	(10)	(20)	192	1.0
Bono	(4)	(3)	14	11	26	290	1.3
Bono East	4	7	8	15	23	456	0.5
Oti	5	7	16	24	39	294	0.7
Northern	21	11	22	12	33	969	1.9
Savannah	4	6	14	23	37	262	0.6
North East	3	2	12	8	20	276	1.6
Upper East	3	5	8	12	20	420	0.7
Upper West	3	4	10	16	26	255	0.6
Mother's education							
No education	36	28	18	14	32	2,026	1.3
Primary	33	15	25	11	36	1,336	2.3
Secondary	51	67	11	15	26	4,530	0.7
More than secondary	12	4	15	5	20	820	3.0
Wealth quintile							
Lowest	34	25	16	12	28	2,070	1.3
Second	27	33	15	19	34	1,778	0.8
Middle	26	30	15	18	33	1,703	0.9
Fourth	14	17	9	10	19	1,641	0.8
Highest	31	10	20	7	27	1,520	3.1
Total	132	114	15	13	28	8,713	1.2

Note: Respondents may choose to report the duration of their pregnancy in either weeks or months. Figures in parentheses are based on 250–499 children.

[1] Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.

[2] Early neonatal deaths are deaths at age 0–6 days among live-born children.

[3] The number of stillbirths divided by the number of pregnancies lasting 28 or more weeks, expressed per 1,000

[4] The number of early neonatal deaths divided by the number of live births, expressed per 1,000

[5] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies lasting 28 or more weeks, expressed per 1,000

[6] Includes pregnancies lasting 7 or more months when duration of pregnancy is reported in months

[7] Pregnancy interval categories correspond to birth interval categories of <24 months, 24–35 months, 36–47 months, and 48+ months assuming a pregnancy duration of 9 months.

Table 8.5 High-risk fertility behaviour

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Ghana DHS 2022

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	29.5	1.00	20.8[a]
Unavoidable risk category			
First-order births between age 18 and age 34	22.8	1.56	5.7
In any avoidable high-risk category	47.7	1.68	73.5
Single high-risk category			
Mother's age <18 only	3.8	1.92	0.2
Mother's age >34 only	3.6	1.02	8.3
Birth interval <24 months only	5.2	1.62	9.2
Birth order >3 only	15.8	1.33	10.3
Subtotal	28.4	1.43	27.9
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.0	*	0.1
Age >34 and birth interval <24 months	0.3	*	0.6
Age >34 and birth order >3	14.4	1.67	33.0
Age >34 and birth interval <24 months and birth order >3	1.5	2.34	5.3
Birth interval <24 months and birth order >3	2.9	4.02	6.6
Subtotal	19.3	2.06	45.6
Total	100.0	na	100.0
Subtotals by individual avoidable high-risk category			
Mother's age <18	3.9	1.94	0.3
Mother's age >34	19.8	1.58	47.2
Birth interval <24 months	10.1	2.39	21.7
Birth order >3	34.7	1.75	55.2
Number of births/women	8,581	na	8,205

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. An asterisk indicates that a ratio is based on fewer than 25 unweighted cases and has been suppressed.
na = not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3
[a] Includes sterilised women

MATERNAL AND NEWBORN HEALTH CARE 9

Key Findings

- ***Antenatal care coverage:*** 98% of women age 15–49 received antenatal care (ANC) from a skilled provider, and 88% had at least four ANC visits. Midwives and nurses were the most common service providers (80%).
- ***Institutional deliveries:*** 86% of live births occurred in health facilities and 13% at home. A majority of births were delivered by midwives and nurses (69%).
- ***Caesarean section deliveries:*** 21% of live births were delivered via caesarean section.
- ***Postnatal care:*** 87% of mothers and newborns had postnatal checks during the first 2 days after birth.

Health care services during pregnancy, childbirth, and after delivery are important for the survival and well-being of both the mother and the infant. Antenatal care (ANC) can reduce health risks for mothers and infants through monitoring of pregnancies and screening for complications. Delivery at a health facility, with skilled medical attention under hygienic conditions, reduces the risk of complications and infections during labour and delivery. Timely postnatal care provides an opportunity to treat complications arising from delivery and teach the mother how to care for herself and her newborn.

The first part of this chapter presents information on ANC providers, number and timing of ANC visits, and various components of care. The second focuses on childbirth and provides information on place of delivery, assistance during delivery, and caesarean deliveries. The third section focuses on postnatal care and presents information on postnatal health checks for mothers and newborns and men's involvement in maternal health care. The final section covers issues that affect women's health regardless of their maternal status: whether women have been examined for breast or cervical cancer, problems they experience accessing health care, and the distance from their home to the nearest health facility.

The reproductive, maternal, newborn, child, and adolescent health and nutrition strategic plan for 2020–2025 has the specific objectives of improving maternal and newborn health, strengthening the availability of emergency obstetric and newborn care services, and improving accountability for the lives of mothers and newborns (MoH 2020).

9.1 Antenatal Care Coverage and Content

9.1.1 Skilled Providers

Antenatal care (ANC) from a skilled provider

Pregnancy care received from skilled providers, such as doctors, midwives, and nurses.

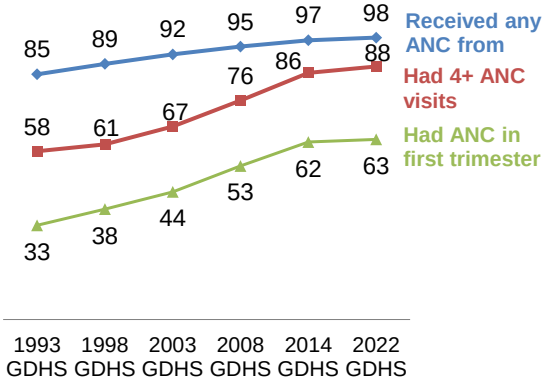
Sample: Women age 15–49 who had a live birth or stillbirth in the 2 years before the survey

Overall, 98% of women age 15–49 received ANC from a skilled provider for their most recent birth. Midwives and nurses were the most common service providers (80%), followed by doctors (18%). Only 2% of women did not receive any ANC (**Table 9.1**).

Trends: As shown in **Figure 9.1**, the percentage of women with a live birth in the 2 years preceding the survey who received antenatal care from a skilled provider increased from 85% in 1993 to 97% in 2014 and 98% in 2022.

***Figure 9.1* Trends in antenatal care coverage**

Percentage of women age 15–49 who had a live birth in the 2 years before the survey (for the most recent birth)



9.1.2 Timing and Number of Antenatal Care Visits

Eighty-eight percent of women had four or more ANC visits during their most recent pregnancy resulting in a live birth in the 2 years preceding the survey, and 39% had eight or more ANC visits (**Table 9.2**).

Trends: The percentage of women who had four or more ANC visits increased from 58% in 1993 to 86% in 2014 and 88% in 2022 (**Figure 9.1**).

9.2 Components of Antenatal Care

Components of antenatal care

Specific antenatal care services performed by a health care provider include measuring blood pressure, taking a urine sample, taking a blood sample, listening for the baby's heartbeat, counselling about the mother's diet, counselling about breastfeeding, and asking about vaginal bleeding.

Sample—quality of care indicator: Women age 15–49 who had a live birth or stillbirth in the 2 years before the survey and had at least one ANC visit

Sample—population-based indicator: All women age 15–49 who had a live birth or stillbirth in the 2 years before the survey

The ability for ANC to act as an effective intervention for identifying issues occurring during pregnancy that could adversely affect pregnancy outcomes is dictated in large part by the components of ANC services offered by the health care provider.

As a part of ANC, certain interventions and tests are recommended at each ANC contact. These include the following:

- Measuring blood pressure. Taking a woman's blood pressure at each antenatal care visit is essential to monitor for gestational hypertension or preeclampsia.
- Conducting urine and blood tests. These tests assess signs of infection or other diseases and conditions that could negatively affect a woman or her baby during or after pregnancy.
- Listening to the baby's heartbeat. This can confirm that the foetus is alive as well as reassure the mother.
- Counselling on maternal nutrition, specifically on healthy eating during pregnancy and breastfeeding. These counselling messages promote healthy weight gain during pregnancy and can help the pregnant woman breastfeed her newborn early.

- Asking about vaginal bleeding. Light bleeding or spotting is common, especially during the first few months of a pregnancy. Heavy bleeding may be a sign of something more serious; a pregnant woman experiencing heavy bleeding should visit a health care provider.

Table 9.3.1 shows the percentage of women with a live birth or stillbirth in the 2 years before the survey who reported that they had at least one ANC visit and received specified ANC services. The results in this table measure the quality of the ANC services these women received. **Table 9.3.2** shows the percentage of all women with a live birth or stillbirth in the last 2 years who received specified ANC services, regardless of whether they reported an ANC visit. The results in this table measure coverage of these key ANC interventions among the population of women in need of them.

Among women age 15–49 who received ANC for their most recent live birth, 98% had their blood pressure measured, 99% each had urine and blood samples taken, 99% reported that the provider listened to the baby's heartbeat, 94% were counselled on their diet and 89% on breastfeeding, and 81% were asked if they had experienced vaginal bleeding (**Table 9.3.1** and **Figure 9.2**).

Trends: The percentage of women who had their blood pressure measured increased from 95% in 2003 to 99% in 2014 before decreasing slightly to 98% in 2022.

Between 2003 and 2022, the percentage of women who had a urine sample taken increased from 83% to 99% and the percentage who had a blood sample taken rose from 85% to 99% (**Figure 9.3**).

***Figure 9.2* Components of antenatal care**

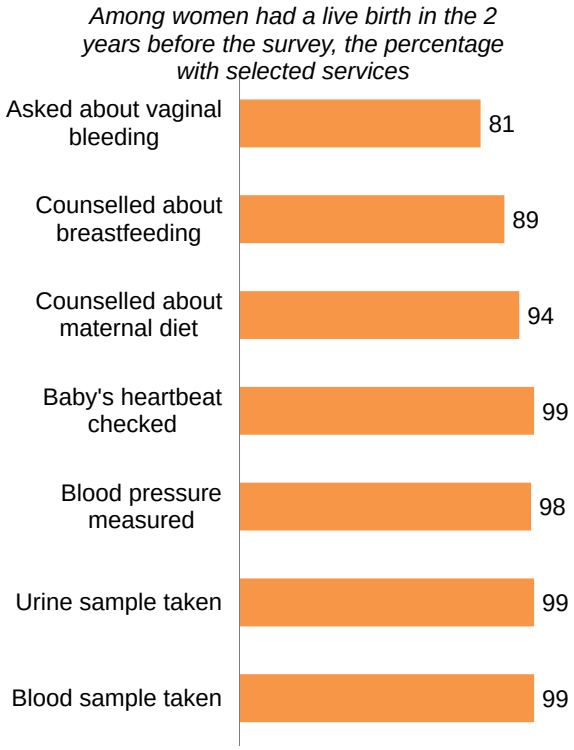
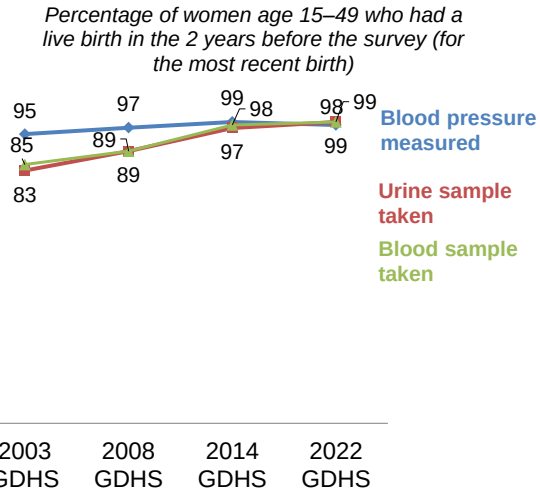


***Figure 9.3* Trends in antenatal care coverage**



9.2.1 Deworming and Iron-containing Supplementation during Pregnancy

During pregnancy, women have higher micronutrient needs and are at risk of micronutrient deficiencies, including iron deficiency, which is a primary cause of anaemia. Severe anaemia can place the mother and the baby in danger through increased risk of blood loss during labour and increased risk of preterm delivery, low birth weight, and perinatal mortality (Haider et al. 2013). To help address maternal anaemia, interventions provide iron tablets or syrup and/or iron-containing multiple micronutrient supplements to pregnant women (WHO 2016c).

Women with a live birth or stillbirth in the 2 years preceding the survey were asked if they took iron supplementation and deworming medication during their most recent pregnancy. **Table 9.4** shows that 92% of women took some form of iron supplementation. Overall, 60% of women took iron supplements for 90 days or more and 29% took them for more than 6 months.

9.2.2 Source of Iron-containing Supplements

Information on sources of iron-containing supplements can increase understanding of the distribution patterns of supplements.

Among women age 15–49 who took some form of iron supplementation during the pregnancy of their most recent live birth, 85% obtained supplements from public sector sources, 11% from non-NGO (nongovernmental organisation) private medical sector sources, and 5% from other private sector sources including shops and markets (**Table 9.5**). Within the public sector, hospitals were the predominant source (39%), followed by government health centres (17%) and community-based health planning and services (CHPS)/government health posts (13%).

9.3 Protection against Neonatal Tetanus

Protection against neonatal tetanus

The number of tetanus toxoid injections needed to protect a baby from neonatal tetanus depends on the mother's vaccinations. A birth is protected against neonatal tetanus if the mother has received any of the following:

- Two tetanus toxoid injections during the pregnancy
- Two or more injections, the last one within 3 years of the birth
- Three or more injections, the last one within 5 years of the birth
- Four or more injections, the last one within 10 years of the birth
- Five or more injections at any time prior to the birth

Sample: Women age 15–49 with a live birth in the 2 years before the survey

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, one of the major causes of early infant death in many low-income countries. Neonatal tetanus is often caused by lack of access to hygienic procedures during delivery.

Forty-eight percent of women age 15–49 received two or more tetanus toxoid injections for their most recent live birth. Overall, 74% of women had their most recent live births protected against neonatal tetanus (**Table 9.6**).

Trends: The percentage of women whose most recent live births were protected against neonatal tetanus increased from 69% in 2008 to 77% in 2014 and then decreased to 74% in 2022.

9.4 Delivery Services

9.4.1 Institutional Deliveries

Institutional deliveries

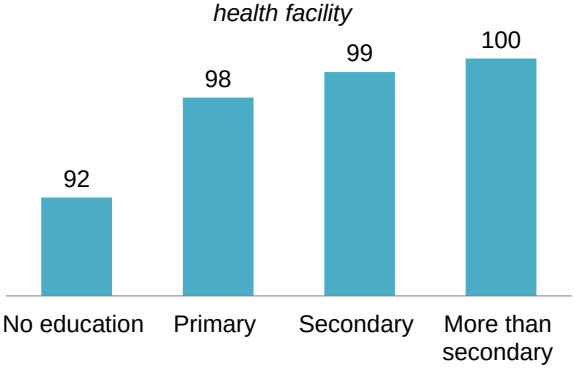
Deliveries that occur in a health facility.

Sample: All live births and/or stillbirths in the 2 years before the survey

Eighty-six percent of live births in the 2 years preceding the survey were delivered in a health facility. Seventy-six percent of births occurred in a public facility, 10% in a private facility, 13% at home, and 1% at other locations (**Table 9.7**). Almost all births to women with at least a primary education are delivered in a health facility (98%–100%), as compared with 92% of births to women with no education (**Figure 9.4**).

Figure 9.4 **Health facility births by education**

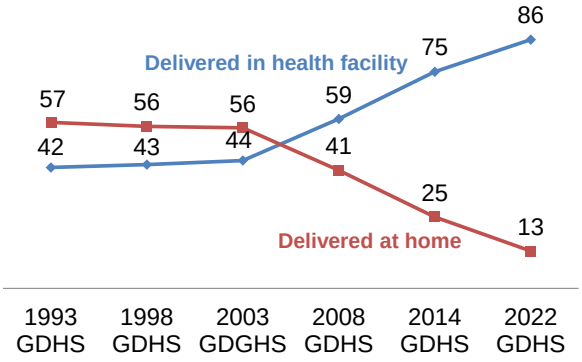
Percentage of live births in the 2 years before the survey that were delivered in a health facility



Trends: Institutional deliveries increased from 42% in 1993 to 75% in 2014 and 86% in 2022. Over the same period, home deliveries declined from 57% to 25% and then to 13% (**Figure 9.5**).

Figure 9.5 **Trends in place of birth**

Percentage of live births in the 2 years before the survey



9.4.2 Delivery by Caesarean

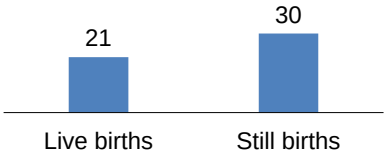
Caesarean sections (C-sections) may be required when vaginal delivery poses a risk to the mother or baby. Although this procedure can save lives, it can put women and babies at risk of medical problems if performed without medical need.

Slightly more than one in every five (21%) live births in the 2 years preceding the survey were delivered via caesarean section (**Table 9.8** and **Figure 9.6**).

Trends: The percentage of live births in the 2 years preceding the survey delivered via caesarean section has increased steadily over time, from 5% in 1993 to 13% in 2014 and 21% in 2022.

Figure 9.6 **Caesarean section by birth outcome**

Percentage of live births in the 2 years before the survey that were delivered by caesarean section



9.4.3 Skilled Assistance during Delivery

Skilled assistance during delivery

Births delivered with the assistance of doctors, midwives/nurses, and community health workers.

Sample: All live births and/or stillbirths in the 2 years before the survey

During pregnancy, counselling should be provided to pregnant women and their families about the benefits of giving birth in a health facility with assistance from a skilled health professional. Evidence suggests that even if all precautions are taken during pregnancy, complications can still occur before, during, or after childbirth (WHO 2017c). Giving birth at a hospital with skilled assistance increases the chances of resolving all ensuing complications to improve the health of the mother and newborn (GHS 2016).

Sixty-nine percent of live births in the 2 years preceding the survey were delivered by midwives or nurses, 19% by doctors, 7% by traditional birth attendants (TBAs), 2% by relatives, and 1% by community health workers; 2% of deliveries were not assisted by anyone (**Table 9.9** and **Figure 9.7**). Eighty-eight percent of live births in the 2 years preceding the survey were delivered by a skilled provider. The percentage of deliveries attended by a skilled provider decreases with increasing birth order, from 93% among first-order births to 73% among sixth- or higher-order births (**Figure 9.8**).

Figure 9.7 Assistance during delivery

Percent distribution of births in the 2 years before the survey

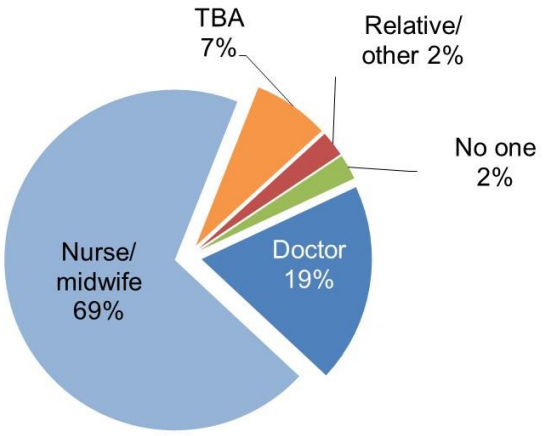
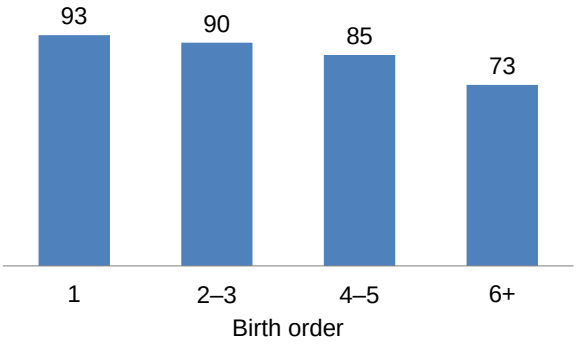


Figure 9.8 Skilled assistance at delivery by birth order

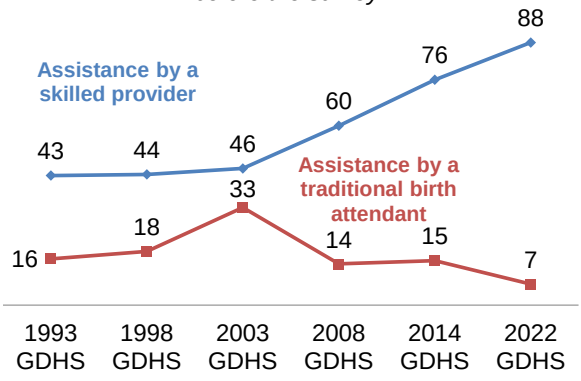
Percentage of live births in the 2 years before the survey that were delivered by a skilled provider



Trends: The percentage of live births delivered by a skilled provider increased from 43% in 1993 to 76% in 2014 and 88% in 2022. During the same period, the percentage of live births delivered by traditional birth attendants decreased from 16% to 15% and then to 7% (**Figure 9.9**).

Figure 9.9 Trends in assistance during delivery

Percentage of live births in the 2 years before the survey



Duration of Stay at the Health Facility

Among women who delivered via caesarean section for their most recent live birth, 83% stayed in the health facility for 3 or more days. One in every two women with vaginal births stayed in the health facility for less than 24 hours and 39% stayed in the health facility for 1 to 2 days (**Table 9.10**).

9.5 POSTNATAL CARE

9.5.1 Postnatal Health Check for Mothers

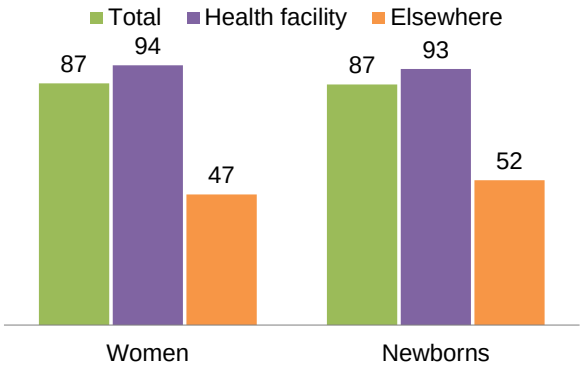
Among women age 15–49 with a live birth and/or stillbirth in the 2 years preceding the survey, 87% had a postnatal check during the first 2 days after their most recent live birth, with most checks occurring within 4 hours of delivery (73%) (**Table 9.11**).

Women who deliver in a health facility are more likely to receive their first postnatal check within 2 days of delivery (94%) than those who deliver elsewhere (47%) (**Figure 9.10**).

Trends: The percentage of women with a live birth who had a postnatal check during the first 2 days after birth increased from 55% in 2008 to 81% in 2014 and then to 87% in 2022.

***Figure 9.10* Postnatal care by place of delivery**

Percentage of last live births in the 2 years before the survey for which women and newborns received a postnatal check during the first 2 days after birth



Type of Provider

Eighty-three percent of women with a live birth in the 2 years preceding the survey received a postnatal check during the first 2 days after delivery from a doctor, a midwife, or a nurse. Traditional birth attendants provided the first postnatal check for 4% of women (**Table 9.12**).

Content of Care

Seventy-four percent of women with a live birth in the 2 years preceding the survey had their blood pressure checked, 65% were informed about vaginal bleeding, and 50% were counselled about family planning during the first 2 days after birth by a health care provider. Overall, 45% of women had all three checks performed by a health care provider in the first 2 days after birth (**Table 9.13**).

9.5.2 Postnatal Health Check for Newborns

Eighty-seven percent of newborns had a postnatal check during the first 2 days after birth, with most checks taking place less than 4 hours after delivery (74%). One in 10 newborns had no postnatal check (**Table 9.14**).

Type of Provider

Eighty-three percent of newborns received a postnatal check during the first 2 days after birth from a doctor, a midwife, or a nurse. Traditional birth attendants provided the first postnatal check for 4% of newborns (**Table 9.15**).

Content of Care

Postnatal breastfeeding counselling supports exclusive breastfeeding. Face-to-face breastfeeding counselling facilitates observation of positioning and the latch of the infant and allows for tailored breastfeeding counselling and support (WHO 2018).

Seventy-eight percent of newborns had their umbilical cord examined, 76% had their temperature measured, and 82% had their weight measured. Seventy-one percent of mothers of newborns were counseled on newborn danger signs, and another 71% were counselled on breastfeeding and observed

breastfeeding. Overall, 60% of newborns had all five signal functions performed during the first 2 days after birth (**Table 9.16**).

9.5.3 Postnatal Health Checks for Mothers and Newborns

Overall, 83% of both mothers and newborns received a postnatal check during the first 2 days after delivery, while 9% of both mothers and newborns did not receive any postnatal check (**Table 9.17**).

9.6 Men's Involvement in Maternal Health Care

Among men age 15–49 with a youngest child age 0–2, 95% reported that the child's mother had an antenatal check-up during the pregnancy, and 52% were present during an antenatal check-up. Eighty-six percent of men reported that their child was born in a health facility, and 66% of these men went with the child's mother to the health facility (**Table 9.18**).

9.7 Breast and Cervical Cancer Examinations

Breast cancer examination

Women were asked if a doctor or other health care provider examined their breasts to check for cancer. The examination could include either a clinical breast exam, in which health care providers use their hands to feel for lumps or other changes, or use of medical equipment to make an image of the breast tissue, such as a mammogram.

Cervical cancer examination

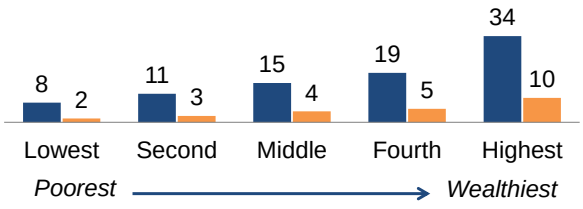
To be checked for cervical cancer, a woman is asked to lie on her back with her legs apart. Then the health care worker will use a brush or swab to collect a sample from inside her. The sample is sent to a laboratory for testing. This test is called a Pap smear or human papillomavirus (HPV) test. Another method is visual inspection with acetic acid (VIA). In this test, the health care worker puts vinegar on the cervix to see if there is a reaction. Women were asked if a doctor or other health care provider ever tested them for cervical cancer. Information on the type of screening test was not collected.

Sample: Women age 15–49

Overall, among women age 15–49, 5% have been tested for cervical cancer and 18% have been examined for breast cancer by a doctor or a health care worker (**Table 9.19**). The percentage of women who have received breast and cervical cancer examinations increases with increasing household wealth (**Figure 9.11**).

Figure 9.11 **Breast and cervical cancer exams by household wealth**

Percentage of women age 15–49 who were ever examined by a healthcare worker for:



9.8 PROBLEMS IN ACCESSING HEALTH CARE

Problems in accessing health care

Women were asked whether each of the following factors is a big problem in seeking medical advice or treatment for themselves when they are sick:

- Getting permission to go to the doctor
- Getting money for advice or treatment
- Distance to a health facility
- Not wanting to go alone

Sample: Women age 15–49

Many factors can prevent women from obtaining medical advice or treatment for themselves when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of delivery.

More than half of women (54%) reported that they have at least one problem in accessing health care. The most common problem is getting money for treatment (45%), followed by distance to a health facility (22%). Sixteen percent of women mentioned not wanting to go alone, and 10% mentioned getting permission to go for treatment (**Table 9.20**).

9.9 DISTANCE AND MEANS OF TRANSPORT TO THE NEAREST HEALTH FACILITY

Distance to the nearest health facility is one of the major factors influencing the health-seeking practices of women in Ghana. In the 2022 GDHS, women were asked to provide details on travel time to the nearest health facility and the means of transport by which they reached the facility.

The majority (88%) of women reported traveling less than 1 hour to the nearest health facility; 58% travel less than 30 minutes, and 30% travel between 30 minutes and 59 minutes. Only 3% of women travel 2 hours or more to the nearest health facility.

Traveling via nonmotorised means is more common among the women interviewed (61%) than traveling via motorised means (39%) (**Table 9.21**).

LIST OF TABLES

For more information on maternal and newborn health care, see the following tables:

Table 9.1 Antenatal care

Percent distribution of women age 15–49 who had a live birth and/or stillbirth in the 2 years preceding the survey by antenatal care (ANC) provider during the pregnancy for the most recent live birth or stillbirth and percentage receiving antenatal care from a skilled provider for the most recent live birth or stillbirth, according to background characteristics, Ghana DHS 2022

Background characteristic	Antenatal care provider					No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor	Nurse/ midwife	Traditional birth attendant	Community health worker/ fieldworker	Other				
				LIVE BIRTHS					
Age at birth									
<20	6.5	91.2	0.0	0.5	0.0	1.8	100.0	97.6	351
20–34	17.0	80.9	0.0	0.3	0.0	1.7	100.0	97.9	2,449
35–49	26.0	71.4	0.0	0.5	0.2	1.9	100.0	97.5	692
Birth order[2]									
1	17.8	81.1	0.0	0.0	0.0	1.0	100.0	98.9	1,016
2–3	18.8	79.1	0.1	0.5	0.0	1.5	100.0	97.9	1,287
4–5	18.2	78.3	0.0	0.9	0.0	2.6	100.0	96.5	760
6+	13.1	83.6	0.0	0.0	0.2	3.0	100.0	96.8	428
Residence									
Urban	25.3	73.2	0.0	0.1	0.0	1.3	100.0	98.6	1,623
Rural	11.1	86.0	0.0	0.7	0.1	2.2	100.0	97.1	1,868
Region									
Western	11.9	81.0	0.0	3.3	0.0	3.8	100.0	92.9	208
Central	8.1	90.1	0.0	0.6	0.0	1.2	100.0	98.2	357
Greater Accra	45.6	50.1	0.0	0.0	0.0	4.3	100.0	95.7	410
Volta	12.1	87.2	0.0	0.0	0.0	0.8	100.0	99.2	130
Eastern	26.8	72.8	0.0	0.5	0.0	0.0	100.0	99.5	246
Ashanti	23.9	76.1	0.0	0.0	0.0	0.0	100.0	100.0	631
Western North	16.5	83.1	0.0	0.0	0.0	0.4	100.0	99.6	96
Ahafo	24.5	73.2	0.0	0.0	0.4	1.9	100.0	97.7	77
Bono	7.2	91.6	0.0	0.7	0.0	0.5	100.0	98.8	113
Bono East	9.5	89.7	0.0	0.0	0.0	0.8	100.0	99.2	191
Oti	6.0	91.5	0.3	0.0	0.9	1.4	100.0	97.4	123
Northern	10.0	86.4	0.0	0.3	0.0	3.4	100.0	96.4	395
Savannah	10.6	84.5	0.0	0.0	0.0	4.9	100.0	95.1	105
North East	8.2	87.3	0.2	0.0	0.0	4.3	100.0	95.5	112
Upper East	4.5	94.5	0.0	0.0	0.0	1.0	100.0	99.0	191
Upper West	8.2	89.9	0.0	1.2	0.0	0.6	100.0	98.2	105
Education									
No education	8.1	88.2	0.1	0.2	0.1	3.4	100.0	96.2	728
Primary	19.3	77.6	0.0	0.7	0.0	2.3	100.0	96.9	542
Secondary	17.4	81.0	0.0	0.4	0.0	1.2	100.0	98.4	1,898
More than secondary	38.9	60.3	0.0	0.1	0.0	0.7	100.0	99.2	323
Wealth quintile									
Lowest	8.2	87.4	0.0	0.5	0.2	3.7	100.0	95.6	853
Second	10.7	87.0	0.0	0.5	0.0	1.7	100.0	97.7	723
Middle	15.2	83.2	0.0	0.4	0.0	1.1	100.0	98.4	705
Fourth	22.6	75.6	0.0	0.2	0.0	1.6	100.0	98.2	631
Highest	38.1	61.7	0.0	0.2	0.0	0.0	100.0	99.8	579
Total	17.7	80.1	0.0	0.4	0.0	1.8	100.0	97.8	3,491
				STILLBIRTHS					
Total	7.7	83.5	0.0	0.0	0.0	8.9	100.0	91.1	57
				LIVE BIRTHS AND STILLBIRTHS[3]					
Total	17.5	80.1	0.0	0.4	0.0	1.9	100.0	97.7	3,534

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[1] Skilled provider includes doctor and nurse/midwife (community health nurse, community health officer, enrolled nurse, public health nurse, or general nurse).
[2] Birth order refers to the order of the birth among the respondent's live births.
[3] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15–49 who had a live birth and/or a stillbirth in the 2 years preceding the survey by number of antenatal care (ANC) visits during the pregnancy for the most recent live birth or stillbirth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to background characteristics, Ghana DHS 2022

Background characteristic	Number of ANC visits									Number of months pregnant at time of first ANC visit							
	None	1	2	3	4–7	8+	Don't know	Total	4+ ANC visits	No antenatal care	<4	4–6	7+	Don't know	Total	Number of women	Median months pregnant at first visit (for those with ANC)	Number of women with ANC
	LIVE BIRTHS																	
Age at birth																		
<20	1.8	3.5	5.6	5.9	55.8	27.3	0.0	100.0	83.1	1.8	51.0	40.3	6.8	0.0	100.0	351	3.9	344
20–34	1.7	1.3	3.0	5.5	48.7	39.7	0.1	100.0	88.4	1.7	64.1	30.6	3.5	0.1	100.0	2,449	3.4	2,406
35–49	1.9	2.1	3.6	4.4	47.4	40.5	0.0	100.0	87.9	1.9	62.6	31.4	4.0	0.1	100.0	692	3.5	679
Birth order[1]																		
1	1.0	1.4	2.6	4.3	50.3	40.2	0.0	100.0	90.5	1.0	64.4	31.1	3.5	0.0	100.0	1,016	3.4	1,006
2–3	1.5	1.6	3.2	5.1	46.7	41.7	0.1	100.0	88.4	1.5	66.5	27.6	4.3	0.2	100.0	1,287	3.3	1,268
4–5	2.6	1.7	3.0	4.9	50.2	37.6	0.1	100.0	87.8	2.6	60.6	34.3	2.4	0.1	100.0	760	3.5	740
6+	3.0	2.7	6.1	8.9	52.2	27.2	0.0	100.0	79.4	3.0	49.5	41.2	6.3	0.0	100.0	428	4.0	415
Residence																		
Urban	1.3	1.0	2.6	3.7	45.0	46.2	0.0	100.0	91.2	1.3	66.2	28.4	4.0	0.0	100.0	1,623	3.4	1,602
Rural	2.2	2.3	4.0	6.7	52.8	32.0	0.1	100.0	84.8	2.2	59.2	34.6	3.8	0.2	100.0	1,868	3.6	1,827
Region																		
Western	3.8	2.0	1.2	3.6	42.8	46.5	0.0	100.0	89.4	3.8	67.0	26.9	2.3	0.0	100.0	208	3.3	200
Central	1.2	1.0	5.2	4.6	43.3	44.7	0.0	100.0	88.0	1.2	63.3	28.3	7.2	0.0	100.0	357	3.5	353
Greater Accra	4.3	1.8	1.7	2.2	40.8	49.3	0.0	100.0	90.1	4.3	61.0	28.6	6.1	0.0	100.0	410	3.6	392
Volta	0.8	0.8	1.8	2.7	48.6	45.3	0.0	100.0	94.0	0.8	70.5	25.8	2.5	0.5	100.0	130	3.3	129
Eastern	0.0	1.4	3.1	6.9	43.9	44.8	0.0	100.0	88.7	0.0	61.5	32.1	6.4	0.0	100.0	246	3.5	246
Ashanti	0.0	0.4	3.8	6.1	50.8	38.8	0.0	100.0	89.7	0.0	64.4	33.4	2.2	0.0	100.0	631	3.5	631
Western North	0.4	2.7	4.9	5.2	56.7	30.1	0.0	100.0	86.8	0.4	66.4	31.1	2.1	0.0	100.0	96	3.4	96
Ahafo	1.9	1.2	2.1	6.2	46.2	42.4	0.0	100.0	88.6	1.9	65.8	29.5	2.8	0.0	100.0	77	3.5	76
Bono	0.5	0.6	3.8	3.9	54.4	36.8	0.0	100.0	91.2	0.5	67.1	29.7	2.8	0.0	100.0	113	3.4	112
Bono East	0.8	3.6	4.3	5.7	51.8	33.7	0.0	100.0	85.6	0.8	64.1	33.4	1.7	0.0	100.0	191	3.5	189
Oti	1.4	4.2	5.2	13.3	50.7	24.9	0.3	100.0	75.7	1.4	62.6	32.1	3.9	0.0	100.0	123	3.4	121
Northern	3.4	4.1	3.8	7.9	53.1	27.7	0.0	100.0	80.8	3.4	49.3	42.7	4.4	0.2	100.0	395	3.9	382
Savannah	4.9	2.9	3.3	8.7	60.1	19.4	0.8	100.0	79.5	4.9	54.7	35.8	4.0	0.6	100.0	105	3.6	100
North East	4.3	1.5	4.9	5.0	54.9	28.7	0.6	100.0	83.5	4.3	60.2	33.3	2.2	0.0	100.0	112	3.4	108
Upper East	1.0	0.3	1.7	1.9	52.8	42.0	0.3	100.0	94.8	1.0	69.9	25.7	3.1	0.3	100.0	191	3.1	189
Upper West	0.6	0.0	2.3	2.1	62.0	32.9	0.2	100.0	94.8	0.6	70.3	26.9	2.0	0.2	100.0	105	3.2	104
Education																		
No education	3.4	4.0	4.2	7.5	53.8	27.0	0.2	100.0	80.8	3.4	55.4	36.8	4.2	0.2	100.0	728	3.7	704
Primary	2.3	2.7	4.2	5.9	53.3	31.5	0.2	100.0	84.8	2.3	56.1	36.5	5.1	0.0	100.0	542	3.7	529
Secondary	1.2	0.7	3.1	5.2	47.9	41.9	0.0	100.0	89.8	1.2	63.0	31.9	3.9	0.1	100.0	1,898	3.5	1,875
More than secondary	0.7	0.8	1.5	0.1	39.3	57.5	0.0	100.0	96.9	0.7	86.3	11.5	1.5	0.0	100.0	323	2.9	321

Continued…

Table 9.2—*Continued*

Background characteristic	Number of ANC visits									Number of months pregnant at time of first ANC visit								
	None	1	2	3	4–7	8+	Don't know	Total	4+ ANC visits	No antenatal care	<4	4–6	7+	Don't know	Total	Number of women	Median months pregnant at first visit (for those with ANC)	Number of women with ANC
Wealth quintile																		
Lowest	3.7	4.4	5.3	8.7	54.3	23.5	0.1	100.0	77.8	3.7	55.1	35.2	5.7	0.2	100.0	853	3.7	821
Second	1.7	1.8	3.6	5.1	54.0	33.7	0.2	100.0	87.6	1.7	58.3	36.5	3.3	0.2	100.0	723	3.6	711
Middle	1.1	0.6	4.3	7.6	50.7	35.7	0.1	100.0	86.4	1.1	59.5	34.3	5.1	0.0	100.0	705	3.6	698
Fourth	1.6	0.5	0.6	2.9	47.7	46.9	0.0	100.0	94.5	1.6	66.8	28.6	3.0	0.0	100.0	631	3.3	621
Highest	0.0	0.5	2.2	0.4	35.5	61.6	0.0	100.0	97.0	0.0	77.5	20.9	1.5	0.0	100.0	579	3.2	579
Total	1.8	1.7	3.4	5.3	49.2	38.6	0.1	100.0	87.8	1.8	62.5	31.7	3.9	0.1	100.0	3,491	3.5	3,429
STILLBIRTHS																		
Total	8.9	0.0	8.2	5.8	57.7	19.5	0.0	100.0	77.1	8.9	52.5	37.4	1.2	0.0	100.0	57	3.5	52
LIVE BIRTHS AND STILLBIRTHS[2]																		
Total	1.9	1.7	3.4	5.3	49.2	38.4	0.1	100.0	87.6	1.9	62.4	31.8	3.9	0.1	100.0	3,534	3.5	3,466

Note: Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[1] Birth order refers to the order of the birth among the respondent's live births.
[2] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.3.1 Components of antenatal care among women receiving ANC

Among women age 15–49 receiving antenatal care (ANC) for the most recent live birth and/or stillbirth in the 2 years preceding the survey, percentage receiving specific antenatal services from a health care provider, according to background characteristics, Ghana DHS 2022

Background characteristic	Among women who received antenatal care for their most recent live birth or stillbirth in the last 2 years, percentage who received specific services during ANC from a health care provider:							Number of women with ANC for their most recent live birth and/or stillbirth in the last 2 years
	Blood pressure measured	Urine sample taken	Blood sample taken	Baby's heartbeat checked	Counselled about maternal diet	Counselled about breastfeeding	Asked about vaginal bleeding	
	LIVE BIRTHS							
Age at birth								
<20	97.8	97.4	96.6	99.1	92.4	85.1	70.9	344
20–34	97.9	99.2	99.1	99.3	93.9	89.3	80.9	2,406
35–49	98.1	98.4	98.3	98.9	95.2	90.4	86.8	679
Birth order[1]								
1	97.9	98.6	98.7	99.3	93.5	85.6	73.8	1,006
2–3	97.2	99.2	99.2	99.5	94.1	91.0	82.8	1,268
4–5	98.7	99.0	98.7	98.9	95.3	90.7	86.9	740
6+	98.7	97.7	97.4	98.6	92.7	89.0	83.1	415
Residence								
Urban	98.4	99.2	99.4	99.4	95.2	92.3	82.6	1,602
Rural	97.5	98.5	98.1	99.0	93.0	86.3	79.8	1,827
Region								
Western	98.5	99.5	99.5	98.6	95.2	94.3	89.6	200
Central	96.9	99.5	99.5	100.0	92.6	84.1	79.3	353
Greater Accra	97.9	99.1	99.3	99.8	98.8	94.9	87.8	392
Volta	100.0	100.0	99.4	99.5	95.6	97.3	81.2	129
Eastern	97.6	100.0	100.0	98.8	98.3	96.1	86.8	246
Ashanti	96.9	99.3	99.3	99.4	91.5	80.9	65.8	631
Western North	98.6	99.6	96.1	98.4	94.9	91.2	85.0	96
Ahafo	100.0	99.5	100.0	100.0	93.4	95.4	89.8	76
Bono	99.2	100.0	100.0	99.5	96.2	94.6	90.3	112
Bono East	100.0	100.0	100.0	100.0	92.2	91.3	86.2	189
Oti	99.2	99.3	99.3	99.4	95.4	92.6	82.7	121
Northern	95.8	95.6	95.3	97.7	90.4	86.5	80.3	382
Savannah	97.7	98.0	95.7	98.2	85.6	83.3	77.7	100
North East	98.4	94.9	96.9	97.8	90.9	72.1	72.5	108
Upper East	99.8	98.3	98.5	99.8	97.7	97.1	91.3	189
Upper West	100.0	100.0	99.4	100.0	98.1	94.0	90.1	104
Education								
No education	97.9	97.4	97.0	98.0	92.0	86.0	82.1	704
Primary	97.5	98.6	98.7	99.1	94.7	89.0	79.6	529
Secondary	97.7	99.3	99.4	99.5	94.3	89.3	80.2	1,875
More than secondary	99.9	99.9	98.5	100.0	95.8	94.7	86.6	321

Continued…

Table 9.3.1—*Continued*

Background characteristic	Among women who received antenatal care for their most recent live birth or stillbirth in the last 2 years, percentage who received specific services during ANC from a health care provider:							Number of women with ANC for their most recent live birth and/or stillbirth in the last 2 years
	Blood pressure measured	Urine sample taken	Blood sample taken	Baby's heartbeat checked	Counselled about maternal diet	Counselled about breastfeeding	Asked about vaginal bleeding	
Wealth quintile								
Lowest	98.4	97.4	97.2	98.8	91.5	85.2	80.6	821
Second	97.3	98.6	98.3	98.9	92.8	87.9	76.5	711
Middle	97.4	99.3	99.6	99.5	94.8	89.6	82.8	698
Fourth	97.8	99.6	99.5	99.1	95.4	92.0	82.2	621
Highest	98.8	99.9	99.3	100.0	96.7	92.4	84.3	579
Total	97.9	98.8	98.7	99.2	94.0	89.1	81.1	3,429
STILLBIRTHS								
Total	97.9	98.6	95.4	94.3	88.0	62.6	74.1	52
LIVE BIRTHS AND STILLBIRTHS[2]								
Total	97.9	98.8	98.6	99.1	93.9	88.7	81.0	3,466

Note: The denominator for this table includes all women with a birth in the 2 years preceding the survey who received ANC for that birth. Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[1] Birth order refers to the order of the birth among the respondent's live births.
[2] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.3.2 Components of antenatal care among all women

Among all women age 15–49 with a live birth and/or stillbirth in the 2 years preceding the survey, percentage receiving specific antenatal services from a health care provider for their most recent live birth and/or stillbirth, according to background characteristics, Ghana DHS 2022

Background characteristic	Among women who received antenatal care for their most recent live birth or stillbirth in the last 2 years, percentage who received specific services during ANC from a health care provider:							Number of women with a live birth and/or stillbirth in the last 2 years
	Blood pressure measured	Urine sample taken	Blood sample taken	Baby's heartbeat checked	Counselled about maternal diet	Counselled about breastfeeding	Asked about vaginal bleeding	
	LIVE BIRTHS							
Age at birth								
<20	96.0	95.6	94.9	97.2	90.7	83.6	69.6	351
20–34	96.2	97.4	97.4	97.6	92.3	87.7	79.5	2,449
35–49	96.2	96.5	96.5	97.0	93.4	88.7	85.1	692
Birth order[1]								
1	96.9	97.6	97.7	98.3	92.6	84.7	73.1	1,016
2–3	95.8	97.7	97.7	98.0	92.7	89.6	81.6	1,287
4–5	96.2	96.5	96.1	96.3	92.8	88.3	84.7	760
6+	95.7	94.8	94.5	95.6	89.9	86.3	80.7	428
Residence								
Urban	97.1	97.9	98.1	98.1	93.9	91.0	81.5	1,623
Rural	95.4	96.3	96.0	96.8	91.0	84.4	78.0	1,868
Region								
Western	94.8	95.7	95.7	94.8	91.6	90.7	86.2	208
Central	95.8	98.3	98.3	98.8	91.5	83.1	78.3	357
Greater Accra	93.7	94.8	95.1	95.5	94.6	90.8	84.1	410
Volta	99.2	99.2	98.7	98.7	94.9	96.5	80.6	130
Eastern	97.6	100.0	100.0	98.8	98.3	96.1	86.8	246
Ashanti	96.9	99.3	99.3	99.4	91.5	80.9	65.8	631
Western North	98.2	99.3	95.7	98.0	94.5	90.8	84.7	96
Ahafo	98.1	97.7	98.1	98.1	91.7	93.6	88.2	77
Bono	98.7	99.5	99.5	99.0	95.7	94.2	89.8	113
Bono East	99.2	99.2	99.2	99.2	91.5	90.5	85.4	191
Oti	97.9	98.0	98.0	98.1	94.1	91.4	81.6	123
Northern	92.6	92.4	92.1	94.4	87.3	83.6	77.6	395
Savannah	93.0	93.2	91.0	93.4	81.5	79.2	73.9	105
North East	94.2	90.8	92.7	93.6	87.0	68.9	69.4	112
Upper East	98.8	97.3	97.5	98.8	96.7	96.2	90.4	191
Upper West	99.4	99.4	98.8	99.4	97.5	93.4	89.5	105
Education								
No education	94.6	94.1	93.7	94.7	88.9	83.1	79.4	728
Primary	95.3	96.4	96.4	96.8	92.5	87.0	77.8	542
Secondary	96.5	98.1	98.2	98.3	93.2	88.2	79.2	1,898
More than secondary	99.2	99.2	97.8	99.3	95.1	94.0	86.0	323

Continued...

Table 9.3.2—*Continued*

Background characteristic	Among women who received antenatal care for their most recent live birth or stillbirth in the last 2 years, percentage who received specific services during ANC from a health care provider:							Number of women with a live birth and/or stillbirth in the last 2 years
	Blood pressure measured	Urine sample taken	Blood sample taken	Baby's heartbeat checked	Counselled about maternal diet	Counselled about breastfeeding	Asked about vaginal bleeding	
Wealth quintile								
Lowest	94.7	93.7	93.6	95.1	88.1	82.0	77.6	853
Second	95.7	96.9	96.7	97.2	91.2	86.3	75.1	723
Middle	96.3	98.1	98.5	98.4	93.7	88.6	81.8	705
Fourth	96.2	98.0	97.9	97.5	93.9	90.5	80.9	631
Highest	98.8	99.9	99.3	100.0	96.7	92.4	84.3	579
Total	96.2	97.1	96.9	97.4	92.3	87.5	79.6	3,491
STILLBIRTHS								
Total	89.2	89.9	86.9	85.9	80.2	57.0	67.5	57
LIVE BIRTHS AND STILLBIRTHS[2]								
Total	96.1	97.0	96.8	97.2	92.1	87.0	79.5	3,534

Note: The denominator for this table includes all women with a birth in the 2 years preceding the survey, whether or not they received ANC for that birth. Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[1] Birth order refers to the order of the birth among the respondent's live births.
[2] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.4 Deworming and iron-containing supplementation during pregnancy

Among women age 15–49 with a live birth or stillbirth in the 2 years preceding the survey, percentages who took deworming medication and any iron-containing supplements during the pregnancy of the most recent live birth or stillbirth, and percent distribution of the number of days during which women age 15–49 with a live birth or stillbirth in the 2 years preceding the survey took iron-containing supplements during the pregnancy for the most recent live birth or stillbirth, according to background characteristics, Ghana DHS 2022

Background characteristic	Among women with a live birth and/or stillbirth in the last 2 years, percentage who during the pregnancy for the most recent live birth or stillbirth:		Number of days during which women with a live birth and/or stillbirth in the last 2 years took iron-containing supplements[1] during the pregnancy for the most recent live birth or stillbirth:							Number of women with a live birth and/or stillbirth in the last 2 years
	Took deworming medication	Took any iron-containing supplements[1]	None	<60	60–89	90–179	180+	Don't know	Total	
					LIVE BIRTHS					
Age at birth										
<20	56.9	91.4	8.6	20.8	8.1	38.4	22.5	1.7	100.0	351
20–34	59.5	92.7	7.3	22.6	8.4	30.7	29.4	1.6	100.0	2,449
35–49	57.5	91.2	8.8	20.0	8.8	29.0	31.4	2.0	100.0	692
Birth order[2]										
1	59.3	93.8	6.2	21.3	6.8	32.6	31.7	1.5	100.0	1,016
2–3	58.6	92.9	7.1	23.1	7.5	29.3	31.5	1.5	100.0	1,287
4–5	60.9	90.9	9.1	19.1	10.2	32.5	27.1	2.0	100.0	760
6+	55.1	89.2	10.8	24.9	12.2	30.5	19.6	2.1	100.0	428
Residence										
Urban	60.8	94.4	5.6	19.8	8.4	29.8	34.2	2.2	100.0	1,623
Rural	57.2	90.5	9.5	23.7	8.5	32.3	24.7	1.2	100.0	1,868
Region										
Western	58.9	91.2	8.8	19.6	13.1	27.0	30.9	0.7	100.0	208
Central	74.1	95.9	4.1	10.9	10.5	37.3	35.6	1.6	100.0	357
Greater Accra	56.7	96.4	3.6	15.1	7.7	29.3	40.8	3.4	100.0	410
Volta	73.5	97.3	2.7	9.0	3.2	34.1	44.5	6.5	100.0	130
Eastern	81.4	95.9	4.1	25.9	11.3	31.3	24.8	2.6	100.0	246
Ashanti	55.1	94.2	5.8	23.3	10.0	34.2	26.2	0.5	100.0	631
Western North	69.0	88.7	11.3	42.8	8.5	24.6	12.4	0.4	100.0	96
Ahafo	62.3	95.8	4.2	29.6	8.0	28.3	29.5	0.4	100.0	77
Bono	53.9	98.3	1.7	23.7	5.0	33.5	34.7	1.4	100.0	113
Bono East	52.0	86.6	13.4	17.6	5.4	32.6	31.1	0.0	100.0	191
Oti	61.9	95.4	4.6	15.7	6.4	35.8	32.9	4.6	100.0	123
Northern	56.2	83.0	17.0	25.1	9.8	28.9	18.3	0.8	100.0	395
Savannah	43.2	81.2	18.8	37.4	9.5	15.2	16.1	3.0	100.0	105
North East	30.4	89.2	10.8	22.1	6.9	45.8	12.6	1.7	100.0	112
Upper East	41.4	88.1	11.9	44.9	1.8	11.9	28.9	0.6	100.0	191
Upper West	58.5	97.8	2.2	8.8	5.4	42.6	38.9	2.1	100.0	105
Education										
No education	52.2	85.5	14.5	24.1	10.8	29.9	18.8	1.8	100.0	728
Primary	53.8	89.9	10.1	25.0	7.3	31.1	25.0	1.5	100.0	542
Secondary	61.5	94.8	5.2	20.7	8.1	33.7	30.6	1.8	100.0	1,898
More than secondary	67.0	96.4	3.6	19.2	6.7	18.8	50.6	1.1	100.0	323

Continued...

Table 9.4—*Continued*

Background characteristic	Among women with a live birth and/or stillbirth in the last 2 years, percentage who during the pregnancy for the most recent live birth or stillbirth:		Number of days during which women with a live birth and/or stillbirth in the last 2 years took iron-containing supplements[1] during the pregnancy for the most recent live birth or stillbirth:							Number of women with a live birth and/or stillbirth in the last 2 years
	Took deworming medication	Took any iron-containing supplements[1]	None	<60	60–89	90–179	180+	Don't know	Total	
Wealth quintile										
Lowest	52.3	87.1	12.9	28.9	8.9	30.6	17.8	1.0	100.0	853
Second	54.6	91.3	8.7	22.7	8.4	31.4	26.6	2.2	100.0	723
Middle	63.0	94.4	5.6	22.4	9.1	34.1	27.3	1.5	100.0	705
Fourth	65.0	94.9	5.1	16.3	9.8	31.5	34.6	2.8	100.0	631
Highest	62.3	95.6	4.4	16.3	5.6	27.5	45.2	1.0	100.0	579
Total	58.9	92.3	7.7	21.9	8.4	31.1	29.1	1.7	100.0	3,491
STILLBIRTHS										
Total	43.7	82.4	17.6	36.7	7.0	16.4	21.7	0.6	100.0	57
LIVE BIRTHS AND STILLBIRTHS[3]										
Total	58.7	92.2	7.8	22.1	8.5	30.9	29.1	1.7	100.0	3,534

Note: Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[1] Iron tablets and iron syrup
[2] Birth order refers to the order of the birth among the respondent's live births.
[3] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.5 Source of iron-containing supplements

Among women age 15–49 who had a live birth and/or stillbirth in the 2 years preceding the survey and were given or bought iron-containing supplements during the pregnancy of the most recent live birth or stillbirth, percentage who obtained supplements, according to source, Ghana DHS 2022

	Percentage who obtained iron-containing supplements[1] from each source:		
Source	Live births	Stillbirths	Live births and stillbirths[2]
Public sector	85.3	91.7	85.5
Government hospital	39.3	26.8	39.2
Government polyclinic	6.0	14.9	6.1
Government health centre	17.0	37.1	17.3
Government clinic	10.7	13.0	10.7
CHPS centre/government health post	13.3	7.0	13.2
Community health service (outreach)	1.1	0.6	1.1
Private medical sector (non-NGO)	10.5	7.1	10.4
Private hospital/clinic	6.9	7.1	6.9
Private clinic	2.6	0.0	2.6
Maternity home	0.8	5.6	0.8
Community health service (mobile clinic)	0.2	0.0	0.2
Other private medical sector	0.1	0.0	0.1
Private medical sector (NGO)	0.1	0.0	0.1
NGO hospital/clinic	0.1	0.0	0.1
Other private sector	4.6	1.2	4.5
Shop	4.3	1.2	4.2
Market	0.3	0.0	0.3
Number of women	3,230	47	3,268

Note: Supplements may have been obtained from more than one source. Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.
CHPS = community-based health planning and services
NGO = nongovernmental organisation
[1] Iron tablets and iron syrup
[2] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.6 Tetanus toxoid injections

Among women age 15–49 with a live birth in the 2 years preceding the survey, percentage receiving two or more tetanus toxoid injections during the pregnancy for the most recent live birth and percentage whose most recent live birth was protected against neonatal tetanus, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage receiving two or more injections during the pregnancy for the most recent live birth	Percentage whose most recent live birth was protected against neonatal tetanus[1]	Number of women
Age at birth			
<20	55.0	63.6	351
20–34	49.0	74.5	2,449
35–49	39.0	76.5	692
Birth order[2]			
1	62.1	68.5	1,016
2–3	48.1	78.1	1,287
4–5	37.4	75.8	760
6+	30.4	70.3	428
Residence			
Urban	54.7	79.2	1,623
Rural	41.5	69.2	1,868
Region			
Western	49.6	72.9	208
Central	51.2	80.0	357
Greater Accra	51.3	78.4	410
Volta	48.4	83.3	130
Eastern	57.1	81.9	246
Ashanti	57.0	80.8	631
Western North	58.3	76.5	96
Ahafo	55.4	77.8	77
Bono	41.1	69.2	113
Bono East	46.7	63.1	191
Oti	33.9	71.3	123
Northern	37.7	66.7	395
Savannah	30.1	43.1	105
North East	26.6	45.7	112
Upper East	31.6	75.1	191
Upper West	54.7	70.8	105
Education			
No education	30.6	60.4	728
Primary	45.0	72.2	542
Secondary	52.5	76.6	1,898
More than secondary	61.8	90.5	323
Wealth quintile			
Lowest	32.2	60.2	853
Second	47.5	71.0	723
Middle	47.8	75.0	705
Fourth	56.5	81.0	631
Highest	60.8	88.0	579
Total	47.7	73.8	3,491

[1] Includes women with two injections during the pregnancy for the most recent live birth, or two or more injections (the last within 3 years of the most recent live birth), or three or more injections (the last within 5 years of the most recent live birth), or four or more injections (the last within 10 years of the most recent live birth), or five or more injections at any time prior to the most recent birth

[2] Birth order refers to the order of the birth among the respondent's live births.

Table 9.7 Place of delivery

Percent distribution of live births and/or stillbirths in the 2 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Ghana DHS 2022

Background characteristic	Health facility			Home	Other	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private medical sector	NGO medical sector					
				LIVE BIRTHS				
Mother's age at birth								
<20	83.0	5.0	0.3	11.1	0.7	100.0	88.2	358
20–34	76.1	10.4	0.3	12.4	0.8	100.0	86.8	2,561
35–49	71.0	12.2	0.2	15.6	1.0	100.0	83.4	718
Birth order[1]								
1	80.8	11.1	0.4	7.2	0.5	100.0	92.3	1,054
2–3	77.9	9.9	0.3	10.6	1.3	100.0	88.1	1,338
4–5	71.5	11.8	0.1	16.3	0.3	100.0	83.4	798
6+	65.2	6.3	0.1	27.1	1.3	100.0	71.6	447
Antenatal care visits[2]								
None	37.0	2.5	0.0	59.1	1.5	100.0	39.5	62
1–3	56.9	4.0	0.1	37.4	1.7	100.0	60.9	362
4+	78.7	11.0	0.3	9.3	0.8	100.0	90.0	3,065
Don't know/missing	*	*	*	*	*	100.0	*	3
Residence								
Urban	78.2	15.8	0.3	5.1	0.5	100.0	94.3	1,700
Rural	73.6	5.3	0.2	19.7	1.2	100.0	79.1	1,938
Region								
Western	76.5	8.5	0.0	14.6	0.4	100.0	85.0	212
Central	73.4	8.9	0.6	16.0	1.1	100.0	82.9	380
Greater Accra	72.5	19.8	0.0	7.7	0.0	100.0	92.3	427
Volta	84.9	3.8	2.2	7.8	1.3	100.0	90.9	135
Eastern	83.0	6.5	0.0	10.5	0.0	100.0	89.5	252
Ashanti	76.5	15.9	0.0	5.8	1.7	100.0	92.4	666
Western North	74.7	13.6	0.6	10.2	0.9	100.0	88.9	101
Ahafo	80.8	11.5	0.0	6.1	1.7	100.0	92.2	81
Bono	75.9	14.8	0.0	8.2	1.1	100.0	90.7	117
Bono East	80.6	5.6	0.0	13.5	0.3	100.0	86.2	202
Oti	59.2	7.6	0.3	30.8	2.1	100.0	67.1	128
Northern	67.4	2.9	0.0	29.0	0.7	100.0	70.3	406
Savannah	69.2	1.1	0.3	28.6	0.8	100.0	70.6	111
North East	81.3	0.9	2.3	14.7	0.9	100.0	84.4	116
Upper East	81.3	16.1	0.0	2.2	0.4	100.0	97.4	196
Upper West	93.2	0.8	0.0	5.6	0.4	100.0	94.0	109
Mother's education								
No education	70.3	2.4	0.1	26.5	0.7	100.0	72.8	761
Primary	73.7	8.5	0.5	16.1	1.2	100.0	82.7	562
Secondary	79.0	11.2	0.2	8.7	0.9	100.0	90.4	1,979
More than secondary	72.9	24.8	0.7	1.5	0.1	100.0	98.3	336
Wealth quintile								
Lowest	66.7	4.5	0.2	27.9	0.7	100.0	71.4	896
Second	79.7	6.4	0.2	12.6	1.0	100.0	86.3	749
Middle	79.4	7.5	0.1	11.3	1.7	100.0	87.0	730
Fourth	85.3	10.0	0.2	3.9	0.7	100.0	95.5	668
Highest	69.3	27.2	0.7	2.8	0.0	100.0	97.2	595
Total	75.8	10.2	0.3	12.9	0.9	100.0	86.2	3,638
				STILLBIRTHS				
Total	79.2	13.9	0.0	6.9	0.0	100.0	93.1	57
				LIVE BIRTHS AND STILLBIRTHS				
Total	75.8	10.3	0.3	12.8	0.8	100.0	86.4	3,695

Note: Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
NGO = nongovernmental organisation
[1] Birth order refers to the order of the birth among the respondent's live births.
[2] Includes only the most recent birth in the 2 years preceding the survey

Table 9.8 Caesarean section

Percentage of live births and/or stillbirths in the 2 years preceding the survey delivered via caesarean section (C-section), according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage delivered via C-section	Number of births
LIVE BIRTHS		
Mother's age at birth		
<20	14.6	358
20–34	20.7	2,561
35–49	24.2	718
Birth order[1]		
1	24.3	1,054
2–3	21.1	1,338
4–5	19.3	798
6+	14.1	447
Antenatal care visits[2]		
None	3.5	62
1–3	9.4	362
4+	21.5	3,065
Don't know/missing	*	3
Place of delivery		
Health facility	24.1	3,137
Public sector	22.2	2,757
Private medical sector (non-NGO)	37.8	371
Private medical sector (NGO)	*	9
Residence		
Urban	27.0	1,700
Rural	15.3	1,938
Region		
Western	19.6	212
Central	18.9	380
Greater Accra	34.2	427
Volta	28.4	135
Eastern	25.5	252
Ashanti	23.1	666
Western North	18.1	101
Ahafo	19.4	81
Bono	21.2	117
Bono East	22.8	202
Oti	12.1	128
Northern	10.3	406
Savannah	7.0	111
North East	8.8	116
Upper East	20.7	196
Upper West	17.8	109
Mother's education		
No education	10.0	761
Primary	19.3	562
Secondary	21.7	1,979
More than secondary	41.9	336
Wealth quintile		
Lowest	11.8	896
Second	16.1	749
Middle	16.7	730
Fourth	27.1	668
Highest	38.0	595
Total	20.8	3,638
STILLBIRTHS		
Total	20.2	57
LIVE BIRTHS AND STILLBIRTHS		
Total	20.8	3,695

Note: The question on C-section is asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in a health facility did not receive a C-section. Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Birth order refers to the order of the birth among the respondent's live births.

[2] Includes only the most recent birth in the 2 years preceding the survey

Table 9.9 Assistance during delivery

Percent distribution of live births and/or stillbirths in the 2 years preceding the survey by person providing assistance during delivery and percentage assisted by a skilled provider, and among most recent live births in the 2 years preceding the survey, percentage with skin-to-skin contact immediately after birth, according to background characteristics, Ghana DHS 2022

Background characteristic	Person providing assistance during delivery									Among most recent live births	
	Doctor	Nurse/midwife	Traditional birth attendant	Community health worker/ volunteer	Relative/other	No one	Total	Percentage delivered by a skilled provider[1]	Number of live births and/or stillbirths	Percentage with skin-to-skin contact immediately after birth	Number of live births
					LIVE BIRTHS						
Mother's age at birth											
<20	11.3	77.1	7.6	0.7	2.0	1.4	100.0	88.3	358	60.6	351
20–34	18.7	69.7	6.6	0.4	2.1	2.4	100.0	88.4	2,561	61.1	2,449
35–49	23.0	61.2	8.8	0.6	3.7	2.7	100.0	84.2	718	54.6	692
Birth order[2]											
1	21.1	71.9	4.2	0.4	1.5	1.0	100.0	93.0	1,054	57.6	1,016
2–3	19.0	70.5	5.7	0.5	1.9	2.4	100.0	89.5	1,338	61.9	1,287
4–5	18.9	66.2	8.6	0.4	2.9	2.9	100.0	85.1	798	62.8	760
6+	12.8	60.5	15.9	0.8	5.2	4.8	100.0	73.3	447	53.1	428
Antenatal care visits[3]											
None	11.9	27.5	38.4	0.0	12.2	10.0	100.0	39.4	62	39.4	62
1–3	8.2	54.4	21.1	0.9	7.5	7.9	100.0	62.6	362	44.3	362
4+	19.2	72.2	4.9	0.5	1.7	1.6	100.0	91.3	3,065	62.0	3,065
Don't know/missing	*	*	*	*	*	*	100.0	*	3	*	3
Place of delivery											
Health facility	21.8	77.8	0.1	0.2	0.1	0.1	100.0	99.6	3,137	65.9	3,004
Public sector	19.8	79.7	0.1	0.2	0.1	0.1	100.0	99.5	2,757	67.2	2,642
Private medical sector (non-NGO)	35.8	64.2	0.0	0.0	0.0	0.0	100.0	100.0	371	56.5	353
Private medical sector (NGO)	*	*	*	*	*	*	100.0	*	9	*	9
Elsewhere	0.5	11.6	51.7	2.1	17.2	16.9	100.0	12.1	500	22.1	487
Residence											
Urban	25.2	70.1	2.0	0.3	1.1	1.3	100.0	95.3	1,700	60.6	1,623
Rural	13.2	67.5	11.7	0.6	3.6	3.3	100.0	80.8	1,938	59.0	1,868

Continued...

Table 9.9—*Continued*

Background characteristic	Person providing assistance during delivery						Total	Percentage delivered by a skilled provider[1]	Number of live births and/or stillbirths	Among most recent live births	
	Doctor	Nurse/midwife	Traditional birth attendant	Community health worker/ volunteer	Relative/other	No one				Percentage with skin-to-skin contact immediately after birth	Number of live births
Region											
Western	12.8	74.0	7.4	0.5	2.2	3.1	100.0	86.8	212	63.3	208
Central	15.9	69.0	11.0	0.4	0.9	2.7	100.0	85.0	380	55.2	357
Greater Accra	36.2	57.8	3.4	1.0	1.6	0.0	100.0	94.0	427	60.5	410
Volta	25.5	68.0	4.1	0.0	0.0	2.3	100.0	93.5	135	60.6	130
Eastern	26.8	63.6	6.3	0.9	0.5	1.9	100.0	90.3	252	67.0	246
Ashanti	21.8	71.8	3.0	0.0	1.6	1.8	100.0	93.6	666	54.9	631
Western North	14.0	75.3	4.1	0.0	1.3	5.4	100.0	89.3	101	73.3	96
Ahafo	19.9	73.5	1.2	0.4	3.0	1.9	100.0	93.4	81	57.2	77
Bono	18.7	72.6	4.5	0.0	1.1	3.2	100.0	91.3	117	67.0	113
Bono East	15.1	72.4	3.6	0.0	5.8	3.0	100.0	87.6	202	63.2	191
Oti	10.1	60.1	8.7	1.2	10.9	9.0	100.0	70.3	128	53.4	123
Northern	9.5	62.1	19.3	0.7	5.5	2.9	100.0	71.6	406	45.7	395
Savannah	12.2	59.8	18.1	0.1	3.7	6.0	100.0	72.0	111	68.8	105
North East	7.8	77.3	11.8	0.0	2.1	1.0	100.0	85.2	116	78.7	112
Upper East	11.2	86.8	0.9	0.0	0.9	0.2	100.0	98.0	196	63.7	191
Upper West	16.1	75.6	3.7	3.1	0.2	1.3	100.0	91.7	109	76.7	105
Mother's education											
No education	8.7	65.5	15.0	0.4	5.4	5.1	100.0	74.2	761	54.9	728
Primary	16.0	67.9	9.0	1.1	3.4	2.6	100.0	83.9	562	57.4	542
Secondary	20.1	71.7	4.9	0.4	1.4	1.6	100.0	91.7	1,979	62.9	1,898
More than secondary	39.3	60.0	0.0	0.0	0.3	0.4	100.0	99.3	336	56.4	323
Wealth quintile											
Lowest	9.8	63.0	17.3	0.4	5.5	3.9	100.0	72.9	896	53.1	853
Second	14.1	74.1	6.5	0.8	1.6	2.9	100.0	88.2	749	61.6	723
Middle	15.0	72.7	5.5	0.8	2.8	3.1	100.0	87.7	730	64.4	705
Fourth	23.9	72.9	1.8	0.2	0.3	1.1	100.0	96.8	668	59.9	631
Highest	37.4	61.1	0.8	0.0	0.8	0.0	100.0	98.4	595	61.5	579
Total	18.8	68.7	7.2	0.5	2.4	2.4	100.0	87.6	3,638	59.8	3,491
STILLBIRTHS											
Total	39.9	53.2	5.9	0.0	0.0	1.0	100.0	93.1	57	na	na
LIVE BIRTHS AND STILLBIRTHS											
Total	19.2	68.5	7.1	0.5	2.4	2.4	100.0	87.6	3,695	na	na

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = not applicable
[1] Skilled provider includes doctor and nurse/midwife/ (community health nurse, community health officer, enrolled nurse, public health nurse, or general nurse).
[2] Birth order refers to the order of the birth among the respondent's live births.
[3] Includes only the most recent birth in the 2 years preceding the survey

Table 9.10 Duration of stay in health facility after birth

Among women with a live birth and/or stillbirth in the 2 years preceding the survey who delivered their most recent birth in a health facility, percent distribution by duration of stay in the health facility following their most recent birth, according to type of delivery, Ghana DHS 2022

Type of delivery	<6 hours	6–11 hours	12–23 hours	1–2 days	3+ days	Don't know/ missing	Total	Number of women
LIVE BIRTHS								
Vaginal birth	18.8	19.2	12.3	39.1	10.5	0.2	100.0	2,308
Caesarean section	3.3	1.6	1.0	11.6	82.5	0.0	100.0	696
STILLBIRTHS								
Vaginal birth	(18.1)	(4.4)	(5.6)	(36.8)	(35.1)	(0.0)	100.0	42
Caesarean section	*	*	*	*	*	*	100.0	12
LIVE BIRTHS AND STILLBIRTHS[1]								
Vaginal birth	18.9	19.0	12.2	39.0	10.8	0.2	100.0	2,338
Caesarean section	3.3	1.5	1.0	11.5	82.7	0.0	100.0	705

Note: Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.11 Timing of first postnatal check for the mother

Among women age 15–49 with a live birth and/or stillbirth in the 2 years preceding the survey, percent distribution of the mother's first postnatal check for the most recent live birth or stillbirth by time after delivery, and percentage of women with a live birth or stillbirth in the 2 years preceding the survey who received a postnatal check during the first 2 days after giving birth, according to background characteristics, Ghana DHS 2022

Background characteristic	Time after delivery of mother's first postnatal check[1]						No postnatal check[2]	Total	Percentage of women with a postnatal check during the first 2 days after birth[1]	Number of women
	Less than 4 hours	4–23 hours	1–2 days	3–6 days	7–41 days	Don't know/ missing				
	LIVE BIRTHS									
Age at birth										
<20	73.2	8.2	4.0	1.6	1.1	1.8	10.1	100.0	85.4	351
20–34	73.1	10.0	4.8	1.2	1.5	1.5	7.8	100.0	88.0	2,449
35–49	72.2	9.4	4.2	1.4	2.0	0.9	10.0	100.0	85.8	692
Birth order[3]										
1	74.7	9.7	4.2	0.9	1.2	2.1	7.2	100.0	88.6	1,016
2–3	74.3	11.2	4.5	1.4	0.8	0.7	7.1	100.0	90.1	1,287
4–5	71.5	8.5	4.9	1.3	2.8	2.0	8.9	100.0	85.0	760
6+	67.0	7.4	5.5	1.7	2.3	1.1	15.0	100.0	79.8	428
Place of delivery										
Health facility	79.4	10.6	3.7	1.0	0.7	1.6	2.9	100.0	93.8	3,004
Elsewhere	33.1	4.0	10.2	3.1	6.4	0.6	42.7	100.0	47.2	487
Residence										
Urban	77.4	11.1	3.8	1.1	0.4	1.3	4.9	100.0	92.4	1,623
Rural	69.0	8.5	5.3	1.4	2.5	1.6	11.6	100.0	82.9	1,868
Region										
Western	73.0	10.7	3.6	0.7	1.9	5.4	4.6	100.0	87.3	208
Central	66.5	12.9	6.4	1.4	2.7	1.5	8.6	100.0	85.8	357
Greater Accra	81.0	10.5	3.9	0.9	0.0	1.1	2.6	100.0	95.4	410
Volta	70.7	12.3	6.4	1.1	2.8	0.0	6.6	100.0	89.5	130
Eastern	81.3	9.4	4.2	0.0	2.0	0.0	3.1	100.0	95.0	246
Ashanti	76.2	8.5	3.2	1.0	1.2	2.3	7.7	100.0	87.9	631
Western North	70.8	11.5	5.1	0.0	1.2	1.4	10.0	100.0	87.4	96
Ahafo	64.9	7.2	16.0	5.1	2.5	0.5	3.8	100.0	88.2	77
Bono	83.2	7.8	3.1	1.3	0.0	0.0	4.6	100.0	94.1	113
Bono East	69.9	8.1	7.5	0.8	0.8	0.6	12.3	100.0	85.6	191
Oti	63.5	11.4	1.9	2.5	4.5	1.6	14.6	100.0	76.8	123
Northern	56.0	10.6	6.1	3.7	2.7	0.2	20.7	100.0	72.7	395
Savannah	71.6	3.7	6.2	0.7	0.9	4.9	12.0	100.0	81.5	105
North East	69.2	10.1	3.9	1.0	0.5	1.8	13.6	100.0	83.2	112
Upper East	89.5	6.4	0.9	0.0	0.4	0.9	1.9	100.0	96.7	191
Upper West	78.7	10.1	2.2	0.3	0.8	0.5	7.3	100.0	91.0	105
Education										
No education	66.3	7.2	4.8	1.7	2.2	1.6	16.2	100.0	78.3	728
Primary	72.5	9.0	4.9	1.7	2.1	1.0	8.7	100.0	86.4	542
Secondary	74.5	10.5	4.6	1.1	1.2	1.7	6.3	100.0	89.7	1,898
More than secondary	79.3	11.9	3.7	0.9	0.8	0.1	3.3	100.0	94.9	323

Continued...

Table 9.11—*Continued*

Background characteristic	Time after delivery of mother's first postnatal check[1]						No postnatal check[2]	Total	Percentage of women with a postnatal check during the first 2 days after birth[1]	Number of women
	Less than 4 hours	4–23 hours	1–2 days	3–6 days	7–41 days	Don't know/ missing				
Wealth quintile										
Lowest	64.0	8.2	5.8	1.5	2.6	1.2	16.7	100.0	78.0	853
Second	72.1	9.4	5.2	1.3	1.5	1.5	8.9	100.0	86.7	723
Middle	74.5	9.6	4.9	1.6	0.9	1.3	7.3	100.0	88.9	705
Fourth	78.1	10.1	2.6	0.9	1.9	2.5	3.9	100.0	90.8	631
Highest	79.6	12.0	4.1	0.9	0.5	0.7	2.2	100.0	95.7	579
Total	72.9	9.7	4.6	1.3	1.5	1.4	8.5	100.0	87.3	3,491
STILLBIRTHS										
Total	68.7	6.1	3.8	0.0	2.2	2.1	17.1	100.0	78.6	57
LIVE BIRTHS AND STILLBIRTHS[4]										
Total	72.8	9.7	4.6	1.3	1.6	1.5	8.7	100.0	87.1	3,534

Note: Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[1] Includes women who received a check from a doctor, nurse/midwife, auxiliary midwife, community health worker/fieldworker, or traditional birth attendant
[2] Includes women who received a check after 41 days
[3] Birth order refers to the order of the birth among the respondent's live births.
[4] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.12 Type of provider of first postnatal check for the mother

Among women age 15–49 with a live birth and/or stillbirth in the 2 years preceding the survey, percent distribution by type of provider of the mother's first postnatal health check during the 2 days after the last birth, according to background characteristics, Ghana DHS 2022

Background characteristic	Type of health provider of mother's first postnatal check			No postnatal check during the first 2 days after birth	Total	Number of women
	Doctor/nurse/ midwife	Traditional birth attendant	Community health worker/volunteer			
			LIVE BIRTHS			
Age at birth						
<20	82.5	2.6	0.2	14.6	100.0	351
20–34	84.1	3.5	0.3	12.0	100.0	2,449
35–49	81.3	4.2	0.3	14.2	100.0	692
Birth order[1]						
1	86.9	1.7	0.1	11.4	100.0	1,016
2–3	86.4	3.2	0.5	9.9	100.0	1,287
4–5	80.8	4.0	0.2	15.0	100.0	760
6+	70.8	8.5	0.5	20.2	100.0	428
Place of delivery						
Health facility	93.6	0.0	0.1	6.2	100.0	3,004
Elsewhere	20.5	25.4	1.2	52.8	100.0	487
Residence						
Urban	90.8	1.3	0.3	7.6	100.0	1,623
Rural	77.0	5.6	0.3	17.1	100.0	1,868
Region						
Western	80.1	7.2	0.0	12.7	100.0	208
Central	81.4	3.5	0.9	14.2	100.0	357
Greater Accra	92.3	2.3	0.8	4.6	100.0	410
Volta	87.7	1.8	0.0	10.5	100.0	130
Eastern	89.6	5.3	0.0	5.0	100.0	246
Ashanti	87.0	0.8	0.0	12.1	100.0	631
Western North	84.5	2.9	0.0	12.6	100.0	96
Ahafo	87.8	0.4	0.0	11.8	100.0	77
Bono	93.0	1.1	0.0	5.9	100.0	113
Bono East	83.5	2.1	0.0	14.4	100.0	191
Oti	68.1	8.3	0.4	23.2	100.0	123
Northern	66.0	6.4	0.3	27.3	100.0	395
Savannah	66.2	15.1	0.1	18.5	100.0	105
North East	79.8	3.5	0.0	16.8	100.0	112
Upper East	96.1	0.7	0.0	3.3	100.0	191
Upper West	87.0	1.9	2.1	9.0	100.0	105
Education						
No education	71.2	6.9	0.2	21.7	100.0	728
Primary	79.9	5.7	0.8	13.6	100.0	542
Secondary	87.2	2.3	0.1	10.3	100.0	1,898
More than secondary	94.4	0.0	0.5	5.1	100.0	323
Wealth quintile						
Lowest	69.8	8.0	0.2	22.0	100.0	853
Second	82.6	3.8	0.3	13.3	100.0	723
Middle	84.8	3.5	0.6	11.1	100.0	705
Fourth	90.4	0.4	0.0	9.2	100.0	631
Highest	95.2	0.2	0.3	4.3	100.0	579
Total	83.4	3.6	0.3	12.7	100.0	3,491
			STILLBIRTHS			
Total	77.6	0.9	0.0	21.4	100.0	57
			LIVE BIRTHS AND STILLBIRTHS[2]			
Total	83.3	3.5	0.3	12.9	100.0	3,534

Note: Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months.

[1] Birth order refers to the order of the birth among the respondent's live births.

[2] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.13 Content of postnatal care for the mother

Among women age 15–49 with a live birth and/or stillbirth in the 2 years preceding the survey, percentage for whom selected checks were performed during the first 2 days after the most recent birth, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage for whom during the first 2 days after the most recent birth, any health care provider:			Percentage with all three checks performed in the first 2 days after birth	Number of women
	Measured blood pressure	Discussed vaginal bleeding	Discussed family planning		
	LIVE BIRTHS				
Age at birth					
<20	72.7	62.8	49.0	42.6	351
20–34	74.3	64.8	48.8	43.9	2,449
35–49	74.0	66.5	52.5	47.6	692
Birth order[1]					
1	77.2	64.4	47.4	41.7	1,016
2–3	75.7	67.0	51.4	46.6	1,287
4–5	72.2	65.2	51.7	47.1	760
6+	65.2	59.5	45.4	40.3	428
Place of delivery					
Health facility	80.6	70.1	54.7	49.2	3,004
Public sector	80.2	69.8	55.1	49.5	2,642
Private medical sector (non-NGO)	83.3	71.4	52.0	46.0	353
Private medical sector (NGO)	*	*	*	*	9
Elsewhere	33.7	33.2	17.7	15.9	487
Residence					
Urban	80.1	69.7	54.3	49.1	1,623
Rural	68.9	60.8	45.5	40.5	1,868
Region					
Western	80.3	80.9	61.2	59.9	208
Central	72.9	59.4	37.3	29.4	357
Greater Accra	81.8	74.1	56.2	52.0	410
Volta	89.8	82.1	61.9	59.7	130
Eastern	83.9	75.7	57.6	51.0	246
Ashanti	75.5	55.3	38.1	30.9	631
Western North	63.3	61.1	48.4	43.7	96
Ahafo	83.1	81.8	62.6	59.7	77
Bono	77.7	77.1	59.8	57.1	113
Bono East	78.4	65.4	59.8	52.5	191
Oti	70.6	69.4	41.0	39.6	123
Northern	56.7	51.8	45.2	40.3	395
Savannah	64.9	61.2	44.5	39.9	105
North East	65.3	51.5	45.1	41.2	112
Upper East	75.4	73.7	65.0	62.7	191
Upper West	61.2	51.6	48.0	42.8	105
Mother's education					
No education	60.6	55.3	42.5	38.9	728
Primary	71.0	61.4	46.5	39.7	542
Secondary	77.9	67.4	51.7	46.3	1,898
More than secondary	87.4	78.0	58.4	54.6	323
Wealth quintile					
Lowest	61.6	54.4	44.3	40.1	853
Second	71.2	62.7	47.4	41.8	723
Middle	76.3	68.5	51.2	46.0	705
Fourth	80.9	68.2	51.7	45.1	631
Highest	85.8	75.3	55.8	52.0	579
Total	74.1	64.9	49.6	44.5	3,491
	STILLBIRTHS				
Total	66.0	59.7	41.6	37.4	57
	LIVE BIRTHS AND STILLBIRTHS[2]				
Total	73.9	64.8	49.4	44.3	3,534

Note: Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Birth order refers to the order of the birth among the respondent's live births.

[2] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 9.14 Timing of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by time after birth of first postnatal check, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, Ghana DHS 2022

Background characteristic	Time after delivery of newborn's first postnatal check[1]						No postnatal check[2]	Total	Percentage of births with a postnatal check during the first 2 days after birth[1]	Number of births
	Less than 1 hour	1–3 hours	4–23 hours	1–2 days	3–6 days	Don't know				
Mother's age at birth										
<20	29.5	43.2	8.4	5.2	0.8	1.3	11.6	100.0	86.2	351
20–34	29.3	44.4	8.2	5.1	0.9	1.8	10.3	100.0	87.0	2,449
35–49	32.0	41.7	8.0	5.2	2.1	1.0	9.9	100.0	86.9	692
Birth order[3]										
1	27.7	46.5	8.5	4.5	0.6	2.4	9.9	100.0	87.1	1,016
2–3	30.8	44.3	8.0	5.7	1.0	1.5	8.7	100.0	88.8	1,287
4–5	31.4	41.2	9.1	4.2	1.5	0.9	11.6	100.0	85.9	760
6+	29.4	39.7	6.6	6.5	2.4	1.3	14.1	100.0	82.2	428
Place of delivery										
Health facility	32.4	47.3	8.9	3.9	0.9	1.8	4.8	100.0	92.5	3,004
Elsewhere	14.4	21.3	4.1	12.5	2.8	0.1	44.8	100.0	52.3	487
Residence										
Urban	31.5	46.0	8.6	4.3	1.1	1.8	6.6	100.0	90.5	1,623
Rural	28.4	41.7	7.8	5.8	1.2	1.5	13.6	100.0	83.7	1,868
Region										
Western	25.0	50.7	10.5	2.9	0.0	5.2	5.7	100.0	89.1	208
Central	38.5	38.0	6.9	5.9	0.5	1.5	8.8	100.0	89.2	357
Greater Accra	21.3	58.2	6.9	6.9	1.0	1.4	4.4	100.0	93.2	410
Volta	27.3	45.4	9.7	6.1	1.1	0.6	9.8	100.0	88.5	130
Eastern	46.0	38.5	6.1	3.7	0.0	0.5	5.2	100.0	94.3	246
Ashanti	44.2	30.9	7.2	3.5	1.1	2.4	10.7	100.0	85.8	631
Western North	33.5	36.9	11.0	3.5	1.6	1.8	11.7	100.0	84.9	96
Ahafo	6.3	52.0	9.3	16.3	6.7	1.8	7.7	100.0	83.8	77
Bono	40.2	46.8	5.6	3.1	2.1	0.7	1.5	100.0	95.7	113
Bono East	38.0	32.1	9.5	7.4	0.3	0.8	12.0	100.0	86.9	191
Oti	33.2	30.1	9.7	2.7	2.4	1.1	20.8	100.0	75.6	123
Northern	6.0	47.2	12.2	7.6	2.7	0.0	24.3	100.0	73.0	395
Savannah	29.1	40.6	4.2	7.6	2.1	4.4	12.0	100.0	81.5	105
North East	29.2	41.0	10.6	3.3	1.2	1.4	13.3	100.0	84.1	112
Upper East	8.8	79.4	6.4	0.9	0.0	1.8	2.7	100.0	95.5	191
Upper West	36.2	42.0	8.3	3.1	0.0	0.7	9.7	100.0	89.6	105
Mother's education										
No education	21.0	44.3	7.7	6.1	1.7	1.2	18.0	100.0	79.0	728
Primary	29.3	43.7	8.1	5.2	1.7	1.6	10.4	100.0	86.3	542
Secondary	33.2	42.5	8.4	4.9	0.7	1.9	8.4	100.0	88.9	1,898
More than secondary	31.3	49.5	8.8	4.0	1.5	0.6	4.3	100.0	93.6	323
Wealth quintile										
Lowest	20.8	42.7	8.6	6.8	1.7	1.2	18.3	100.0	78.9	853
Second	28.8	43.8	8.9	5.2	1.4	1.5	10.4	100.0	86.7	723
Middle	35.1	42.3	8.2	3.7	1.0	1.0	8.7	100.0	89.2	705
Fourth	36.8	41.4	6.9	4.9	0.3	2.9	6.9	100.0	90.0	631
Highest	30.7	49.4	8.2	4.5	1.3	1.6	4.3	100.0	92.8	579
Total	29.9	43.7	8.2	5.1	1.2	1.6	10.3	100.0	86.9	3,491

[1] Includes newborns who received a check from a doctor, nurse/midwife/, traditional birth attendant, or community health worker/volunteer
[2] Includes newborns who received a check after the first week of life
[3] Birth order refers to the order of the birth among the respondent's live births.

Table 9.15 Type of provider of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the birth, according to background characteristics, Ghana DHS 2022

Background characteristic	Type of health provider of newborn's first postnatal check			No postnatal check during the first 2 days after birth	Total	Number of births
	Doctor/nurse/ midwife	Traditional birth attendant	Community health worker/volunteer			
Mother's age at birth						
<20	82.6	3.4	0.2	13.8	100.0	351
20–34	82.8	4.0	0.2	13.0	100.0	2,449
35–49	81.3	5.4	0.3	13.1	100.0	692
Birth order[1]						
1	85.2	1.9	0.1	12.9	100.0	1,016
2–3	84.8	3.7	0.4	11.2	100.0	1,287
4–5	81.3	4.6	0.1	14.1	100.0	760
6+	71.4	10.3	0.5	17.8	100.0	428
Place of delivery						
Health facility	92.4	0.0	0.1	7.5	100.0	3,004
Elsewhere	21.6	29.7	1.0	47.7	100.0	487
Residence						
Urban	88.9	1.4	0.2	9.5	100.0	1,623
Rural	76.9	6.6	0.2	16.3	100.0	1,868
Region						
Western	80.1	9.0	0.0	10.9	100.0	208
Central	83.5	5.3	0.4	10.8	100.0	357
Greater Accra	89.8	2.6	0.8	6.8	100.0	410
Volta	85.6	2.9	0.0	11.5	100.0	130
Eastern	86.5	7.8	0.0	5.7	100.0	246
Ashanti	84.7	1.1	0.0	14.2	100.0	631
Western North	83.8	1.2	0.0	15.1	100.0	96
Ahafo	83.0	0.9	0.0	16.2	100.0	77
Bono	94.1	1.6	0.0	4.3	100.0	113
Bono East	85.1	1.8	0.0	13.1	100.0	191
Oti	68.6	6.7	0.4	24.4	100.0	123
Northern	65.8	7.2	0.0	27.0	100.0	395
Savannah	65.4	16.0	0.1	18.5	100.0	105
North East	80.2	3.9	0.0	15.9	100.0	112
Upper East	94.9	0.6	0.0	4.5	100.0	191
Upper West	85.8	1.6	2.1	10.4	100.0	105
Mother's education						
No education	71.5	7.4	0.1	21.0	100.0	728
Primary	78.1	7.4	0.8	13.7	100.0	542
Secondary	86.1	2.7	0.1	11.1	100.0	1,898
More than secondary	93.6	0.0	0.0	6.4	100.0	323
Wealth quintile						
Lowest	69.4	9.2	0.2	21.1	100.0	853
Second	81.9	4.4	0.3	13.3	100.0	723
Middle	84.5	4.3	0.5	10.8	100.0	705
Fourth	89.3	0.7	0.0	10.0	100.0	631
Highest	92.6	0.2	0.0	7.2	100.0	579
Total	82.5	4.2	0.2	13.1	100.0	3,491

[1] Birth order refers to the order of the birth among the respondent's live births.

Table 9.16 Content of postnatal care for newborns

Among most recent live births in the 2 years preceding the survey, percentage for whom selected functions were performed during the first 2 days after the birth and percentage with five signal functions performed during the first 2 days after the birth, according to background characteristics, Ghana DHS 2022

	Percentage of most recent live births for whom a health care provider performed the selected functions during the first 2 days after the birth:								
Background characteristic	Cord examined	Temperature measured	Mother told how to recognise if the baby needs immediate medical attention	Mother counselled on breastfeeding	Mother observed breastfeeding	Mother both counselled on breastfeeding and observed breastfeeding	Weighed[1]	Percentage with five[2] signal functions performed during the first 2 days after birth	Number of births
Mother's age at birth									
<20	77.5	74.7	71.6	74.8	68.7	66.0	80.7	61.0	351
20–34	77.8	76.3	70.2	76.5	72.8	71.9	82.9	59.3	2,449
35–49	77.5	75.0	71.2	74.1	69.8	68.9	80.3	61.4	692
Birth order[3]									
1	79.0	78.4	72.0	78.5	75.1	73.2	86.8	63.4	1,016
2–3	79.3	78.1	72.4	78.8	75.2	74.5	85.1	61.8	1,287
4–5	75.3	73.6	68.9	72.6	67.5	66.8	78.0	56.2	760
6+	74.2	67.2	64.3	66.5	61.1	60.3	70.1	52.7	428
Place of delivery									
Health facility	81.1	81.7	75.6	81.1	76.9	76.1	92.8	67.6	3,004
Elsewhere	57.1	39.7	39.1	43.5	40.0	37.3	17.0	12.6	487
Residence									
Urban	80.5	80.7	74.6	81.0	77.5	76.8	90.4	66.1	1,623
Rural	75.3	71.6	67.0	71.4	66.8	65.4	75.1	54.6	1,868
Region									
Western	88.5	81.5	82.6	82.5	79.2	78.5	81.3	71.6	208
Central	80.4	76.2	60.9	75.4	74.1	70.7	79.0	50.0	357
Greater Accra	82.2	83.2	73.0	82.8	78.4	78.4	90.5	66.0	410
Volta	88.9	87.6	85.9	89.9	84.7	84.1	86.7	72.4	130
Eastern	88.8	81.7	78.5	85.8	83.2	82.6	89.3	71.4	246
Ashanti	75.8	76.3	70.6	76.9	68.8	67.5	89.3	62.9	631
Western North	69.1	67.3	65.5	70.5	68.3	67.8	83.0	56.0	96
Ahafo	87.3	87.4	83.7	86.3	86.8	84.7	90.3	74.8	77
Bono	85.3	83.0	75.7	79.2	77.8	76.3	89.5	67.3	113
Bono East	79.8	79.5	76.9	76.9	70.4	69.8	82.8	67.7	191
Oti	76.3	72.4	74.6	76.8	74.2	74.2	63.3	54.7	123
Northern	59.8	58.9	57.0	56.4	52.8	51.8	64.7	42.0	395
Savannah	80.8	74.4	71.7	72.8	69.4	67.4	57.7	43.4	105
North East	73.9	69.3	59.8	65.5	61.9	59.6	77.9	49.1	112
Upper East	76.9	77.5	75.7	79.1	76.9	76.9	88.9	65.1	191
Upper West	61.8	62.8	55.6	61.9	58.5	58.5	86.4	48.8	105
Mother's education									
No education	68.0	64.6	60.0	61.3	55.3	54.2	66.6	46.1	728
Primary	76.5	72.5	67.4	74.8	68.9	68.3	75.3	53.7	542
Secondary	80.9	79.4	73.6	79.8	76.5	75.1	87.3	64.4	1,898
More than secondary	83.0	86.0	81.2	87.0	85.7	85.7	98.9	74.9	323
Wealth quintile									
Lowest	69.6	64.8	59.3	63.4	59.9	57.9	64.8	43.6	853
Second	76.1	73.0	69.8	73.4	68.1	67.2	80.6	59.5	723
Middle	81.3	79.1	72.9	78.9	75.8	74.1	83.1	62.1	705
Fourth	83.1	83.1	78.2	83.2	78.0	77.7	92.6	68.8	631
Highest	81.5	83.9	76.6	85.4	82.1	82.1	97.4	72.1	579
Total	77.7	75.9	70.5	75.8	71.8	70.7	82.2	59.9	3,491

[1] Captures newborns who were weighed at birth. May exclude some newborns who were weighed during the 2 days after birth.
[2] The functions are (1) examining the umbilical cord, (2) measuring temperature, (3) observing and/or counselling on breastfeeding, (4) telling the mother about danger signs/how to recognise if the baby needs immediate attention, and (5) weighing. Corresponds to the definition of the five signal functions to assess the content of postnatal care for newborns described in Moran et al. 2013.
[3] Birth order refers to the order of the birth among the respondent's live births.

Table 9.17 Postnatal checks for mothers and newborns

Among most recent live births in the 2 years preceding the survey, percentage for whom mothers age 15–49 received a postnatal check during the first 2 days after birth, percentage for whom newborns received a postnatal check during the first 2 days after birth, percentage for whom both mothers and newborns received a postnatal check, and percentage for whom neither mothers nor newborns received a postnatal check, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who received a postnatal check[1] during the first 2 days after birth				Number of births
	Mother	Newborn	Both mother and newborn	Neither mother nor newborn received a postnatal check[2]	
Mother's age at birth					
<20	85.4	86.1	81.4	9.9	351
20–34	88.0	87.0	83.9	8.9	2,449
35–49	85.8	86.9	82.6	9.9	692
Birth order[3]					
1	88.6	87.1	84.0	8.4	1,016
2–3	90.1	88.8	85.5	6.6	1,287
4–5	85.0	85.9	81.9	11.0	760
6+	79.8	82.2	77.9	15.9	428
Place of delivery					
Health facility	93.8	92.5	89.8	3.5	3,004
Public sector	93.7	92.5	89.8	3.5	2,642
Private medical sector (non-NGO)	93.8	91.8	89.0	3.4	353
Private medical sector (NGO)	*	*	*	*	9
Elsewhere	47.2	52.3	44.1	44.6	487
Residence					
Urban	92.4	90.5	87.5	4.7	1,623
Rural	82.9	83.7	79.8	13.2	1,868
Region					
Western	87.3	89.1	84.4	8.0	208
Central	85.8	89.2	84.6	9.6	357
Greater Accra	95.4	93.2	91.5	2.9	410
Volta	89.5	88.5	84.4	6.4	130
Eastern	95.0	94.3	91.8	2.6	246
Ashanti	87.9	85.8	81.8	8.1	631
Western North	87.4	84.9	82.5	10.1	96
Ahafo	88.2	83.8	82.4	10.4	77
Bono	94.1	95.7	92.2	2.4	113
Bono East	85.6	86.9	83.6	11.1	191
Oti	76.8	75.6	73.3	20.8	123
Northern	72.7	73.0	68.0	22.3	395
Savannah	81.5	81.5	77.6	14.7	105
North East	83.2	84.1	80.6	13.3	112
Upper East	96.7	95.2	92.6	0.7	191
Upper West	91.0	89.6	86.9	6.4	105
Mother's education					
No education	78.3	79.0	75.8	18.5	728
Primary	86.4	86.3	82.3	9.5	542
Secondary	89.7	88.9	85.4	6.8	1,898
More than secondary	94.9	93.6	90.8	2.3	323
Wealth quintile					
Lowest	78.0	78.8	74.7	17.9	853
Second	86.7	86.7	82.5	9.2	723
Middle	88.9	89.2	84.8	6.6	705
Fourth	90.8	90.0	87.3	6.5	631
Highest	95.7	92.8	91.3	2.7	579
Total	87.3	86.9	83.4	9.2	3,491

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
NGO = nongovernmental organisation
[1] Includes checks from a doctor, nurse/midwife, auxiliary midwife, traditional birth attendant, or community health worker/volunteer
[2] Includes checks after the first 2 days or by other persons
[3] Birth order refers to the order of the birth among the respondent's live births.

Table 9.18 Men's involvement in maternal health care

Among men age 15–49 with a youngest child age 0–2, percentage who report that the child's mother had any antenatal check-ups during the pregnancy with the child; among men for whom the mother of the youngest child age 0–2 had any antenatal check-ups during the pregnancy with the child, percentage who were present for any antenatal check-up; among men with a child age 0–2, percentage who report that their child was born in a health facility; and among men whose youngest child age 0–2 was born in a health facility, percentage who went to the health facility with the mother, according to background characteristics, Ghana DHS 2022

	Among men age 15–49 with a youngest child age 0–2		Among men age 15–49 with a youngest child age 0–2 for whom the mother had any antenatal check-ups		Among men age 15–49 with a youngest child age 0–2		Among men age 15–49 whose youngest child age 0–2 was born in a health facility	
Background characteristic	Percentage who report the child's mother had any antenatal check-ups during pregnancy with the child	Number of men	Percentage ever present during any antenatal check-up	Number of men	Percentage who report their child was born in a health facility	Number of men	Percentage who went with the child's mother to health facility	Number of men
Father's age at interview								
<20	*	13	*	11	*	13	*	12
20–34	94.0	697	52.5	655	87.6	697	61.8	610
35–49	96.3	822	51.5	792	84.2	822	70.9	693
Number of children ever fathered								
1	94.4	330	54.3	311	92.2	330	59.7	304
2–3	94.7	588	52.4	557	88.3	588	63.8	519
4–5	97.0	358	48.3	347	84.4	358	74.5	302
6+	94.1	257	52.5	242	73.9	257	69.8	190
Residence								
Urban	95.1	759	53.9	722	95.2	759	68.0	723
Rural	95.1	774	49.8	736	76.5	774	63.9	592
Region								
Western	98.4	97	40.5	96	87.8	97	53.2	85
Central	94.2	129	32.5	121	87.5	129	58.6	113
Greater Accra	95.4	236	61.4	225	94.8	236	64.4	224
Volta	97.8	50	55.2	49	80.4	50	(75.1)	40
Eastern	92.1	109	51.7	100	88.6	109	52.2	96
Ashanti	100.0	196	29.7	196	87.7	196	63.3	172
Western North	90.9	42	26.3	39	85.8	42	58.2	36
Ahafo	72.9	35	27.9	25	91.7	35	51.0	32
Bono	96.2	48	46.8	46	90.7	48	63.0	43
Bono East	89.3	93	63.5	83	85.3	93	70.9	79
Oti	98.5	53	56.2	52	73.3	53	65.0	39
Northern	96.1	199	75.6	192	72.0	199	82.7	143
Savannah	96.2	52	54.1	50	73.5	52	59.6	38
North East	97.2	55	69.8	54	75.7	55	85.5	42
Upper East	93.5	80	50.1	75	96.3	80	81.0	77
Upper West	94.1	58	62.7	54	93.5	58	72.3	54
Father's education								
No education	94.1	286	58.7	269	69.7	286	69.6	199
Primary	94.1	210	46.0	198	82.3	210	69.2	173
Secondary	95.3	804	47.3	766	88.9	804	62.7	715
More than secondary	96.3	233	64.2	224	97.9	233	71.6	228
Wealth quintile								
Lowest	93.8	343	59.2	321	68.0	343	72.0	233
Second	96.0	289	51.0	277	80.4	289	63.2	232
Middle	92.5	261	45.9	241	87.0	261	68.3	227
Fourth	94.4	318	43.3	301	95.4	318	59.0	304
Highest	98.5	322	57.7	317	99.1	322	69.3	319
Total 15–49	95.1	1,533	51.8	1,458	85.8	1,533	66.2	1,315
50–59	96.8	101	50.3	98	86.8	101	66.1	88
Total 15–59	95.2	1,634	51.7	1,556	85.9	1,634	66.2	1,403

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 9.19 Examinations for breast and cervical cancer

Percentage of women age 15–49 ever examined by a doctor or health care worker for breast cancer and percentage ever tested by a doctor or health care worker for cervical cancer, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage examined for breast cancer	Percentage tested for cervical cancer	Number of women
Age			
15–29	13.7	2.8	7,716
30–49	23.3	7.3	7,298
30–34	23.6	6.9	2,252
35–39	24.5	7.1	2,059
40–44	21.1	7.1	1,675
45–49	23.9	8.5	1,312
30–44	23.2	7.0	5,986
40–49	22.3	7.7	2,987
Number of living children			
0	14.0	2.9	4,925
1–2	22.2	6.5	4,598
3–4	21.9	6.3	3,391
5+	14.6	4.2	2,100
Marital status			
Never married	13.9	2.2	5,268
Married or living together	20.9	6.4	8,205
Divorced/separated/widowed	20.1	6.7	1,542
Employment (last 12 months)			
Not employed	11.4	2.2	3,273
Employed for cash	22.8	6.4	9,055
Employed not for cash	12.1	3.5	2,686
Residence			
Urban	23.0	6.5	8,557
Rural	12.3	2.9	6,457
Region			
Western	22.5	2.9	955
Central	17.8	3.9	1,703
Greater Accra	24.4	5.8	2,327
Volta	18.4	6.4	713
Eastern	22.2	6.3	1,220
Ashanti	18.8	5.7	2,928
Western North	13.9	3.7	411
Ahafo	17.4	5.0	317
Bono	19.1	4.3	567
Bono East	13.7	3.8	676
Oti	8.6	3.1	403
Northern	15.4	6.7	1,149
Savannah	6.9	1.6	319
North East	17.7	4.0	290
Upper East	13.3	3.9	640
Upper West	10.0	3.7	398
Education			
No education	9.1	3.1	2,411
Primary	11.4	3.3	2,071
Secondary	17.6	3.8	8,999
More than secondary	47.3	16.6	1,533
Wealth quintile			
Lowest	7.7	1.5	2,447
Second	11.2	2.5	2,712
Middle	15.4	4.3	3,121
Fourth	19.4	5.3	3,379
Highest	33.8	9.6	3,355
Total	18.4	5.0	15,014

Table 9.20 Problems in accessing health care

Percentage of women age 15–49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Ghana DHS 2022

Background characteristic	Problems in accessing health care					
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	Number of women
Age						
15–19	12.2	42.6	22.1	22.1	54.5	2,682
20–34	9.5	42.7	21.5	15.2	52.3	7,286
35–49	9.2	48.5	23.7	14.6	55.1	5,046
Number of living children						
0	10.6	38.9	19.2	19.1	50.1	4,925
1–2	8.8	41.8	20.8	13.7	50.9	4,598
3–4	9.2	48.5	22.9	14.5	55.6	3,391
5+	12.0	58.1	32.2	17.7	64.6	2,100
Marital status						
Never married	10.0	42.2	19.5	18.5	52.8	5,268
Married or living together	10.2	43.0	23.8	14.7	51.7	8,205
Divorced/separated/widowed	7.8	61.9	23.9	16.6	66.6	1,542
Employment (last 12 months)						
Not employed	10.6	41.9	21.2	18.8	52.0	3,273
Employed for cash	8.8	44.9	20.9	14.1	53.1	9,055
Employed not for cash	12.8	47.3	28.6	20.2	57.4	2,686
Residence						
Urban	8.0	39.1	14.9	13.2	46.7	8,557
Rural	12.4	52.0	32.2	20.2	62.8	6,457
Region						
Western	3.1	46.4	17.3	10.1	52.9	955
Central	7.5	47.7	17.4	21.3	56.9	1,703
Greater Accra	3.2	35.1	11.7	10.9	42.7	2,327
Volta	5.4	39.9	15.1	13.6	46.6	713
Eastern	14.0	41.1	13.4	13.3	51.8	1,220
Ashanti	11.0	44.2	23.1	13.9	52.7	2,928
Western North	8.5	39.7	28.8	17.3	53.6	411
Ahafo	12.8	46.0	36.8	22.6	64.1	317
Bono	4.7	30.8	23.0	11.8	41.5	567
Bono East	4.5	52.2	26.5	9.9	59.0	676
Oti	15.9	52.5	41.4	26.4	64.2	403
Northern	31.8	56.2	40.2	34.7	65.4	1,149
Savannah	9.0	60.1	37.4	22.3	72.4	319
North East	7.2	60.7	35.5	20.8	65.7	290
Upper East	11.4	42.3	24.6	14.4	50.5	640
Upper West	9.1	55.3	30.3	12.6	66.6	398
Education						
No education	17.0	60.4	36.8	22.9	68.5	2,411
Primary	10.9	55.7	27.9	18.2	62.9	2,071
Secondary	8.3	41.9	19.1	15.1	51.1	8,999
More than secondary	6.5	21.3	11.2	9.8	32.2	1,533
Wealth quintile						
Lowest	16.7	62.6	48.9	25.7	75.3	2,447
Second	13.2	57.1	29.7	19.6	65.5	2,712
Middle	9.1	47.3	18.0	14.7	54.5	3,121
Fourth	7.3	39.2	13.0	14.8	47.1	3,379
Highest	5.7	24.6	10.5	9.4	34.0	3,355
Total	9.9	44.7	22.3	16.2	53.6	15,014

Table 9.21 Distance from health care

Percent distributions of women age 15–49 by travel time to nearest health facility and by means of transport to nearest health facility, according to background characteristics, Ghana DHS 2022

Background characteristic	Travel time to nearest health facility					Means of transport to nearest health facility				
	<30 minutes	30–59 minutes	60–119 minutes	≥2 hours	Total	Motorised[1]	Not motorised[2]	Other	Total	Number of women
Age										
15–19	54.7	32.3	10.0	3.0	100.0	35.7	64.3	0.0	100.0	2,682
20–34	60.0	28.6	8.2	3.1	100.0	39.6	60.3	0.1	100.0	7,286
35–49	57.2	29.3	9.9	3.7	100.0	40.4	59.6	0.0	100.0	5,046
Accessing health care										
Distance to health facility is a problem	29.3	37.5	23.3	10.0	100.0	48.1	51.9	0.0	100.0	3,354
Distance to health facility is not a problem	66.4	27.2	5.0	1.4	100.0	36.6	63.3	0.1	100.0	11,660
Means of transport to nearest health facility										
Motorised[1]	50.4	33.9	11.2	4.5	100.0	na	na	na	na	5,882
Not motorised[2]	63.0	26.7	7.8	2.5	100.0	na	na	na	na	9,126
Other	*	*	*	*	100.0	na	na	na	na	6
Residence										
Urban	63.4	29.5	5.6	1.4	100.0	43.9	56.1	0.1	100.0	8,557
Rural	51.0	29.5	13.7	5.8	100.0	33.0	67.0	0.0	100.0	6,457
Region										
Western	64.7	29.5	4.7	1.1	100.0	44.8	55.2	0.0	100.0	955
Central	67.4	24.5	6.6	1.6	100.0	33.2	66.8	0.0	100.0	1,703
Greater Accra	62.7	28.7	5.5	3.1	100.0	54.4	45.5	0.1	100.0	2,327
Volta	66.7	25.6	5.7	2.0	100.0	46.2	53.8	0.0	100.0	713
Eastern	70.9	24.4	3.9	0.8	100.0	30.2	69.8	0.0	100.0	1,220
Ashanti	53.9	33.7	10.8	1.6	100.0	42.2	57.8	0.0	100.0	2,928
Western North	57.9	26.5	11.4	4.1	100.0	34.1	65.7	0.1	100.0	411
Ahafo	42.1	34.1	18.2	5.7	100.0	52.6	47.4	0.0	100.0	317
Bono	61.5	28.6	7.7	2.3	100.0	34.4	65.6	0.0	100.0	567
Bono East	50.4	28.5	11.9	9.1	100.0	30.8	69.2	0.0	100.0	676
Oti	51.6	24.5	12.3	11.6	100.0	42.2	57.6	0.1	100.0	403
Northern	45.1	31.7	14.1	9.2	100.0	38.9	61.0	0.1	100.0	1,149
Savannah	60.3	24.7	12.8	2.2	100.0	28.6	71.3	0.1	100.0	319
North East	45.8	30.5	17.2	6.5	100.0	31.1	68.9	0.0	100.0	290
Upper East	40.8	44.7	13.2	1.4	100.0	18.2	81.8	0.0	100.0	640
Upper West	52.7	27.8	15.5	4.1	100.0	16.5	83.5	0.0	100.0	398
Education										
No education	47.0	31.0	15.0	7.1	100.0	33.1	66.8	0.1	100.0	2,411
Primary	55.4	28.4	11.0	5.1	100.0	36.0	63.9	0.0	100.0	2,071
Secondary	58.9	30.7	8.1	2.2	100.0	39.2	60.8	0.0	100.0	8,999
More than secondary	74.4	21.7	2.8	1.0	100.0	53.0	47.0	0.0	100.0	1,533
Wealth quintile										
Lowest	32.5	35.1	20.5	11.9	100.0	32.7	67.3	0.0	100.0	2,447
Second	54.1	29.8	13.3	2.8	100.0	31.2	68.7	0.0	100.0	2,712
Middle	63.2	28.5	6.6	1.8	100.0	32.5	67.4	0.1	100.0	3,121
Fourth	64.7	29.4	4.6	1.3	100.0	39.8	60.2	0.0	100.0	3,379
Highest	68.7	26.2	4.3	0.8	100.0	55.9	44.1	0.0	100.0	3,355
Total	58.1	29.5	9.1	3.3	100.0	39.2	60.8	0.0	100.0	15,014

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = not applicable
[1] Includes car/truck, public bus, motorcycle/scooter, and boat with motor
[2] Includes animal-drawn cart, bicycle, boat without motor, and walking

CHILD HEALTH 10

Key Findings

- ***Birth weight:*** Among infants born in the last 2 years who had their birth weight reported, 11% had a low birth weight (less than 2.5 kg).
- ***Vaccinations:*** By the time of the survey, 75% of children age 12–23 months were fully vaccinated against all basic antigens, and 56% were fully vaccinated according to the national schedule.
- ***Symptoms of acute respiratory infection:*** Advice or treatment was sought for 54% of children under age 5 who had symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey.
- ***Fever:*** Advice or treatment was sought for 57% of children under age 5 who had a fever in the 2 weeks before the survey.
- ***Diarrhoea:*** Advice or treatment was sought for 51% of children under age 5 who had diarrhoea in the 2 weeks before the survey. Fifty-seven percent of children with diarrhoea received oral rehydration therapy (ORT), while 22% received no treatment.

Information on child health and survival can help policymakers and programme managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in Ghana.

This chapter presents information on birth weight and vaccination status for young children. It also looks at the prevalence of, and care-seeking behaviours for three common childhood illnesses: symptoms of acute respiratory infection (ARI), fever, and diarrhoea.

10.1 CHILD'S SIZE AND BIRTH WEIGHT

Low birth weight

Percentage of births with a reported birth weight below 2.5 kilograms regardless of gestational age.

Sample: Live births in the 2 years before the survey that have a reported birth weight from either a written record or the mother's report

Birth weight is a reliable and sensitive indicator for predicting the immediate and long-term outcome of a newborn. Low birth weight is a challenging, multifaceted public health problem because it is associated with an increased risk of morbidity and mortality in infants. Low birth weight newborns are more likely to die from common childhood diseases in the first year of life than their normal-weight counterparts. The public health significance of low birth weight is accentuated by its association with mental retardation, specialised institutional care, and intensive care unit care.

For births in the 2 years preceding the survey, birth weight was recorded in the questionnaire if available from either a written record or the mother's recall. Overall, information on birth weight was available for

67% of babies through written records and 15% through the mother's recall (**Table 10.1**). Eleven percent of infants with a reported birth weight had a low birth weight (less than 2.5 kg). The percentage of children with a low birth weight has increased since 1998, from 9% to 11%.

10.2 VACCINATION OF CHILDREN

Universal immunisation of children against common vaccine-preventable diseases is crucial in reducing infant and child morbidity and mortality. In Ghana, routine childhood vaccines include bacille Calmette-Guérin (BCG) (tuberculosis), HepB (hepatitis B), oral polio vaccine (OPV) or inactivated polio vaccine (IPV), pentavalent or DPT-HepB-Hib (diphtheria, pertussis, tetanus, hepatitis B, and *Haemophilus influenzae* type b), pneumococcal conjugate vaccine (PCV), rotavirus vaccine (RV), measles-rubella vaccine (MR), yellow fever vaccine, and meningitis A vaccine.

Information on vaccination coverage was obtained in two ways: from written vaccination records, including vaccination or health cards, and from verbal reports. For each child born in the 3 years before the survey, mothers were asked to show the interviewers the vaccination card or other document used for recording the child's immunisations. If the vaccination card or other document was available, the interviewer copied the dates of each vaccination received. If the mother was not able to present the vaccination card or other document for a child, she was asked to recall whether the child had received particular vaccines. If she indicated that the child had received any of the multidose vaccines, she was asked the number of doses the child received.

10.2.1 Vaccination Card Ownership and Availability

Vaccination cards are a critical tool in ensuring that a child receives all recommended vaccinations on schedule. Ninety-eight percent each of children age 12–23 months and age 24–35 months ever had a vaccination card or other document on which their vaccinations were recorded. However, only 88% of children age 12–23 months and 79% of children age 24–35 months had vaccination cards available at the time of the interview (**Table 10.2**).

10.2.2 Basic Antigen Coverage

Fully vaccinated: basic antigens

Percentage of children who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic antigens, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of polio vaccine given as oral polio vaccine (OPV), inactivated polio vaccine (IPV), or a combination of OPV and IPV
- Three doses of DPT-containing vaccine, which protects against diphtheria, pertussis (whooping cough), and tetanus
- One dose of measles-rubella vaccine (MR)

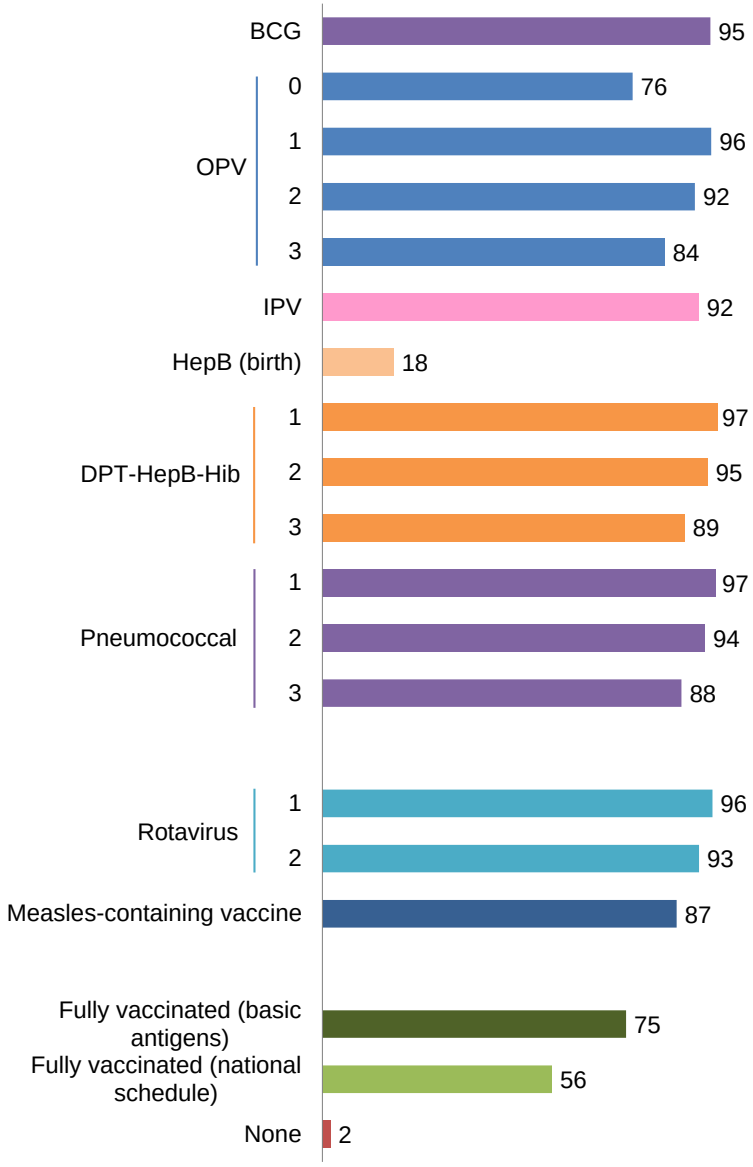
Sample: Children age 12–23 months and age 24–35 months

Historically, an important measure of vaccination coverage has been the proportion of children receiving all "basic" antigens. Children are considered fully vaccinated against all basic antigens if they have received the BCG vaccine, three doses each of polio vaccine and DPT-containing vaccine, and a single dose of measles-containing vaccine. In Ghana, the BCG and polio 0 vaccines are given at birth or at first clinic contact, while the polio and DPT-containing vaccines are given at approximately age 6, 10, and 14 weeks. A first measles-containing vaccination should be given at or soon after age 9 months.

Among children age 12–23 months, 95% received the BCG vaccine, 89% received the third dose of DPT-HepB-Hib, 84% received the third dose of OPV, 88% received the third dose of the pneumococcal vaccine, 93% received the second dose of the rotavirus vaccine, 84% received the yellow fever vaccine, and 87% received the first dose of the measles-rubella vaccine (**Table 10.3** and **Figure 10.1**).

Figure 10.1 **Childhood vaccinations**

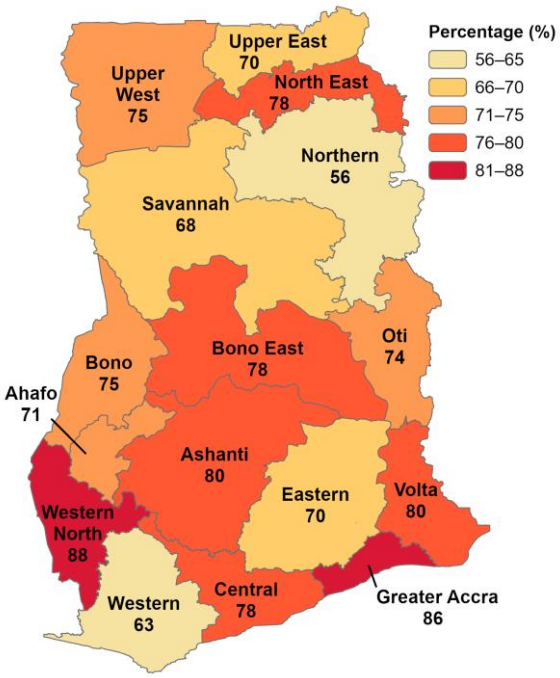
Percentage of children age 12–23 months vaccinated at any time before the survey



Seventy-five percent of children age 12–23 months were fully vaccinated with all basic antigens at any time before the survey. Two percent of children age 12–23 months did not receive any vaccinations (**Table 10.3**). By region, full vaccination coverage among children age 12–23 months ranges from 56% in Northern to 88% in Western North (**Map 10.1**).

Map 10.1 Vaccination coverage by region

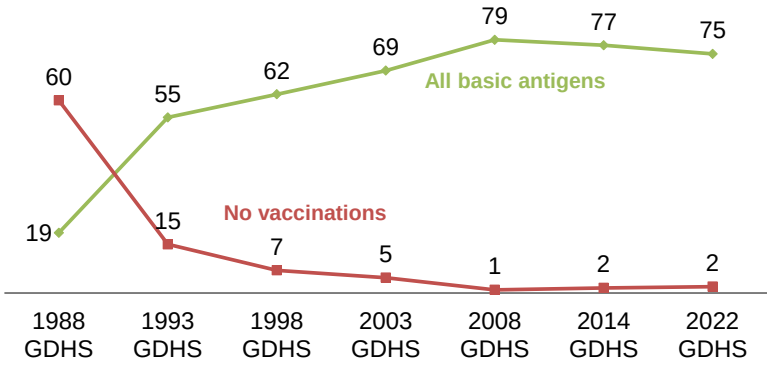
Percentage of children age 12–23 months who were fully vaccinated (basic antigens) at any time before the survey



Trends: The percentage of children age 12–23 months who received all basic antigens increased from 55% in 1993 to 79% in 2008 before decreasing to 77% in 2014 and 75% in 2022 (**Figure 10.2**).

Figure 10.2 Trends in childhood vaccinations

Percentage of children age 12–23 months who received all basic antigens at any time before the survey



10.2.3 National Schedule Coverage

Fully vaccinated according to national schedule: age 12–23 months

Percentage of children who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To be fully vaccinated according to the national schedule, a child must receive the following:

- One dose of BCG vaccine
- OPV (birth dose)
- Hepatitis B vaccine (birth dose)
- Three doses of OPV and one dose of IPV
- Three doses of DPT-HepB-Hib
- Three doses of PCV
- Two doses of RV
- One dose of MR
- Yellow fever vaccine

Sample: Children age 12–23 months

Fully vaccinated according to national schedule: age 24–35 months

Percentage of children who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To be fully vaccinated according to the national schedule, a child must receive all of the vaccinations listed above along with the following:

- A second dose of MR
- One dose of meningitis A vaccine

Sample: Children age 24–35 months

A second measure of vaccination coverage is the percentage of children age 12–23 months and 24–35 months who are fully vaccinated according to the national schedule. In this report, a child age 12–23 months is considered to be fully vaccinated according to the national schedule if the child has received all basic antigens as well as a birth dose of OPV, a birth dose of HepB vaccine, a dose of IPV, three doses of the pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of yellow fever vaccine. Children age 24–35 months have received all vaccinations according to the national schedule if they have received a second dose of the measles-rubella vaccine and a dose of the meningitis A vaccine in addition to all of the vaccinations relevant for a child age 12–23 months.

Among children age 12-23 months, 56% are fully vaccinated according to the national schedule. Children age 24–35 months are fully vaccinated according to the national schedule if they have received a second dose of the MMR vaccine in addition to all of the vaccinations relevant for a child age 12–23 months. Seventy-three percent of children age 24–25 months received a second dose of MMR. Overall, 42% of children age 24–35 months are fully vaccinated according to the national schedule (**Table 10.4**).

Source of Vaccinations

Most children age 12–23 months and 24–35 months (93% and 94%, respectively) received vaccinations from public sector sources (**Table 10.5**).

10.3 Symptoms of Acute Respiratory Infection and Care-seeking Behaviour

Care seeking for symptoms of acute respiratory infection (ARI)

Children with symptoms of ARI for whom advice or treatment was sought. ARI symptoms consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Table 10.6 shows that 2% of children under age 5 had symptoms of ARI in the 2 weeks preceding the survey. Fifty-four percent of those children were taken to a health facility or provider for advice or treatment, and 21% were taken for advice and treatment the same or the next day. The public sector (64%) is the most common source of advice or treatment for children with symptoms of ARI. Among public sector facilities, the most prominent sources are government hospitals (26%), community-based health planning and services (CHPS) centres/government health posts (13%), and government health centres (12%). Drug peddlers are the most common private sector source (11%) (**Table 10.7**).

10.4 Diarrhoeal Disease

Diarrhoeal disease remains an important cause of morbidity and mortality among young children in Ghana. Oral rehydration therapy (ORT) and supplemental zinc, combined with continued feeding, are the recommended interventions for treating diarrhoea. ORT can be provided as increased fluids (especially increased breastfeeding), as fluid prepared from a packet of oral rehydration salts (ORS), or as government-recommended homemade fluids (RHF). Zinc has been shown to reduce the severity and duration of diarrhoea, and it is recommended that all children with diarrhoea receive a 5-day course of zinc.

10.4.1 Diarrhoea and Care-seeking Behaviour

Care seeking for diarrhoea

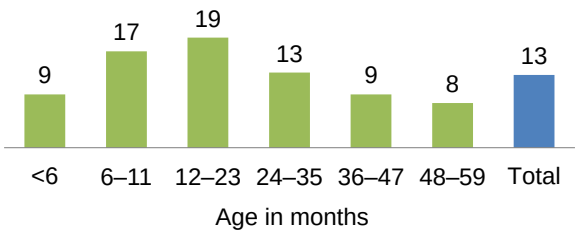
Children with diarrhoea for whom advice or treatment was sought.

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

Thirteen percent of children under age 5 were reported to have had diarrhoea in the 2 weeks preceding the survey (**Table 10.9** and **Figure 10.3**). Treatment or advice was sought for 51% of children who had diarrhoea.

Figure 10.3 **Diarrhoea prevalence by age**

Percentage of children under age 5 who had diarrhoea in the 2 weeks before the survey



10.4.2 Feeding Practices

Appropriate feeding practices

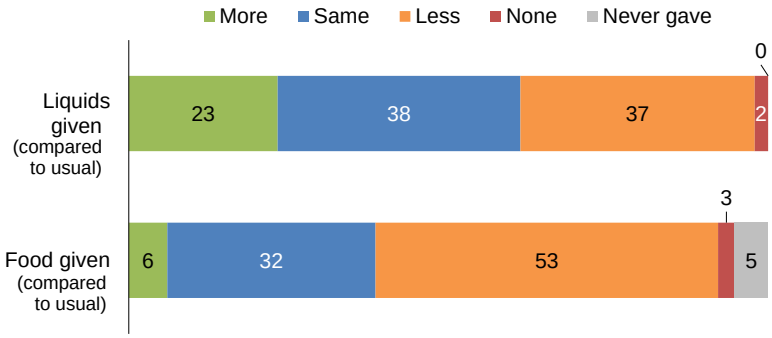
Children with diarrhoea are given more liquids than usual and as much food or more than usual.

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

Only 23% of children under age 5 with diarrhoea in the 2 weeks before the survey were given more liquids than usual, while 38% received the same amount of liquids. It is alarming that 20% of children were given somewhat less liquid than usual, 17% were given much less liquid than usual, and 2% were given no liquid at all. Thirty-two percent of children with diarrhoea were given the same amount of food and 6% were given more food than usual (as recommended). Twenty-eight percent of children were given somewhat less food than usual, 25% were given much less food than usual, and 3% were given no food at all (**Figure 10.4** and **Table 10.10**).

Figure 10.4 **Feeding practices during diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



10.4.3 Oral Rehydration Therapy, Zinc, Continued Feeding, and Other Treatments

Oral rehydration therapy

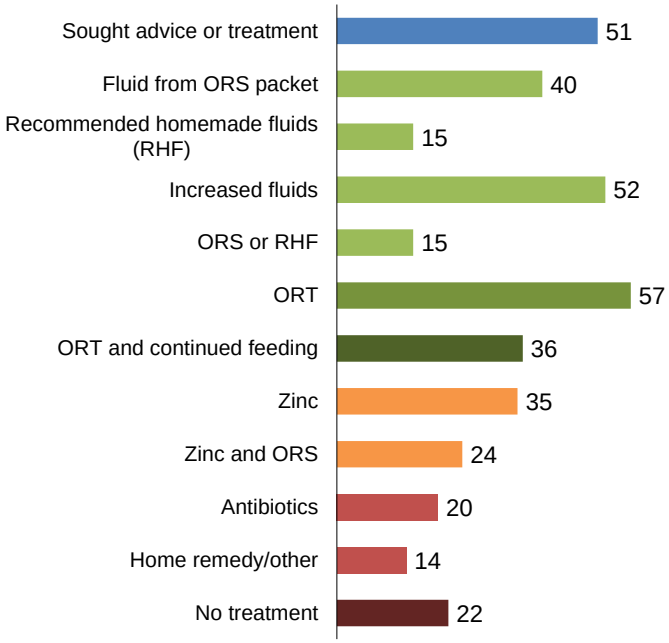
Children with diarrhoea are given increased fluids, a fluid made from a special packet of oral rehydration salts (ORS), or government-recommended homemade fluids (RHF).

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

It is very important that all children with diarrhoea receive increased fluids, continued feeding, and oral zinc. However, only 57% of children under age 5 with diarrhoea in the 2 weeks preceding the survey received ORT (ORS, RHF, or increased fluids). Fifty-two percent of children received ORT in the form of increased fluids, 40% in ORS packets or as prepackaged ORS liquid, and 15% as recommended home fluids. Thirty-six percent of children were given ORT and continued feeding, and 35% received zinc. Twenty-two percent of children received no treatment (**Figure 10.5** and **Table 10.11**).

***Figure 10.5* Treatment of diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



Trends: The percentage of children under age 5 with diarrhoea in the 2 weeks before the survey who received ORT increased from 32% in 1998 to 67% in 2008 before decreasing to 62% in 2014 and 57% in 2022. The percentage of children with diarrhoea who received zinc supplements increased from 2% in 2008 to 35% in 2022.

Source of Advice or Treatment for Diarrhoea

Children with diarrhoea for whom advice or treatment was sought were most likely to be taken to public sector facilities (51%). "Other" private sector suppliers (29%), including shops/markets (16%) and drug peddlers (13%), were the next most common source of advice and treatment for diarrhoea (**Table 10.12**).

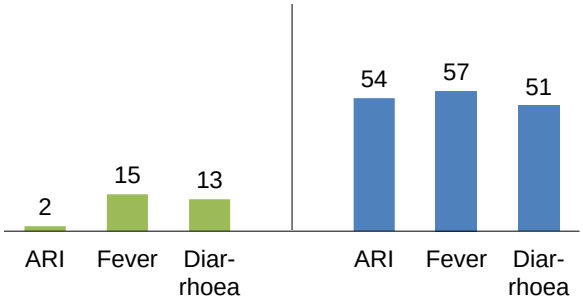
10.5 Treatment of Childhood Illness

Fever (15%) was the most common illness reported among children under age 5 during the 2 weeks before the survey, followed by diarrhoea (13%) and symptoms of ARI (2%), and children with fever were most likely to be taken for advice or treatment. Advice or treatment was sought for 57% of children with fever, 54% of children with symptoms of ARI, and 51% of children with diarrhoea (**Figure 10.6**).

***Figure 10.6* Symptoms of childhood illness and care seeking**

Percentage of children under age 5 with symptoms in the 2 weeks before the survey

Among those with symptoms of illness, percentage for whom advice or treatment was sought



LIST OF TABLES

For more information on child health, see the following tables:

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the 2 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 2 years preceding the survey that have a reported birth weight by source of information (written record or mother's report), and among live births in the 2 years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Ghana DHS 2022

	Percent distribution of births by size of baby at birth based on mother's estimate					Percentage of births that have a reported birth weight according to:				Among births with a reported birth weight[1]	
Background characteristic	Very small	Smaller than average	Average or larger	Don't know	Total	Written record	Mother's report	Either	Number of births	Percentage less than 2.5 kg	Number of births
Mother's age at birth											
<20	7.5	9.5	82.2	0.7	100.0	64.6	15.6	80.2	358	13.8	287
20–34	3.5	8.9	87.4	0.2	100.0	67.4	15.3	82.7	2,561	10.9	2,117
35–49	4.0	7.5	88.1	0.4	100.0	68.1	12.5	80.6	718	10.5	578
Birth order[2]											
1	4.6	9.6	85.4	0.4	100.0	68.4	17.8	86.1	1,054	12.5	907
2–3	4.1	8.2	87.4	0.2	100.0	69.5	15.8	85.4	1,338	9.6	1,142
4–5	3.4	8.1	88.3	0.2	100.0	66.4	11.2	77.7	798	11.5	620
6+	3.3	8.9	87.3	0.6	100.0	59.4	10.7	70.0	447	11.9	313
Mother's smoking status											
Smokes cigarettes/tobacco	(9.6)	(4.2)	(86.2)	(0.0)	100.0	(63.6)	(12.0)	(75.5)	29	*	22
Does not smoke	4.0	8.7	87.0	0.3	100.0	67.3	14.8	82.1	3,609	11.1	2,961
Residence											
Urban	3.6	7.5	88.7	0.2	100.0	70.4	19.5	89.9	1,700	10.8	1,528
Rural	4.4	9.7	85.5	0.4	100.0	64.5	10.6	75.1	1,938	11.5	1,455
Region											
Western	2.7	13.3	82.7	1.3	100.0	55.9	25.1	81.0	212	8.7	171
Central	4.5	9.8	85.7	0.0	100.0	62.5	16.0	78.5	380	13.2	298
Greater Accra	0.6	2.2	97.2	0.0	100.0	74.8	16.1	90.9	427	4.7	388
Volta	4.0	6.5	88.8	0.6	100.0	73.3	13.8	87.1	135	7.0	117
Eastern	5.0	3.0	91.9	0.0	100.0	76.9	12.7	89.6	252	11.1	225
Ashanti	5.8	9.4	84.8	0.0	100.0	63.0	25.3	88.2	666	16.0	587
Western North	5.7	9.5	84.8	0.0	100.0	69.3	13.6	82.9	101	12.0	83
Ahafo	4.0	7.6	85.5	2.8	100.0	70.1	19.3	89.3	81	10.8	72
Bono	6.2	13.5	80.3	0.0	100.0	78.8	11.2	89.9	117	10.8	105
Bono East	1.2	10.3	88.5	0.0	100.0	67.9	15.3	83.1	202	10.5	168
Oti	3.5	5.8	90.3	0.4	100.0	58.8	4.8	63.6	128	11.8	82
Northern	1.9	9.0	88.7	0.4	100.0	58.8	6.3	65.1	406	12.2	264
Savannah	5.4	12.3	82.2	0.2	100.0	51.0	4.7	55.7	111	7.8	62
North East	3.4	13.2	83.4	0.0	100.0	72.7	5.6	78.2	116	10.7	91
Upper East	10.4	11.6	76.9	1.1	100.0	83.4	5.6	89.0	196	12.3	174
Upper West	2.0	13.3	83.9	0.8	100.0	78.6	7.4	86.0	109	8.0	94
Mother's education											
No education	3.4	10.5	85.5	0.6	100.0	61.7	5.3	67.0	761	10.7	510
Primary	5.0	8.0	86.6	0.4	100.0	62.7	13.1	75.7	562	10.8	426
Secondary	4.1	8.4	87.2	0.2	100.0	70.6	16.1	86.7	1,979	11.6	1,715
More than secondary	2.8	7.2	89.9	0.0	100.0	67.6	31.4	99.0	336	9.7	333

Continued...

Table 10.1—*Continued*

Background characteristic	Percent distribution of births by size of baby at birth based on mother's estimate					Percentage of births that have a reported birth weight according to:			Number of births	Among births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know	Total	Written record	Mother's report	Either		Percentage less than 2.5 kg	Number of births
Wealth quintile											
Lowest	4.7	10.2	84.5	0.6	100.0	59.1	5.8	65.0	896	13.1	582
Second	4.3	10.4	84.9	0.3	100.0	68.7	11.6	80.3	749	12.1	601
Middle	3.9	8.6	87.2	0.2	100.0	67.3	15.3	82.6	730	11.4	603
Fourth	4.6	6.8	88.3	0.2	100.0	72.3	20.0	92.4	668	11.4	617
Highest	1.9	6.3	91.8	0.0	100.0	71.9	25.6	97.5	595	7.7	580
Total	4.0	8.7	87.0	0.3	100.0	67.2	14.8	82.0	3,638	11.1	2,983

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Based on either a written record or the mother's recall
[2] Birth order refers to the order of the birth among the respondent's live births.

Table 10.2 Possession and observation of vaccination cards

Percentage of children age 12–23 months and children age 24–35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, Ghana DHS 2022

Background characteristic	Children age 12–23 months			Children age 24–35 months		
	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children
Sex						
Male	98.1	88.1	928	97.6	80.8	764
Female	98.1	87.6	895	98.5	76.2	782
Birth order[2]						
1	99.2	85.2	529	98.1	69.3	380
2–3	97.8	88.3	663	98.8	78.3	623
4–5	97.2	91.0	401	97.1	83.6	355
6+	98.1	87.3	230	97.6	87.8	187
Residence						
Urban	99.4	89.0	858	98.6	75.3	786
Rural	97.0	86.9	965	97.5	81.8	760
Region						
Western	94.7	78.2	112	100.0	75.9	102
Central	100.0	85.5	193	100.0	80.6	152
Greater Accra	100.0	94.0	207	100.0	81.3	210
Volta	97.0	89.3	75	98.8	83.2	60
Eastern	98.9	87.4	115	97.7	72.7	115
Ashanti	100.0	91.7	359	100.0	72.2	255
Western North	100.0	93.9	51	100.0	86.4	41
Ahafo	94.6	86.3	38	96.8	77.1	36
Bono	100.0	89.7	62	95.2	83.8	56
Bono East	98.7	88.6	106	100.0	87.5	77
Oti	99.5	84.1	56	96.0	84.4	48
Northern	91.6	81.8	200	91.5	73.1	168
Savannah	98.8	91.4	50	96.5	86.9	52
North East	97.8	90.7	53	97.9	90.0	56
Upper East	98.2	80.5	87	95.6	68.4	74
Upper West	98.3	90.5	58	99.4	86.2	44
Mother's education						
No education	93.1	84.7	390	95.1	80.5	376
Primary	99.1	87.2	291	99.1	82.5	231
Secondary	99.5	89.7	977	99.0	77.9	807
More than secondary	100.0	85.7	164	98.7	69.2	132
Wealth quintile						
Lowest	94.0	84.6	440	95.1	79.7	333
Second	98.8	87.2	384	98.7	80.5	337
Middle	99.1	91.0	377	99.4	76.8	300
Fourth	100.0	86.8	310	98.7	76.5	308
Highest	100.0	90.6	313	98.7	78.5	267
Total	98.1	87.9	1,823	98.1	78.5	1,546

[1] Vaccination card, booklet, or other home-based record
[2] Birth order refers to the order of the birth among the respondent's live births.

Table 10.3 Vaccinations by source of information

Percentage of children age 12–23 months and children age 24–35 months who received specific vaccines at any time before the survey by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, Ghana DHS 2022

	Children age 12–23 months				Children age 24–35 months			
Vaccine	Vaccination card[1]	Mother's report	Either source (crude coverage)	Vaccinated by appropriate age[2,3,4]	Vaccination card[1]	Mother's report	Either source (crude coverage)	Vaccinated by appropriate age[2,3,4]
BCG	85.2	10.1	95.3	95.0	76.1	18.9	95.0	94.4
HepB (birth dose)[5]	11.0	6.6	17.5	na	9.7	10.9	20.6	na
Within 1 day of birth	2.0	4.7	6.7	na	1.5	8.8	10.3	na
After 1 day of birth	8.9	1.9	10.9	na	8.2	2.1	10.2	na
DPT-HepB-Hib								
1	87.4	9.7	97.1	96.9	78.1	17.5	95.6	94.8
2	86.8	7.9	94.6	94.1	77.8	13.9	91.7	90.8
3	84.2	4.8	89.0	87.9	76.6	9.4	85.9	83.4
Polio								
OPV 0 (birth dose)	67.5	8.7	76.2	76.0	57.9	17.5	75.4	74.7
OPV 1	87.3	8.2	95.5	95.4	78.1	15.4	93.5	92.6
OPV 2	86.0	5.5	91.5	91.1	77.3	10.8	88.1	87.2
OPV 3	82.0	2.1	84.1	83.1	72.6	4.5	77.2	74.8
IPV	83.2	9.1	92.4	91.0	76.0	17.8	93.7	90.5
Pneumococcal								
1	87.2	9.5	96.7	96.5	78.0	17.5	95.6	94.7
2	86.5	7.5	94.0	93.6	77.7	14.1	91.8	90.4
3	84.0	4.2	88.2	87.0	76.5	9.5	86.0	83.2
Rotavirus								
1	86.8	8.9	95.8	95.6	77.7	16.6	94.3	93.4
2	84.9	7.6	92.5	91.8	75.8	13.4	89.2	87.2
Yellow fever	77.1	6.9	84.0	76.1	74.1	16.1	90.2	80.5
Measles-rubella								
1	79.2	7.8	87.0	80.4	74.9	15.8	90.7	81.6
2	na	na	na	na	61.4	11.1	72.5	69.3
Meningitis	0.0	0.0	0.0	na	59.3	15.0	74.3	70.1
Fully vaccinated (basic antigens)[6]	73.0	1.6	74.6	68.9	68.3	3.3	71.5	63.6
Fully vaccinated (according to national schedule)[7]	55.5	1.0	56.4	51.4	40.3	2.1	42.4	36.5
No vaccinations	0.1	1.9	2.0	na	0.1	2.2	2.3	na
Number of children	1,602	221	1,823	1,823	1,213	333	1,546	1,546

na = not applicable
BCG = bacille Calmette-Guérin
DPT = diphtheria-pertussis-tetanus
HepB = hepatitis B
Hib = *Haemophilus influenzae* type b
IPV = inactivated polio vaccine
OPV = oral polio vaccine
[1] Vaccination card, booklet, or other home-based record
[2] Received by age 12 months
[3] For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.
[4] Received by age 12 months for all vaccines except measles-rubella 2 vaccine, which should be received by age 24 months
[5] Children are considered to have received HepB (birth dose) if it was recorded on their card or reported by their mother, regardless of timing.
[6] BCG, three doses of DPT-Hep B-Hib, three doses of polio vaccine (excluding polio vaccine given at birth), and one dose of measles-rubella vaccine
[7] For children age 12–23 months: BCG, three doses of DPT-Hep B-Hib, four doses of OPV (including OPV given at birth), one dose of IPV, one dose of yellow fever vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles-rubella vaccine. For children age 24–35 months: all of the vaccines just listed plus a second dose of measles-rubella vaccine and a dose of meningitis A vaccine.

Table 10.4 Vaccinations by background characteristics

Percentage of children age 12–23 months and children age 24–35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage fully vaccinated (basic antigens), percentage fully vaccinated according to national schedule, and percentage who received no vaccinations, according to background characteristics, Ghana DHS 2022

	Children age 12–23 months:																				Children age 24–35 months:			
			DPT-HepB-Hib			Polio					Pneumococcal			Rotavirus										
Background characteristic	BCG	HepB (birth dose)[1]	1	2	3	OPV 0 (birth dose)	OPV 1	OPV 2	OPV 3	IPV	1	2	3	1	2	Measles-rubella 1	Yellow fever	Fully vaccinated (basic antigens)[2]	Fully vaccinated according to national schedule[3]	No vaccinations	Number of children	Measles-rubella 2	Meningitis	Fully vaccinated according to national schedule[4]	Number of children
Sex																									
Male	95.5	17.5	97.4	95.7	89.8	74.5	96.2	92.0	84.9	92.6	96.8	94.8	90.0	95.9	92.5	86.4	83.7	74.7	54.8	2.0	928	74.6	74.7	44.4	764
Female	95.1	17.6	96.7	93.6	88.2	78.0	94.8	91.1	83.3	92.2	96.6	93.2	86.4	95.6	92.4	87.6	84.3	74.6	58.2	2.0	895	70.4	74.0	40.4	782
Birth order[5]																									
1	97.1	20.3	97.2	94.0	86.9	80.8	95.7	91.9	84.0	92.1	97.4	93.6	86.7	96.6	93.8	88.7	84.8	75.8	60.1	1.7	529	72.4	74.2	42.5	380
2–3	94.3	16.5	96.9	94.7	90.1	79.1	95.6	91.2	84.3	93.6	96.0	94.2	88.7	95.4	91.7	86.7	82.8	74.4	58.3	2.0	663	75.8	78.2	46.8	623
4–5	94.6	16.5	96.6	94.6	90.0	70.3	94.9	92.7	86.0	91.1	96.4	92.8	88.6	94.7	91.7	86.1	84.7	76.3	54.5	2.4	401	69.0	69.5	40.5	355
6+	95.5	16.0	98.0	96.0	88.9	67.4	95.9	89.3	80.7	91.6	97.6	96.4	90.0	96.6	93.0	85.5	84.6	69.4	46.2	1.8	230	68.4	70.7	31.2	187
Vaccination card[6]																									
Seen	97.0	12.5	99.5	98.7	95.8	76.8	99.3	97.8	93.3	94.7	99.3	98.5	95.6	98.8	96.6	90.2	87.7	83.1	63.1	0.1	1,602	78.2	75.6	51.4	1,213
Not seen or no longer has	93.0	60.0	88.7	74.4	44.5	79.7	78.1	53.4	20.2	84.2	87.0	69.6	39.6	83.5	72.2	71.5	65.0	15.1	9.0	6.6	187	55.2	74.3	10.8	303
Never had	(29.2)	(22.0)	(30.3)	(14.5)	(12.6)	(26.4)	(11.9)	(3.4)	(3.4)	(26.4)	(29.5)	(17.4)	(8.7)	(21.0)	(11.6)	(23.0)	(14.7)	(3.4)	(3.4)	(65.4)	34	(14.1)	(23.7)	(0.0)	30
Residence																									
Urban	97.9	18.2	98.1	96.0	91.4	82.6	97.2	94.0	86.9	94.3	97.9	95.6	88.8	96.9	93.9	88.0	85.4	78.5	63.3	1.0	858	69.3	72.2	43.7	786
Rural	93.0	16.9	96.1	93.5	86.9	70.5	94.1	89.3	81.6	90.6	95.6	92.6	87.7	94.7	91.2	86.1	82.8	71.2	50.4	2.9	965	75.7	76.6	41.1	760
Region																									
Western	93.2	13.6	93.5	91.3	82.8	61.4	92.5	86.8	73.6	87.9	93.0	93.0	78.9	91.4	88.9	77.3	71.8	62.5	42.4	4.5	112	54.9	56.9	31.5	102
Central	99.1	10.6	100.0	98.2	93.4	72.5	100.0	100.0	88.9	92.8	96.5	95.8	88.0	96.6	95.0	85.3	83.3	77.8	54.9	0.0	193	71.4	71.0	36.9	152
Greater Accra	98.8	12.0	97.7	97.2	94.0	89.2	97.7	95.0	88.8	96.9	98.8	96.8	93.2	97.7	95.8	94.7	92.3	85.6	72.0	1.2	207	85.5	86.5	59.6	210
Volta	99.1	28.7	100.0	95.2	87.6	89.9	97.5	93.1	86.4	94.3	100.0	94.3	89.9	98.8	91.8	90.7	86.9	79.6	70.6	0.0	75	88.6	88.6	73.3	60
Eastern	90.5	16.4	96.4	96.4	85.4	83.7	93.1	89.9	84.3	89.6	96.4	96.4	85.4	96.4	96.4	81.5	78.1	70.3	61.9	2.1	115	70.3	74.9	44.6	115
Ashanti	97.2	13.3	99.4	97.9	92.7	79.0	99.3	95.0	89.9	95.9	99.4	96.9	94.8	98.5	97.2	91.9	88.6	80.3	63.8	0.0	359	66.8	72.3	40.9	255
Western North	97.7	16.9	99.1	97.2	94.2	71.1	98.1	95.9	94.2	99.1	99.1	97.2	94.2	97.2	96.3	93.9	92.5	87.7	62.0	0.0	51	80.6	79.7	40.3	41
Ahafo	88.8	12.5	91.7	90.5	88.5	68.2	88.6	85.5	78.5	86.9	91.7	90.5	85.9	91.0	88.9	84.1	85.4	70.8	53.8	8.3	38	85.5	79.0	49.4	36
Bono	98.6	16.2	100.0	97.3	93.3	94.6	96.1	94.8	82.1	93.8	98.8	96.1	94.5	98.8	93.8	90.9	89.8	75.3	65.2	0.0	62	81.0	79.7	49.2	56
Bono East	97.7	10.8	98.9	96.4	89.7	73.5	95.8	91.8	84.6	97.7	98.9	96.6	90.4	98.3	95.2	91.9	89.0	77.8	55.5	0.7	106	71.1	77.5	41.7	77
Oti	94.9	28.4	98.2	96.1	91.5	73.7	94.5	91.9	84.2	94.7	99.5	94.7	88.4	98.5	90.8	87.4	83.6	73.7	53.3	0.5	56	82.0	84.5	49.2	48
Northern	86.1	22.4	89.1	83.4	77.3	59.2	86.6	78.7	72.8	81.1	88.7	83.9	75.7	87.0	80.4	72.6	68.5	55.8	31.2	9.0	200	56.5	54.6	18.5	168
Savannah	94.9	6.9	96.3	93.7	83.4	60.9	94.9	90.0	74.3	90.7	96.5	95.5	82.9	94.5	87.0	86.4	87.1	67.6	41.8	1.6	50	66.2	65.2	33.1	52
North East	96.3	32.2	95.4	93.2	89.9	68.7	95.7	90.1	84.7	90.8	95.0	91.1	89.2	94.8	89.3	87.2	86.4	78.4	52.3	2.7	53	82.5	79.5	39.3	56
Upper East	93.6	55.8	98.2	91.0	84.6	88.2	91.4	83.9	77.7	91.1	98.0	87.8	83.4	98.0	88.8	92.2	85.9	70.4	55.4	1.2	87	74.8	84.1	39.8	74
Upper West	95.7	10.0	97.3	95.2	93.0	78.9	97.0	93.6	85.3	92.3	96.6	94.6	92.4	93.2	91.8	84.6	82.3	74.7	56.0	1.7	58	86.2	90.2	58.4	44

Continued...

Table 10.4—*Continued*

Background characteristic	Children age 12–23 months																					Children age 12–23 months			
			DPT-HepB-Hib			Polio					Pneumococcal			Rotavirus											
	BCG	HepB (birth dose)[1]	1	2	3	OPV 0 (birth dose)	OPV 1	OPV 2	OPV 3	IPV	1	2	3	1	2	Measles-rubella 1	Yellow fever	Fully vaccinated (basic antigens)[2]	Fully vaccinated according to national schedule[3]	No vaccinations	Number of children	Measles-rubella 2	Meningitis	Fully vaccinated according to national schedule[4]	Number of children
Mother's education																									
No education	89.8	18.7	91.9	88.1	82.8	62.1	90.1	84.8	77.2	86.0	91.8	88.1	81.1	89.9	84.4	76.9	75.9	63.6	41.8	6.5	390	69.4	70.3	28.4	376
Primary	96.8	14.6	98.6	97.4	88.9	77.4	96.8	89.6	81.7	94.5	98.3	96.2	88.8	97.0	94.7	87.6	83.6	72.2	51.7	0.6	291	66.3	67.4	42.3	231
Secondary	96.5	17.4	98.7	96.4	91.0	78.6	97.4	94.3	86.7	93.7	98.1	95.7	90.5	97.9	94.9	89.6	85.8	77.7	59.4	0.7	977	74.5	76.3	46.8	807
More than secondary	98.5	20.6	96.6	94.9	92.2	93.2	95.1	94.3	89.2	95.6	97.1	94.0	90.7	94.9	93.2	94.5	93.1	86.7	82.0	1.5	164	80.0	86.4	56.1	132
Wealth quintile																									
Lowest	90.8	19.4	93.0	89.5	83.4	63.8	90.0	84.1	77.1	86.0	92.6	88.9	82.1	91.5	86.4	81.0	80.1	66.2	42.0	5.8	440	73.0	75.2	29.8	333
Second	95.8	15.2	98.0	95.3	88.2	74.3	96.5	92.5	81.6	93.1	97.7	94.9	90.3	97.2	94.4	86.2	81.7	71.0	52.5	0.9	384	70.3	70.4	37.6	337
Middle	98.0	19.2	98.6	96.9	91.3	78.9	97.8	93.6	88.3	95.3	98.6	96.3	91.2	96.9	93.8	84.7	80.5	74.7	57.1	0.6	377	70.1	71.2	46.5	300
Fourth	97.9	18.5	98.4	95.2	89.4	80.9	96.5	93.0	88.3	93.2	97.5	94.1	86.7	96.5	92.0	91.0	89.6	80.6	64.1	0.3	310	72.3	75.3	45.5	308
Highest	95.3	14.9	98.5	97.9	94.7	88.1	98.3	96.7	88.1	96.0	98.2	97.4	92.3	97.9	97.5	95.4	90.9	84.8	73.3	1.3	313	77.3	80.5	56.1	267
Total	95.3	17.5	97.1	94.6	89.0	76.2	95.5	91.5	84.1	92.4	96.7	94.0	88.2	95.8	92.5	87.0	84.0	74.6	56.4	2.0	1,823	72.5	74.3	42.4	1,546

Note: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother. For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination. Figures in parentheses are based on 25–49 unweighted cases.
BCG = bacille Calmette-Guérin
DPT = diphtheria-pertussis-tetanus
HepB = hepatitis B
Hib = *Haemophilus influenzae* type b
OPV = oral polio vaccine
IPV = inactivated polio vaccine
[1] Children are considered to have received HepB (birth dose) if it was recorded on their card or reported by their mother, regardless of timing.
[2] BCG, three doses of DPT-Hep B-Hib, three doses of polio vaccine (excluding polio vaccine given at birth), and one dose of measles-rubella vaccine
[3] BCG, three doses of DPT-Hep B-Hib, four doses of OPV (including OPV given at birth), one dose of IPV, one dose of yellow fever vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles-rubella vaccine
[4] BCG, three doses of DPT-Hep B-Hib, four doses of OPV (including OPV given at birth), one dose of IPV, one dose of yellow fever vaccine, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, two doses of measles-rubella vaccine, and one dose of meningitis A vaccine
[5] Birth order refers to the order of the birth among the respondent's live births.
[6] Vaccination card, booklet, or other home-based record

Table 10.5 Source of vaccinations

Among children age 12–23 months and children age 24–35 months who received at least one vaccination, percent distribution by source of most vaccinations, according to background characteristics, Ghana DHS 2022

Background characteristic	Children age 12–23 months who received at least one vaccination						Children age 24–35 months who received at least one vaccination					
	Public medical sector	Private medical sector (non-NGO)	Private medical sector (NGO)	Other	Total	Number of children	Public medical sector	Private medical sector (non-NGO)	Private medical sector (NGO)	Other	Total	Number of children
Sex												
Male	93.2	6.4	0.3	0.1	100.0	909	93.0	6.3	0.0	0.6	100.0	748
Female	93.2	6.7	0.1	0.0	100.0	878	94.4	5.6	0.0	0.0	100.0	762
Birth order[1]												
1	91.9	8.0	0.1	0.0	100.0	519	96.2	3.8	0.0	0.0	100.0	368
2–3	92.1	7.3	0.5	0.2	100.0	650	91.4	8.1	0.0	0.5	100.0	615
4–5	95.6	4.4	0.0	0.0	100.0	392	94.1	5.9	0.0	0.0	100.0	346
6+	95.4	4.6	0.0	0.0	100.0	226	96.0	3.0	0.0	1.0	100.0	182
Residence												
Urban	90.8	8.7	0.4	0.1	100.0	850	91.2	8.4	0.0	0.4	100.0	772
Rural	95.4	4.6	0.0	0.0	100.0	937	96.3	3.4	0.0	0.2	100.0	738
Region												
Western	87.5	12.5	0.0	0.0	100.0	107	97.5	2.5	0.0	0.0	100.0	102
Central	94.8	3.9	1.2	0.0	100.0	193	96.3	3.7	0.0	0.0	100.0	152
Greater Accra	92.3	7.7	0.0	0.0	100.0	204	89.6	10.4	0.0	0.0	100.0	210
Volta	91.4	7.6	0.0	1.0	100.0	75	97.5	2.5	0.0	0.0	100.0	60
Eastern	96.2	3.8	0.0	0.0	100.0	112	94.1	5.9	0.0	0.0	100.0	111
Ashanti	89.5	10.5	0.0	0.0	100.0	359	87.7	11.1	0.0	1.2	100.0	252
Western North	90.3	9.7	0.0	0.0	100.0	51	89.7	10.3	0.0	0.0	100.0	40
Ahafo	97.6	2.4	0.0	0.0	100.0	34	96.8	3.2	0.0	0.0	100.0	33
Bono	90.5	9.5	0.0	0.0	100.0	62	95.5	4.5	0.0	0.0	100.0	55
Bono East	94.5	5.5	0.0	0.0	100.0	105	90.1	9.9	0.0	0.0	100.0	76
Oti	96.3	3.1	0.6	0.0	100.0	55	96.2	3.8	0.0	0.0	100.0	47
Northern	98.4	1.6	0.0	0.0	100.0	182	98.2	0.6	0.0	1.2	100.0	150
Savannah	98.2	1.4	0.0	0.4	100.0	49	99.3	0.7	0.0	0.0	100.0	50
North East	96.9	1.9	1.1	0.0	100.0	52	98.4	1.1	0.5	0.0	100.0	55
Upper East	90.2	9.8	0.0	0.0	100.0	86	93.6	6.4	0.0	0.0	100.0	73
Upper West	99.5	0.5	0.0	0.0	100.0	57	98.9	1.1	0.0	0.0	100.0	44
Mother's education												
No education	95.6	4.3	0.0	0.1	100.0	364	97.4	2.1	0.0	0.5	100.0	358
Primary	93.8	6.1	0.1	0.0	100.0	290	95.4	4.6	0.0	0.0	100.0	228
Secondary	92.1	7.6	0.2	0.1	100.0	971	93.6	6.0	0.0	0.4	100.0	797
More than secondary	93.5	6.1	0.4	0.0	100.0	162	81.0	19.0	0.0	0.0	100.0	128
Wealth quintile												
Lowest	95.6	4.4	0.0	0.0	100.0	415	97.1	2.9	0.0	0.0	100.0	318
Second	96.5	3.4	0.1	0.0	100.0	380	95.8	3.6	0.0	0.5	100.0	329
Middle	93.5	6.5	0.0	0.0	100.0	375	95.1	3.8	0.0	1.0	100.0	294
Fourth	90.3	9.4	0.0	0.3	100.0	309	92.8	7.1	0.1	0.0	100.0	306
Highest	88.5	10.5	1.0	0.0	100.0	309	86.3	13.7	0.0	0.0	100.0	264
Total	93.2	6.5	0.2	0.1	100.0	1,787	93.7	6.0	0.0	0.3	100.0	1,510

[1] Birth order refers to the order of the birth among the respondent's live births.

Table 10.6 Children with symptoms of ARI and care seeking for symptoms of ARI

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Ghana DHS 2022

	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
Background characteristic	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought[2]	Percentage for whom advice or treatment was sought the same or next day[2]	Number of children
Age in months					
<6	1.4	850	*	*	12
6–11	1.6	868	*	*	14
12–23	2.8	1,823	61.6	28.2	50
24–35	2.6	1,546	64.4	20.1	40
36–47	1.9	1,632	(46.0)	(25.4)	31
48–59	2.1	1,596	(37.9)	(10.7)	34
Sex					
Male	2.4	4,240	58.2	20.3	100
Female	2.0	4,075	48.9	22.8	81
Mother's smoking status					
Smokes cigarettes/tobacco	1.5	78	*	*	1
Does not smoke	2.2	8,237	53.8	21.5	180
Cooking fuels and technologies					
Clean fuel and technology[3]	1.4	1,774	*	*	25
Solid fuel[4]	2.4	6,522	57.5	23.0	156
No food cooked in household	*	18	*	*	0
Residence					
Urban	1.5	4,048	44.6	19.5	62
Rural	2.8	4,267	59.0	22.4	119
Region					
Western	1.9	515	*	*	10
Central	3.1	841	*	*	26
Greater Accra	0.9	1,057	*	*	9
Volta	4.5	313	*	*	14
Eastern	1.0	611	*	*	6
Ashanti	1.4	1,495	*	*	21
Western North	2.0	222	*	*	5
Ahafo	3.4	186	*	*	6
Bono	1.0	277	*	*	3
Bono East	2.7	437	*	*	12
Oti	1.7	276	*	*	5
Northern	4.1	923	(70.8)	(22.4)	38
Savannah	2.4	247	*	*	6
North East	5.3	267	(54.7)	(15.9)	14
Upper East	1.3	406	*	*	5
Upper West	0.7	242	*	*	2
Mother's education					
No education	3.6	1,922	60.2	22.5	69
Primary	2.6	1,250	(56.5)	(30.3)	33
Secondary	1.7	4,348	44.6	16.0	74
More than secondary	0.7	794	*	*	5
Wealth quintile					
Lowest	3.1	1,966	60.8	20.1	62
Second	3.0	1,690	66.8	30.7	50
Middle	1.2	1,614	*	*	19
Fourth	2.1	1,584	(38.7)	(15.9)	33
Highest	1.2	1,460	*	*	17
Total	2.2	8,315	54.1	21.4	181

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
NGO = nongovernmental organisation
[1] Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.
[2] Includes advice or treatment from the following sources: public sector, private medical sector, NGO medical sector, shop, market, and medicines peddler. Excludes advice or treatment from a traditional practitioner.
[3] Includes stoves/cookers using electricity, liquefied petroleum gas (LPG)/natural gas/biogas, solar, and alcohol/ethanol
[4] Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crops, animal dung/waste, processed biomass (pellets) or woodchips, garbage/plastic, and sawdust

Table 10.7 Source of advice or treatment for children with symptoms of ARI

Percentage of children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Ghana DHS 2022

	Percentage for whom advice or treatment was sought from each source:	
Source	Among children with symptoms of ARI[1]	Among children with symptoms of ARI for whom advice or treatment was sought[1]
Public sector	40.9	63.5
Government hospital	17.0	26.4
Government polyclinic	2.0	3.1
Government health centre	7.8	12.1
Government clinic	4.4	6.8
CHPS centre/government health post	8.2	12.7
Community health service (outreach)	1.8	2.8
Private medical sector (non-NGO)	2.3	3.7
Private hospital/clinic	0.8	1.2
Private clinic	1.4	2.2
Maternity home	0.2	0.3
Other private sector	12.1	18.8
Shop/market	3.6	5.5
Traditional practitioner	1.2	1.9
Drug peddler	7.3	11.3
Other	1.9	2.9
Number of children	181	116

Note: Advice or treatment for children with symptoms of ARI may have been sought from more than one source.
CHPS = community-based health planning and services
NGO = nongovernmental organisation
[1] Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Table 10.8 Children with fever and care seeking for fever

Among children under age 5, percentage who had a fever in the 2 weeks preceding the survey, and among children with a fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, percentage for whom advice or treatment was sought the same or next day following the onset of fever, and percentage who received antibiotics as treatment, according to background characteristics, Ghana DHS 2022

	Among children under age 5:		Among children under age 5 with fever:			
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom advice or treatment was sought the same or next day[1]	Percentage who took antibiotics	Number of children with fever
Age in months						
<6	5.8	850	46.9	29.6	23.6	49
6–11	14.8	868	52.8	29.5	30.5	129
12–23	17.9	1,823	55.9	29.9	26.7	327
24–35	16.8	1,546	62.7	33.2	30.8	260
36–47	16.1	1,632	49.9	28.2	29.4	263
48–59	14.0	1,596	65.8	43.5	18.3	224
Sex						
Male	14.8	4,240	60.4	32.1	30.2	627
Female	15.3	4,075	53.9	33.1	23.5	625
Residence						
Urban	12.1	4,048	49.7	29.2	25.7	490
Rural	17.9	4,267	61.9	34.8	27.6	762
Region						
Western	12.3	515	67.0	43.1	37.9	63
Central	18.0	841	34.9	17.6	26.4	151
Greater Accra	8.7	1,057	(27.0)	(11.9)	(37.1)	92
Volta	14.6	313	71.5	49.2	25.6	46
Eastern	6.3	611	(79.6)	(46.7)	(31.8)	38
Ashanti	17.1	1,495	56.3	39.5	22.0	255
Western North	14.3	222	51.4	26.7	13.1	32
Ahafo	12.1	186	62.5	43.1	15.5	22
Bono	9.3	277	(59.7)	(20.3)	(23.9)	26
Bono East	13.6	437	56.3	20.2	49.6	59
Oti	27.2	276	76.1	49.5	29.4	75
Northern	21.6	923	61.1	34.5	18.5	199
Savannah	17.2	247	58.9	33.8	14.8	43
North East	22.1	267	70.8	36.8	28.2	59
Upper East	17.3	406	70.9	26.4	34.6	70
Upper West	8.5	242	65.6	29.6	43.6	21
Mother's education						
No education	19.1	1,922	56.9	33.2	22.3	366
Primary	17.0	1,250	54.7	28.1	27.7	213
Secondary	13.7	4,348	56.4	32.0	27.0	596
More than secondary	9.7	794	70.7	46.8	45.2	77
Wealth quintile						
Lowest	20.6	1,966	59.3	28.4	27.4	404
Second	15.7	1,690	62.6	41.6	23.2	265
Middle	14.2	1,614	55.7	29.4	26.9	230
Fourth	13.2	1,584	46.1	29.9	27.2	209
Highest	9.8	1,460	59.3	36.7	31.7	144
Total	15.1	8,315	57.1	32.6	26.9	1,252

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] Includes advice or treatment from the following sources: public sector, private medical sector, nongovernmental organisation medical sector, shop, market, and medicines peddler. Excludes advice or treatment from a traditional practitioner.

Table 10.9 Children with diarrhoea and care seeking for diarrhoea

Percentage of children under age 5 who had diarrhoea in the 2 weeks preceding the survey, and among children with diarrhoea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage with diarrhoea	Number of children	Among children under age 5 with diarrhoea: Percentage for whom advice or treatment was sought[1]	Among children under age 5 with diarrhoea: Number of children with diarrhoea
Age in months				
<6	9.3	850	30.6	79
6–11	16.8	868	52.8	146
12–23	19.2	1,823	49.0	349
24–35	13.1	1,546	55.0	203
36–47	9.3	1,632	46.5	152
48–59	7.8	1,596	62.6	125
Sex				
Male	13.2	4,240	51.1	560
Female	12.1	4,075	50.0	493
Source of drinking water[2]				
Improved	13.4	4,496	52.1	602
Unimproved	10.1	237	50.0	24
Surface	17.4	956	54.6	167
Type of toilet facility[3]				
Improved sanitation facility	11.6	4,864	46.4	565
Unimproved facility	10.6	1,037	54.1	110
Open defecation	15.7	2,414	55.8	379
Residence				
Urban	10.9	4,048	47.3	443
Rural	14.3	4,267	52.9	611
Region				
Western	4.9	515	*	25
Central	15.3	841	35.4	128
Greater Accra	7.0	1,057	(15.6)	74
Volta	9.1	313	(74.6)	29
Eastern	9.2	611	(52.9)	56
Ashanti	16.0	1,495	44.5	240
Western North	11.9	222	44.6	26
Ahafo	9.6	186	55.7	18
Bono	8.1	277	(36.5)	23
Bono East	15.3	437	48.2	67
Oti	14.4	276	69.1	40
Northern	18.8	923	68.7	173
Savannah	22.0	247	59.4	54
North East	18.0	267	59.1	48
Upper East	9.1	406	56.1	37
Upper West	6.4	242	(66.7)	16
Mother's education				
No education	15.8	1,922	57.8	303
Primary	14.7	1,250	46.4	184
Secondary	11.8	4,348	47.1	512
More than secondary	6.8	794	56.6	54
Wealth quintile				
Lowest	15.0	1,966	57.6	294
Second	14.1	1,690	53.8	239
Middle	13.3	1,614	39.7	215
Fourth	12.1	1,584	43.8	191
Highest	7.8	1,460	57.3	114
Total	12.7	8,315	50.5	1,054

Note: Advice or treatment for children with diarrhoea may have been sought from more than one source. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes advice or treatment from the following sources: public sector, private medical sector, nongovernmental organisation medical sector, shop, market, and medicines peddler. Excludes advice or treatment from a traditional practitioner.

[2] See Table 16.1 for definition of categories.

[3] See Table 16.6 for definition of categories.

Table 10.10 Feeding practices during diarrhoea

Percent distribution of children under age 5 who had diarrhoea in the 2 weeks preceding the survey by amount of liquids and food given compared with normal practice, according to background characteristics, Ghana DHS 2022

Background characteristic	Amount of liquids given							Amount of food given								Number of children with diarrhoea
	More	Same as usual	Some-what less	Much less	None	Don't know/ missing	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know/ missing	Total	
Age in months																
<6	15.7	53.0	11.5	10.7	9.2	0.0	100.0	4.5	28.1	16.2	12.7	0.0	38.5	0.0	100.0	79
6–11	17.1	40.2	23.3	18.4	1.0	0.0	100.0	2.4	36.1	27.5	24.1	4.9	5.0	0.0	100.0	146
12–23	23.4	33.8	23.0	18.0	1.9	0.0	100.0	4.3	30.5	32.8	24.6	3.2	4.6	0.0	100.0	349
24–35	28.4	34.4	18.8	16.7	1.8	0.0	100.0	9.1	33.5	26.7	28.6	1.7	0.5	0.0	100.0	203
36–47	27.6	40.0	11.4	19.8	1.1	0.3	100.0	9.4	38.6	23.0	26.4	2.0	0.4	0.3	100.0	152
48–59	21.6	39.6	24.3	10.3	0.8	3.4	100.0	6.9	27.1	34.4	26.3	2.1	0.0	3.4	100.0	125
Sex																
Male	23.7	39.8	19.3	14.5	2.1	0.7	100.0	7.4	32.5	29.4	22.9	2.1	4.8	0.7	100.0	560
Female	22.8	35.5	20.5	19.0	2.1	0.1	100.0	4.4	32.3	27.3	27.1	3.1	5.7	0.1	100.0	493
Breastfeeding status																
Breastfeeding	19.0	36.6	23.5	17.7	3.2	0.0	100.0	4.2	29.5	28.4	22.8	3.9	11.2	0.0	100.0	470
Not breastfeeding	28.4	37.8	16.6	15.9	1.3	0.0	100.0	6.8	35.9	28.8	26.7	1.1	0.7	0.0	100.0	307
Residence																
Urban	22.3	44.2	14.8	14.9	2.8	1.0	100.0	5.2	37.8	23.7	24.3	3.3	4.7	1.0	100.0	443
Rural	24.0	33.1	23.5	17.8	1.6	0.0	100.0	6.6	28.5	31.8	25.3	2.1	5.7	0.0	100.0	611
Region																
Western	*	*	*	*	*	*	100.0	*	*	*	*	*	*	*	100.0	25
Central	20.0	64.4	11.8	2.2	1.6	0.0	100.0	4.6	43.2	32.3	9.7	4.6	5.5	0.0	100.0	128
Greater Accra	(24.4)	(42.9)	(17.0)	(15.8)	(0.0)	(0.0)	100.0	(1.4)	(58.4)	(16.3)	(15.8)	(0.0)	(8.1)	(0.0)	100.0	74
Volta	(24.6)	(39.7)	(11.1)	(24.6)	(0.0)	(0.0)	100.0	(8.0)	(39.4)	(10.2)	(34.2)	(8.2)	(0.0)	(0.0)	100.0	29
Eastern	(21.8)	(41.2)	(20.8)	(16.2)	(0.0)	(0.0)	100.0	(5.6)	(27.3)	(42.0)	(21.7)	(0.0)	(3.4)	(0.0)	100.0	56
Ashanti	28.7	50.1	16.0	3.5	0.0	1.8	100.0	5.9	35.0	37.0	17.2	0.9	2.2	1.8	100.0	240
Western North	19.3	29.5	16.1	25.5	9.6	0.0	100.0	9.6	26.0	17.4	32.5	8.7	5.7	0.0	100.0	26
Ahafo	22.4	23.6	34.3	14.3	5.4	0.0	100.0	10.6	26.1	24.7	20.6	9.9	8.0	0.0	100.0	18
Bono	(10.0)	(59.4)	(21.1)	(9.6)	(0.0)	(0.0)	100.0	(0.0)	(57.5)	(8.3)	(18.4)	(3.8)	(12.0)	(0.0)	100.0	23
Bono East	40.7	19.8	16.2	13.7	9.5	0.0	100.0	8.9	25.3	22.5	25.4	5.1	12.8	0.0	100.0	67
Oti	12.3	27.5	17.6	42.5	0.0	0.0	100.0	3.0	28.7	17.4	41.6	3.3	6.0	0.0	100.0	40
Northern	14.9	18.5	38.2	25.7	2.7	0.0	100.0	5.9	22.4	35.3	32.5	0.8	3.0	0.0	100.0	173
Savannah	25.9	25.2	14.5	33.1	1.3	0.0	100.0	17.0	17.2	17.0	35.9	1.2	11.8	0.0	100.0	54
North East	39.3	26.4	19.9	13.3	1.1	0.0	100.0	9.2	25.7	26.9	29.0	2.0	7.3	0.0	100.0	48
Upper East	22.2	22.2	10.5	40.3	3.7	1.1	100.0	1.1	22.9	13.7	55.2	1.1	4.9	1.1	100.0	37
Upper West	(4.7)	(31.9)	(29.5)	(26.0)	(7.9)	(0.0)	100.0	(0.0)	(28.9)	(28.1)	(23.2)	(10.5)	(9.3)	(0.0)	100.0	16
Mother's education																
No education	21.0	29.2	26.8	21.3	1.7	0.0	100.0	5.9	27.3	29.1	28.7	1.8	7.1	0.0	100.0	303
Primary	26.2	35.9	15.7	17.8	4.2	0.2	100.0	10.2	30.5	28.7	25.3	1.9	3.2	0.2	100.0	184
Secondary	23.2	44.1	17.9	13.4	1.2	0.0	100.0	4.4	37.4	27.0	22.9	3.4	4.9	0.0	100.0	512
More than secondary	26.2	32.7	13.2	15.5	4.7	7.7	100.0	7.3	20.5	37.8	20.2	1.6	4.9	7.7	100.0	54

Continued...

Table 10.10—*Continued*

Background characteristic	Amount of liquids given							Amount of food given								Number of children with diarrhoea
	More	Same as usual	Some-what less	Much less	None	Don't know/ missing	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know/ missing	Total	
Wealth quintile																
Lowest	23.8	22.1	25.5	26.6	2.0	0.0	100.0	7.8	21.8	28.5	32.9	1.9	7.3	0.0	100.0	294
Second	29.5	33.9	19.5	15.2	1.9	0.0	100.0	9.3	27.8	26.1	26.8	3.2	6.9	0.0	100.0	239
Middle	18.2	49.3	19.0	10.6	2.9	0.0	100.0	2.6	42.4	28.4	20.3	3.3	2.9	0.0	100.0	215
Fourth	21.3	51.7	14.3	8.8	1.7	2.2	100.0	5.8	40.0	28.3	15.2	2.8	5.6	2.2	100.0	191
Highest	21.5	41.4	17.2	18.0	1.6	0.4	100.0	1.4	38.0	33.3	24.8	1.5	0.6	0.4	100.0	114
Total	23.3	37.8	19.9	16.6	2.1	0.4	100.0	6.0	32.4	28.4	24.9	2.6	5.2	0.4	100.0	1,054

Note: It is recommended that children be given more liquids to drink during diarrhoea and that food not be reduced. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10.11 Oral rehydration salts, zinc, continued feeding, and other treatments for diarrhoea

Among children under age 5 who had diarrhoea in the 2 weeks preceding the survey, percentage given fluid from an ORS packet or prepackaged ORS fluid; zinc; ORS and zinc; ORS and continued feeding; ORS, zinc, and continued feeding; ORS or increased fluids; recommended homemade fluids (RHF); oral rehydration therapy (ORT); ORT and continued feeding; and other treatments, and percentage given no treatment, according to background characteristics, Ghana DHS 2022

	Percentage of children with diarrhoea who were given:															
Background characteristic	Fluid from ORS packet or pre-packaged ORS liquid	Zinc	ORS and zinc	ORS and continued feeding[1]	ORS, zinc, and continued feeding[1]	ORS or increased fluids	Recom-mended home fluids (RHF)	ORT (ORS, RHF, or increased fluids)	ORT and continued feeding[1]	Antibiotic drugs	Antimotility drugs	Intravenous solution	Home remedy/ other	Don't know	Percentage given no treatment	Number of children with diarrhoea
Age in months																
<6	5.9	18.3	3.6	5.2	3.0	21.2	8.3	27.3	12.8	12.9	0.9	0.0	23.5	0.0	36.9	79
6–11	39.4	32.6	21.9	25.7	13.6	50.1	14.5	56.9	35.5	14.4	3.8	0.0	17.2	0.0	24.6	146
12–23	43.1	35.9	25.3	28.7	16.6	55.6	13.4	60.8	39.1	19.3	4.1	0.2	10.5	0.0	21.4	349
24–35	43.7	41.2	31.0	28.2	19.0	56.3	16.1	61.1	35.9	22.4	3.0	0.2	12.2	0.0	17.5	203
36–47	43.7	36.7	24.6	28.3	14.7	57.2	18.0	61.0	42.9	20.2	3.9	1.4	11.8	0.0	19.2	152
48–59	41.7	34.2	26.1	26.6	15.4	50.6	17.2	52.7	34.3	25.0	6.0	3.3	15.7	3.4	18.2	125
Sex																
Male	42.5	36.9	26.1	29.2	17.1	55.4	16.2	61.3	40.9	20.0	5.3	0.4	11.2	0.7	18.1	560
Female	36.9	33.0	22.3	22.6	13.1	48.2	13.2	51.9	30.4	19.1	2.2	1.1	16.1	0.0	25.6	493
Residence																
Urban	33.2	34.8	21.3	19.7	12.0	47.6	16.2	53.1	31.2	20.6	1.6	0.1	13.0	0.9	24.5	443
Rural	44.6	35.3	26.5	30.8	17.5	55.3	13.8	59.7	39.4	18.8	5.4	1.1	13.9	0.0	19.4	611
Region																
Western	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	25
Central	29.7	27.8	18.3	26.3	14.8	37.0	11.6	41.7	34.6	10.4	4.9	0.0	16.7	0.0	41.2	128
Greater Accra	(16.7)	(18.9)	(12.8)	(12.1)	(8.2)	(41.1)	(6.4)	(47.5)	(28.7)	(7.3)	(0.0)	(0.0)	(8.0)	(0.0)	(46.6)	74
Volta	(52.2)	(56.9)	(45.0)	(24.7)	(22.2)	(61.9)	(31.2)	(61.9)	(29.1)	(32.3)	(8.0)	(0.0)	(0.0)	(0.0)	(14.0)	29
Eastern	(45.6)	(39.0)	(24.7)	(26.0)	(10.7)	(56.7)	(6.9)	(59.2)	(36.3)	(32.2)	(0.0)	(0.0)	(6.4)	(0.0)	(18.7)	56
Ashanti	41.9	31.0	20.3	32.9	14.6	55.2	9.1	58.3	42.8	19.4	3.6	1.4	8.7	1.8	18.1	240
Western North	47.9	43.4	36.2	19.1	14.2	49.5	15.5	53.5	23.1	9.9	6.6	0.0	2.0	0.0	32.0	26
Ahafo	42.7	49.0	38.8	32.5	30.6	49.6	23.5	56.3	36.2	17.8	9.8	0.0	9.8	0.0	26.1	18
Bono	(36.0)	(46.6)	(22.9)	(26.7)	(13.6)	(39.1)	(12.0)	(39.1)	(26.7)	(35.2)	(3.0)	(0.0)	(15.4)	(0.0)	(25.2)	23
Bono East	39.9	44.2	30.8	17.6	14.6	63.3	17.6	66.8	36.1	16.7	1.1	0.0	28.3	0.0	11.0	67
Oti	40.0	37.2	26.8	21.7	13.8	44.4	21.8	49.9	26.6	28.8	18.0	2.3	12.6	0.0	17.9	40
Northern	48.1	37.8	30.8	34.5	24.1	57.5	20.4	65.3	43.6	16.6	2.0	0.5	14.7	0.0	16.7	173
Savannah	32.7	15.0	9.1	20.0	4.7	42.8	6.8	44.1	27.5	30.4	3.6	0.0	15.7	0.0	17.0	54
North East	32.4	42.7	21.4	16.5	10.6	60.4	17.7	65.6	37.1	27.3	5.6	0.0	19.0	0.0	12.3	48
Upper East	56.6	53.4	37.2	18.4	7.6	67.4	18.4	74.9	23.7	25.8	1.7	5.9	20.5	0.0	2.3	37
Upper West	(47.4)	(56.2)	(34.9)	(19.5)	(19.5)	(49.2)	(9.1)	(55.4)	(27.5)	(19.8)	(5.6)	(0.0)	(10.7)	(0.0)	(16.7)	16
Mother's education																
No education	37.5	31.8	20.5	23.8	13.8	48.6	15.2	54.9	32.7	21.0	3.0	1.2	18.2	0.0	16.9	303
Primary	46.5	30.9	24.5	30.8	14.8	60.2	12.8	62.7	42.2	17.2	7.7	0.0	10.7	0.0	21.5	184
Secondary	39.4	37.4	26.6	25.5	15.8	51.4	15.1	56.4	35.0	18.2	3.3	0.8	12.4	0.0	25.8	512
More than secondary	34.8	44.9	23.9	29.2	18.6	50.1	16.5	53.4	41.8	32.2	0.7	0.0	7.8	7.7	7.7	54

Continued...

Table 10.11—*Continued*

Background characteristic	Percentage of children with diarrhoea who were given: Fluid from ORS packet or pre-packaged ORS liquid	Zinc	ORS and zinc	ORS and continued feeding[1]	ORS, zinc, and continued feeding[1]	ORS or increased fluids	Recom-mended home fluids (RHF)	ORT (ORS, RHF, or increased fluids)	ORT and continued feeding[1]	Antibiotic drugs	Antimotility drugs	Intravenous solution	Home remedy/ other	Don't know	Percentage given no treatment	Number of children with diarrhoea
Wealth quintile																
Lowest	42.8	34.0	25.6	25.8	15.5	54.0	15.0	60.1	36.7	16.6	3.5	1.0	18.0	0.0	17.8	294
Second	40.9	29.9	22.2	25.2	13.8	55.3	14.6	60.0	35.2	25.5	3.5	1.6	9.2	0.0	16.4	239
Middle	36.2	35.8	22.5	25.1	13.6	47.1	14.1	49.8	32.4	18.4	3.0	0.0	13.3	0.0	28.1	215
Fourth	40.0	34.0	22.6	29.2	14.6	54.4	14.6	59.4	40.9	19.8	7.0	0.2	11.1	2.2	25.6	191
Highest	36.7	48.9	31.8	25.8	21.4	45.4	16.5	51.3	34.4	16.6	1.7	0.0	15.3	0.0	23.0	114
Total	39.8	35.0	24.3	26.1	15.2	52.0	14.8	56.9	36.0	19.6	3.8	0.7	13.5	0.4	21.6	1,054

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
ORS = oral rehydration salts
[1] Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhoea episode.

Table 10.12 Source of advice or treatment for children with diarrhoea

Percentage of children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources; among children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources; among children with diarrhoea who received ORS, percentage for whom advice or treatment was sought from specific sources; and among children with diarrhoea who were given zinc tablets or syrup, percentage for whom advice or treatment was sought from specific sources, Ghana DHS 2022

	Percentage for whom advice or treatment was sought from each source:			
Source	Among children with diarrhoea	Among children with diarrhoea for whom advice or treatment was sought	Among children with diarrhoea who received ORS[1]	Among children with diarrhoea who were given zinc
Public sector	30.8	50.7	52.0	54.1
Government hospital	9.3	15.3	16.4	19.1
Government polyclinic	1.4	2.3	1.1	0.8
Government health centre	7.1	11.7	11.6	12.8
Government clinic	4.7	7.8	8.5	8.3
CHPS centre/government health post	8.2	13.5	14.2	12.8
Community health service (outreach)	0.4	0.6	0.8	1.0
Private medical sector (non-NGO)	2.9	4.8	3.7	5.7
Private hospital/clinic	1.4	2.3	1.3	2.5
Community health service (mobile clinic)	1.2	2.0	1.6	2.3
Other private medical sector	0.3	0.5	0.8	0.9
Private medical sector (NGO)	0.0	0.0	0.0	0.1
NGO hospital/clinic	0.0	0.0	0.0	0.1
Other private sector	17.7	29.2	21.8	17.5
Shop/market	9.9	16.4	12.5	9.9
Traditional practitioner	0.2	0.3	0.1	0.1
Drug peddler	7.7	12.6	9.5	7.8
Other	2.0	3.3	0.2	1.5
Number of children	1,054	639	420	369

Note: Advice or treatment for children with diarrhoea may have been sought from more than one source.
ORS = oral rehydration salts
CHPS = community-based health planning and services
NGO = nongovernmental organisation
[1] Fluids from ORS packet or prepackaged ORS fluid

NUTRITION OF CHILDREN AND ADULTS 11

Key Findings

- ***Nutritional status of children:*** 17% of children under age 5 are stunted (too short for their age), 6% are wasted (too thin for their height), 12% are underweight (too thin for their age), and 2% are overweight or obese (heavy for their height).
- ***Breastfeeding:*** Among children age 0–23 months, 58% were put to the breast within 1 hour of birth and 81% were exclusively breastfed for the first 2 days after birth; 53% of children under age 6 months are exclusively breastfed.
- ***Complementary feeding:*** 41% of children age 6–23 months received the minimum number of food groups during the day or night preceding the interview, 49% were fed the minimum number of times, and 23% were fed a minimum acceptable diet. 32% of children age 6–23 months were given sweet beverages, 33% were given unhealthy foods, and 32% were not given vegetables or fruits.
- ***Growth monitoring:*** 50% of children under age 5 had their weight measured in the 3 months prior to the survey, while 39% had their height measured.
- ***Anaemia in children and women:*** 49% of children age 6–59 months and 41% of women age 15–49 are anaemic. Anaemia prevalence is 51% among pregnant women and 44% among adolescent girls age 15–19.
- ***Nutritional status of adults:*** 50% of women age 20–49 are overweight or obese, and 5% are thin. Among adolescent girls age 15–19, 14% are overweight or obese and 17% are thin. 21% of men age 20–49 are overweight or obese and 6% are thin. Among adolescent boys age 15–19, 3% are overweight or obese and 42% are thin.

Nutrition is the foundation for the health and development of children and adults. This chapter reports on nutritional status and anaemia among children and adults, infant and young child feeding (IYCF) practices, and women's dietary practices. In addition, the chapter presents key nutrition interventions including infant and young child feeding counselling, child growth monitoring, micronutrient supplementation, deworming for children, and the presence of iodine in household cooking salt. Chapter 9 presents information on nutritional interventions provided during the antenatal period such as maternal nutrition counselling, breastfeeding counselling, deworming, iron-containing supplementation and sources of the supplements, and postnatal breastfeeding counselling and observation. Chapter 10 presents information on child feeding practices during diarrhoea.

11.1 NUTRITIONAL STATUS OF CHILDREN

Anthropometry is commonly used to measure child nutritional status. The anthropometric measurements are used to report on child growth indicators. The distribution of height and weight among children under

age 5 was compared with the WHO Child Growth Standards reference population (WHO 2006). The distribution of a well-nourished population will be similar to that of the reference population, while the distribution of a poorly nourished population will not. The indices height-for-age, weight-for-height, and weight-for-age can be expressed in standard deviation units (*z* scores) from the median of the reference population. Values that are greater than two standard deviations below the median of the WHO Child Growth Standards are used to define malnutrition.

Stunting, or low height-for-age, is a measure of growth faltering. Stunting is a marker of the deficient growth environment to which children have been exposed and reflects the overall well-being of a population (Perumal et al. 2018). Suboptimal nutrition can contribute to stunting, while other causes include recurrent infection, chronic diseases, and more; many of the causes of stunting are complex and unknown (WHO 2014a).

Wasting, or low weight-for-height, is a measure of acute undernutrition. It represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness or infection causing weight loss.

Underweight, or low weight-for-age, is a composite index of weight-for-height and height-for-age. It reflects children who are stunted, wasted, or both.

Overweight, or high weight-for-height, results from an imbalance between energy consumed (too much) and energy expended (too little).

Stunting (assessed via height-for-age)

Height-for-age is a measure of growth faltering. Children whose height-for-age *z* score is below minus two standard deviations (−2 SD) from the median of the reference population are considered short for their age (stunted). Children whose *z* score is below minus three standard deviations (−3 SD) from the median are considered severely stunted.

Sample: Children under age 5

Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute undernutrition. Children whose weight-for-height *z* score is below minus two standard deviations (−2 SD) from the median of the reference population are considered thin (wasted). Children whose *z* score is below minus three standard deviations (−3 SD) from the median are considered severely wasted.

Sample: Children under age 5

Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height that takes into account both wasting and stunting. Children whose weight-for-age *z* score is below minus two standard deviations (−2 SD) from the median of the reference population are classified as underweight. Children whose *z* score is below minus three standard deviations (−3 SD) from the median are considered severely underweight.

Sample: Children under age 5

Overweight (assessed via weight-for-height)

Children whose weight-for-height *z* score is more than two standard deviations (+2 SD) above the median of the reference population are considered overweight.

Sample: Children under age 5

The means of the *z* scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics that represent the nutritional status of children in a population. The mean scores describe the nutritional status of the entire population of children without the use of a cutoff point. A mean *z* score of less than 0 (a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the entire sample population's nutritional status relative to the reference population. The farther away mean *z* scores are from 0, the higher the prevalence of malnutrition.

Child Growth Measures of Malnutrition

Information on anthropometry training, standardisation, and data collection methodology can be found in Chapter 1. Appendix C, **Table C.7** provides the standardisation results. The 2022 GDHS identified a total of 5,045 children under age 5 who were eligible for height and weight measurements (Appendix C, **Table C.8**). During measurements, 1% of children had hairstyles or ornamentation that interfered with height measurement, and less than 1% of children were not minimally dressed or wore heavy permanent ornaments that interfered with weight measurement (Appendix C, **Table C.10**). Valid height-for-age measurements were obtained for 98% of eligible children, valid weight-for-height measurements were obtained for 98% of eligible children, and valid weight-for-age measurements were obtained for 98% of eligible children (Appendix C, **Table C.8**). Appendix C, **Table C.8** provides additional information on the completeness and quality of anthropometry data for children.

Data collection included remeasurement of children as described in Chapter 1. The calculation of final *z* scores was based on the first measurement among children randomly selected for remeasurement, while the calculation of final *z* scores was based on the second measurement among children flagged for remeasurement. The remeasurement completion rate was 99% among those selected for remeasurement. Appendix C, **Table C.9** provides additional information on remeasurement data (WHO and UNICEF 2019).

Table 11.1 shows the nutritional status of children under age 5 according to the three anthropometric indices. Seventeen percent of children under age 5 are stunted, among whom 4% are severely stunted, and 6% are wasted, including 1% who are severely wasted. Twelve percent of children are underweight, and 2% are overweight or obese.

Figure 11.1 **Trends in child growth measures**

Percentage of children under age 5 who are malnourished

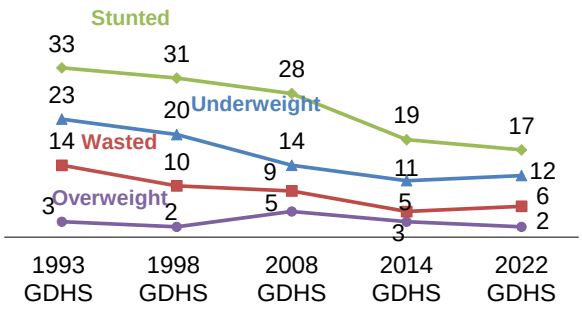
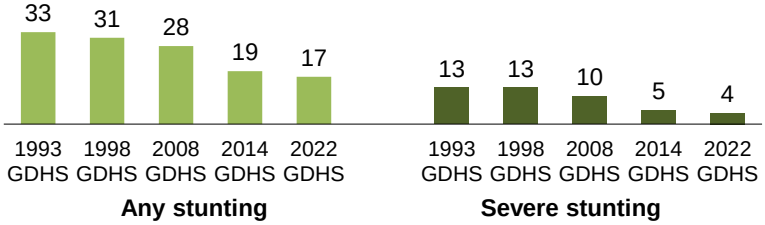


Figure 11.2 **Trends in stunting**

Percentage of children under age 5 who are stunted

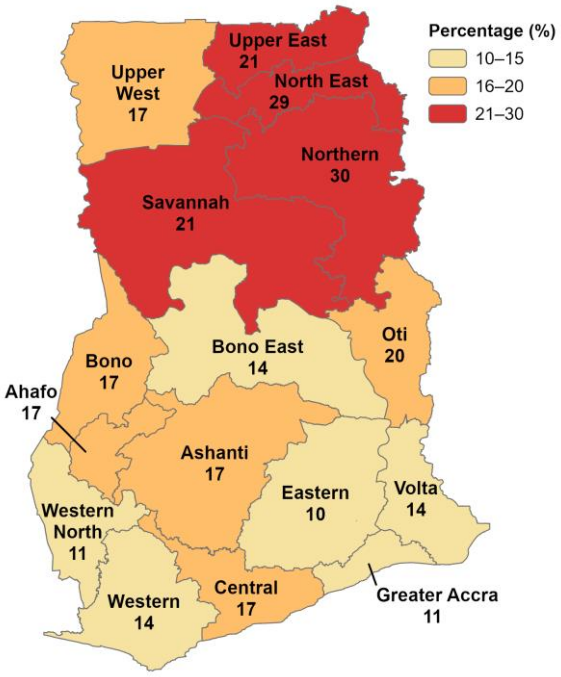


Trends: A comparison of anthropometric measurements from previous GDHS surveys shows that there have been improvements in the nutritional status of children under age 5 in the last 30 years. The prevalence of stunting declined from 33% in 1993 to 17% in 2022 (**Figures 11.1** and **11.2**). The percentage of children who are wasted and underweight followed a similar trend, falling from 14% in 1993 to 6% in 2022 and 23% in 1993 to 12% in 2022, respectively. There have been only minimal changes over time in the percentage of children who are overweight.

There are large disparities in stunting across regions (**Map 11.1**). The prevalence of stunting is highest in the Northern and North East regions (30% and 29%, respectively) and lowest in the Eastern, Western North, and Greater Accra regions (10%, 11%, and 11%, respectively). Similarly, wasting is highest in the Northern region (8%) and lowest in the Western North region (2%) (**Table 11.1**).

Map 11.1 **Stunting in children by region**

Percentage of children under age 5 who are stunted



11.2 Growth Monitoring and Promotion

Growth monitoring and promotion programmes include monitoring children's nutritional status through physical growth measurements and using this information to provide caregivers with counselling and referrals of children whose growth appears abnormal (WHO 2013; WHO 2017a). An important component of growth monitoring is regular measurement of children's weight and length/height. According to the Ghana Growth Monitoring and Promotion schedule for children 0–59 months, children age 0–11 months are expected to have their weight measured every month, while their length is expected to be measured every 3 months. Children age 12–23 months and age 24–59 months are expected to have their weight and length measured every 3 months and every 6 months, respectively. Globally, MUAC measurement is conducted only for children age 6–59 months. In Ghana, MUAC measurements for children are not routinely done during growth monitoring and promotion sessions.

Weight measured in the last 3 months

Percentage of children under age 5 who had their weight measured in the last 3 months.

Weight and height measured in the last 3 months

Percentage of children under age 5 who had their weight and height measured in the last 3 months.

Mid-upper-arm circumference (MUAC) measured in the last 3 months

Percentage of children under age 5 who had their MUAC measured in the last 3 months.

Weight, height, and MUAC measured in the last 3 months

Percentage of children under age 5 who had their weight, height, and MUAC measured in the last 3 months.

Sample: Children under age 5

Fifty percent of children age 0–59 months had a weight measurement taken in the 3 months prior to the survey, 39% had a height measurement taken, and 22% had a MUAC measurement taken (**Table 11.2**).

Overall, 38% of children had height and weight measurements taken, and 21% had all three measurements taken (height, weight, and MUAC).

11.3 Infant and Young Child Feeding Practices

Optimal infant and young child feeding (IYCF) practices are critical to the health and survival of young children. Recommended IYCF practices include early initiation of breastfeeding (within the first hour after birth), exclusive breastfeeding for the first 2 days after birth, exclusive breastfeeding for the first 6 months of life, continued breastfeeding for 2 years or more, and introduction of safe, appropriate, and adequate complementary foods at age 6 months. This section reports on IYCF indicators for children under age 2 (WHO and UNICEF 2021).

11.3.1 Ever Breastfed, Early Initiation of Breastfeeding, and Exclusive Breastfeeding for the First 2 Days after Birth

Breastfeeding supports children's growth and development and also benefits mothers' health. Initiation of breastfeeding within the first hour of birth is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from infections. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, especially through skin-to-skin contact, which facilitates the production of breast milk. Feeding newborns anything other than breast milk in the first 2 days after birth can delay early initiation of breastfeeding and interrupt exclusive breastfeeding and is not recommended unless medically indicated (WHO and UNICEF 2021).

Ever breastfed

Percentage of children born in the last 2 years who were ever breastfed.

Early initiation of breastfeeding

Percentage of children born in the last 2 years who were put to the breast within 1 hour of birth.

Exclusive breastfeeding for the first 2 days after birth

Percentage of children born in the last 2 years who were fed exclusively with breast milk for the first 2 days after birth.

Sample: Children born in the last 2 years

Breastfeeding is nearly universal in Ghana, with 97% of children born in the 2 years preceding the survey ever breastfed (**Table 11.3**). Nearly 6 out of every 10 children (58%) under age 2 were put to the breast within 1 hour of birth, and 81% were exclusively breastfed (given nothing other than breast milk to eat or drink) during the first 2 days after delivery.

Trends: The percentage of children born in the 2 years preceding the survey who have ever been breastfed has remained similar over the last three decades (98% in 1993 and 97% in 2022). Early initiation of breastfeeding has increased steadily over time, from 25% in 1998 to 58% in 2022.

11.3.2 Exclusive Breastfeeding and Mixed Milk Feeding

In the first 6 months, children should be exclusively breastfed; that is, they should be given nothing but breast milk. Exclusive breastfeeding for 6 months lowers the risk of infections that can lead to diarrhoea and respiratory illnesses and provides all of the nutrients and liquid an infant requires for optimal growth and development. Mixed milk feeding, in which children are fed both breast milk and formula or animal milk within the first 6 months, has the adverse effect of reducing breast milk output because the production of breast milk is modulated by the frequency and intensity of suckling. Mixed feeding under age 6 months also can increase children's risk of diarrhoea, alter their intestinal microflora, and lead to early cessation of breastfeeding (WHO and UNICEF 2021).

Exclusive breastfeeding under 6 months

Percentage of children age 0–5 months who were fed exclusively with breast milk during the previous day.

Sample: Youngest children age 0–5 months living with their mother

Mixed milk feeding under 6 months

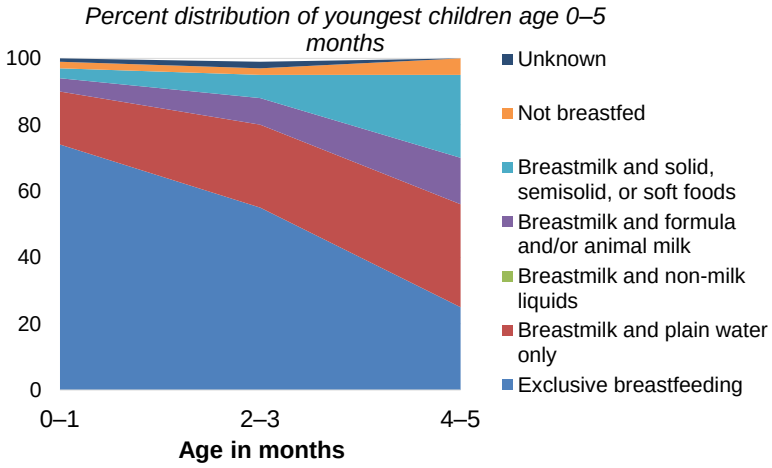
Percentage of children age 0–5 months who were fed both breast milk and formula and/or animal milk during the previous day.

Sample: Youngest children age 0–5 months living with their mother

The 2022 GDHS results show that 53% of children age 0–5 months are exclusively breastfed (**Table 11.4**).

Table 11.5 and **Figure 11.3** show the pattern of how children are fed in the first 6 months. At age 0–1 month, 74% of children are exclusively breastfed as per WHO recommendations (**Table 11.5**) and 25% are not fed according to the recommended guidelines, with 16% receiving breast milk and water only, 4% receiving breast milk and formula and/or animal milk, and 3% receiving breast milk and solid, semisolid, or soft foods. By age 2–3 months, there is a decline in the percentage of children exclusively breastfed and 45% of children are receiving liquids or solid foods other than breast milk. By age 4–5 months, the percentage of children exclusively breastfed declines sharply to 25% and the majority of children are receiving liquids or foods other than breast milk, primarily breast milk and plain water only (32%) and solid, semisolid, or soft foods (24%).

Figure 11.3 **Infant feeding practices by age**



11.3.3 Continued Breastfeeding and Bottle Feeding

Breastfeeding should continue for the first 2 years or beyond because breast milk lowers children's risk of illness, promotes their recovery during illness, and remains an important source of nutrients for healthy growth and development. Longer durations of breastfeeding have many health benefits for women, including reducing risks of certain breast and ovarian cancers and diabetes. The nipple on a feeding bottle is susceptible to contamination and increases the risk of disease among children (WHO and UNICEF 2021). Thus, bottle feeding is not recommended for children under age 2.

Continued breastfeeding

Percentage of children age 12–23 months who were fed breast milk during the previous day.

Sample: Children age 12–23 months

Bottle feeding

Percentage of children age 0–23 months who were fed from a bottle with a nipple during the previous day.

Sample: Children age 0–23 months

Among Ghanian children age 12–23 months, 67% are currently breastfeeding. About one in five children (21%) age 0–23 months are bottle fed (**Table 11.4**).

11.3.4 Introduction of Complementary Foods

After the first 6 months, breast milk alone is no longer sufficient to meet all of the nutritional needs of an infant. After 6 months, appropriate complementary foods should be introduced while breastfeeding is continued until age 2 or older. The transition from exclusive breastfeeding to complementing breastfeeding with family foods is when children are most vulnerable to becoming undernourished. During this time, it is important that children receive solid, semisolid, or soft foods (WHO 2003; WHO and UNICEF 2021).

Introduction of solid, semisolid, or soft foods

Percentage of children age 6–8 months who were fed solid, semisolid, or soft foods during the previous day.

Sample: Youngest children age 6–8 months living with their mother

Overall, 69% of children were introduced to solid, semisolid, or soft foods at age 6–8 months (**Table 11.10**). There has been a small but gradual decline in timely introduction of complementary foods (75% in 2008, 73% in 2014, and 69% in 2022).

11.3.5 Minimum Dietary Diversity, Minimum Meal Frequency, Minimum Milk Feeding Frequency, Minimum Acceptable Diet, and Egg and/or Flesh Food Consumption

Infants and young children should be fed a minimum acceptable diet, which means that they are fed meals with appropriate frequency and a variety of foods to meet their energy and nutrient needs. The minimum acceptable diet indicator is a combination of minimum dietary diversity and minimum meal frequency for breastfeeding children and the same combination along with minimum milk feeding frequency for nonbreastfed children.

Minimum dietary diversity is a proxy for adequate micronutrient density of foods. Consumption of food from at least five groups means that the child has a higher likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food such as grains, roots, or tubers. The five groups should come from a list of eight food groups: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency is a proxy for meeting energy requirements. Breastfed children age 6–8 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least twice a day. Breastfed children age 9–23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least three times a day. Nonbreastfed children age 6–23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods or milk feeds at least four times a day and if at least one of the feeds is a solid, semisolid, or soft food.

Minimum milk feeding frequency is a proxy for meeting the nutrient needs of nonbreastfed children. Milk and milk products are important sources of nutrients. Nonbreastfed children age 6–23 months are considered to be fed with a minimum milk feeding frequency if they receive at least two feeds of milk and/or milk products each day.

Egg and/or flesh food consumption by breastfed and nonbreastfed children age 6–23 months increases energy, protein, and nutrient intake. Eggs, meat, fish, poultry, and organ meats are important sources of nutrients that support healthy child growth (WHO and UNICEF 2021).

Minimum dietary diversity

Percentage of children age 6–23 months who were fed a minimum of five out of eight defined food groups during the previous day. The eight food groups are as follows: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency

Percentage of children age 6–23 months who were fed solid, semisolid, or soft food (including milk feeds for nonbreastfed children) the minimum number of times or more during the previous day.

Minimum milk feeding frequency

Percentage of nonbreastfed children age 6–23 months who were given at least two milk feeds during the previous day.

Minimum acceptable diet

Percentage of children age 6–23 months who were fed a minimum acceptable diet during the previous day. This indicator is a composite of children fed with a minimum dietary diversity and a minimum meal frequency, with the additional requirement that nonbreastfed children are fed with a minimum milk feeding frequency.

Sample: Youngest children age 6–23 months living with their mother

Egg and/or flesh food consumption

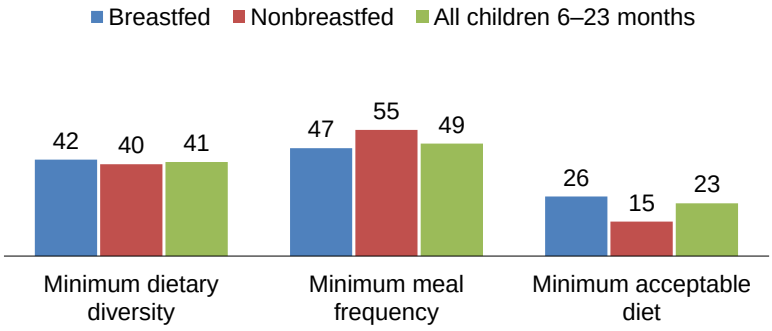
Percentage of children age 6–23 months who were fed eggs and/or flesh food during the previous day.

Sample: Youngest children age 6–23 months living with their mother

Figure 11.4 and **Table 11.8** show that, overall, 41% of children age 6–23 months received the minimum number of food groups during the previous day (minimum dietary diversity); the percentages were similar for breastfed (42%) and nonbreastfed (41%) children. Almost half of all children (49%) age 6–23 months were fed the minimum number of times (minimum meal frequency) (47% of breastfed children and 55% of nonbreastfed children). In addition, 26% of nonbreastfed children received the minimum number of milk feeds. Twenty-three percent of children were fed a minimum acceptable diet (26% of breastfed children but only 15% of nonbreastfed children).

Figure 11.4 **IYCF indicators on minimum acceptable diet by breastfeeding status**

Percentage of children age 6–23 months meeting feeding practice recommendations



Sixty-two percent of children age 6–23 months consumed eggs and/or flesh food (such as meat, fish, poultry, and organ meats) the previous day (**Table 11.9**).

11.3.6 Sweet Beverage Consumption, Unhealthy Food Consumption, and Zero Vegetable or Fruit Consumption among Children

Unhealthy infant and young child feeding practices should be avoided because they can replace nutritious foods that provide important nutrients for children and promote unhealthy weight gain. For infants and young children, consumption of sweet foods and beverages increases the risk of dental caries and obesity in childhood. In addition, too much salt in the diet increases the risk of noncommunicable diseases, and unhealthy fats and refined carbohydrates contribute to unhealthy weight gain. Children consuming diets low in vegetables and fruits have reduced nutrient intakes, which can negatively impact healthy growth and development; low vegetable and fruit consumption is also associated with noncommunicable diseases later in life. The indicator definition below for unhealthy food consumption describes "sentinel unhealthy foods," which are foods high in sugar, salt, and/or unhealthy fats that are commonly consumed by infants and young children (WHO and UNICEF 2021).

Sweet beverage consumption

Percentage of children age 6–23 months who were given a sweet beverage during the previous day.

Unhealthy food consumption

Percentage of children age 6–23 months who were fed sentinel unhealthy foods during the previous day.

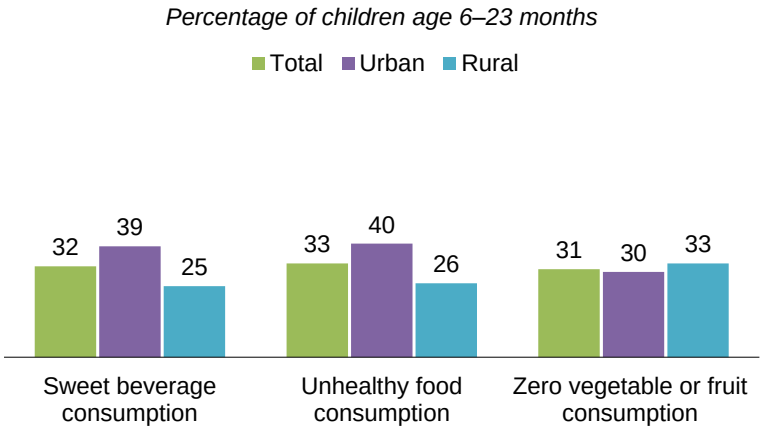
Zero vegetable or fruit consumption

Percentage of children age 6–23 months who were not fed any vegetables or fruits during the previous day.

Sample: Youngest children age 6–23 months living with their mother

Table 11.9 shows the percentage of children age 6–23 months with unhealthy feeding practices. Thirty-two percent of children consumed a sweet beverage, 33% consumed unhealthy foods, and 31% did not consume any vegetables or fruits during the previous day or night. **Figure 11.5.** shows that sweet beverage consumption and unhealthy food consumption among children age 6–23 months are higher in urban areas (39% and 40%, respectively) than in rural areas (25% and 26%, respectively). Conversely, the percentage of children who consumed no vegetables or fruits is similar in urban and rural areas (30% and 33%, respectively).

Figure 11.5 **Unhealthy feeding practices among children age 6–23 months by residence**



11.3.7 Infant and Young Child Feeding (IYCF) Indicators

Table 11.10 summarises all 16 WHO-UNICEF IYCF indicators.

11.4 Infant and Young Child Feeding Counselling

IYCF counselling helps support appropriate breastfeeding and complementary feeding practices (WHO 2003; WHO 2018). Counselling is an interactive process that helps empower mothers and caregivers to follow the recommended IYCF practices. Counselling can take place in health facilities and the community and is delivered by trained health providers, community health workers, and others in the community.

In Ghana, it is recommended that mothers of children age 0–23 months receive IYCF counselling from a health care worker or volunteer every 3 months.

Mothers who received IYCF counselling in the last 6 months

Percentage of mothers with children age 6–23 months who received IYCF counselling in the last 6 months from a health care provider or community health worker.

Sample: Women whose youngest child age 6–23 months is living with them

Table 11.11 shows that half (50%) of mothers of children age 0–23 months received IYCF counselling in the 6 months preceding the survey. The percentage of mothers who received IYCF counselling is higher in urban areas (53%) than in rural areas (46%).

11.5 Anaemia Prevalence in Children

Anaemia is a condition characterised by insufficient haemoglobin, a protein responsible for transporting oxygen in the blood (Chaparro and Suchdev 2019). In children, anaemia can impair cognitive development and is associated with long-term health consequences. When anaemia is severe, it can cause death (Chaparro and Suchdev 2019).

Anaemia in children

Anaemia status	Haemoglobin level in grams/decilitre*
Anaemic	<11.0
Mildly anaemic	10.0–10.9
Moderately anaemic	7.0–9.9
Severely anaemic	<7.0
Not anaemic	≥11.0

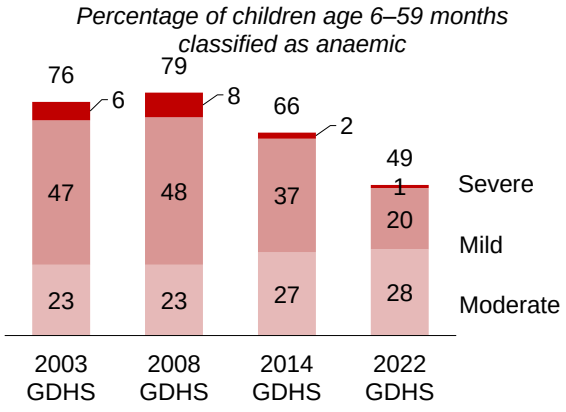
* Haemoglobin levels are adjusted for altitude in enumeration areas above 1,000 metres.

Sample: Children age 6–59 months

Overall, nearly half of children age 6–59 months (49%) are anaemic; 1% are severely anaemic, 28% are mildly anaemic, and 20% are moderately anaemic (**Table 11.12**).

Trends: There has been a 36 percentage point decline in the prevalence of anaemia among children age 6–59 months since 2003 (**Figure 11.6**).

Figure 11.6 **Trends in childhood anaemia**



11.6 Micronutrient Supplementation and Deworming among Children

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrient deficiency can be caused by a lack of consumption of foods that supply vitamins and minerals, as well as by infections and genetic abnormalities. Strategies to prevent or address micronutrient deficiency include agricultural approaches such as biofortification, food-based approaches that can be complemented with food fortification, and, for specific life stages and population groups, direct micronutrient supplementation (USAID 2019).

Iron is a micronutrient that plays an important role in numerous biological systems. Iron deficiency is one of the primary causes of anaemia. Interventions targeting iron deficiency and anaemia include periodically giving children iron tablets or syrup and/or iron-containing micronutrient powders (WHO 2011a; WHO 2016a; WHO 2016b).

Vitamin A is a micronutrient that supports the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency can cause eye damage, increase the severity of infections such as those causing measles, and slow recovery from illness. Vitamin A supplementation programmes help reduce vitamin A deficiency and mortality in children (WHO 2011b).

Soil-transmitted helminth infections can cause internal bleeding, inflammation, impaired nutrient absorption, diarrhoea, vomiting, and loss of appetite. Deworming programmes help reduce the burden of helminth infections (WHO 2017b). In Ghana, deworming is recommended for children age 2 and above.

Iron-containing supplements

Percentage of children age 6–59 months who were given iron-containing supplements in the last 12 months, including tablets, syrup, or micronutrient powders.

Sample: Children age 6–59 months

Vitamin A supplements

Percentage of children age 6–59 months who were given vitamin A supplements in the last 6 months.

Sample: Children age 6–59 months

Deworming medication

Percentage of children age 12–59 months who were given deworming medication in the last 6 months.

Sample: Children age 12–59 months

Table 11.13 shows that 51% of children age 6–59 months received iron-containing supplements in the 12 months prior to the survey. Seventy-five percent of children were given vitamin A supplements and 46% were given deworming medication in the past 6 months.

11.7 Adults' Nutritional Status

Chronic energy deficiency is caused by eating too little or having an unbalanced diet that lacks adequate nutrients. Women of reproductive age (age 15–49) are especially vulnerable to chronic energy deficiency and malnutrition due to low dietary intakes, inequitable distribution of food within the household, improper food storage and preparation, dietary taboos, infectious diseases, and inadequate care practices. Chronic energy deficiency leads to low productivity among adults and greater morbidity and mortality (WHO 1995). In addition, undernutrition among women is a major risk factor for adverse birth outcomes. Overweight and obesity have adverse health outcomes as well. Overweight and obesity are major risk factors for several chronic diseases, including diabetes, cardiovascular diseases, and cancer.

Body mass index (BMI) is the ratio of weight relative to height squared; it is used to measure nutritional status in adults age 20–49. BMI values are independent of age and sex. Adult women age 20–49 whose height is less than 145 centimetres are classified as being of short stature.

BMI-for-age, the ratio of weight relative to height for different age groups, is used to measure nutritional status among children and adolescents age 5–19 (WHO 2007). BMI-for-age is sex and age specific. The reason is that adolescents are still growing and the timing of peak growth velocity differs in boys and girls.

In the DHS surveys, BMI-for-age is reported among adolescents age 15–19. Similarly, short stature among adolescent women (age 15–19) is assessed according to low height-for-age.

Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in metres squared (kg/m^2).

Adult status	BMI
Too thin for height	Less than 18.5
Normal	Between 18.5 and 24.9
Overweight	Between 25.0 and 29.9
Obese	Greater than or equal to 30.0

Sample: Women age 20–49 who are not pregnant and who have not had a birth in the 2 months before the survey and men age 20–49

BMI-for-age

BMI-for-age is measured in *z* score standard deviations (SD).

Adolescent status	BMI-for-age
Too thin for height	Less than −1 SD
Normal	Between −1 SD and +1 SD
Overweight	Between +1 SD and +2 SD
Obese	Greater than +2 SD

Sample: Women age 15–19 who are not pregnant and who have not had a birth in the 2 months before the survey and men age 15–19

Short stature

Percentage of women age 20–49 with height under 145 cm.

Sample: Women age 20–49

Percentage of women age 15–19 with height-for-age *z* score less than −2 SD.

Sample: Women age 15–19

11.7.1 Nutritional Status of Women

Height and weight data were collected for 7,676 eligible women age 15–49 (Appendix C, **Table C.6**). During measurements, 8.8% of women had hairstyles or ornamentation that interfered with height measurement, and 1.4% of women were not wearing lightweight clothing or wore heavy permanent ornaments that interfered with weight measurement (Appendix C, **Table C.11**).

Among women age 20–49, data on height and weight were used to calculate two measures of nutritional status: height and BMI. **Table 11.14.1** shows that less than 1% of women age 20–49 are shorter than 145 cm. In Ghana, overweight and obesity in women are of greater concern than thinness. A total of 5% of women are thin, with 4% being mildly thin and 1% being moderately or severely thin. Conversely, half of women (50%) are overweight or obese, with 28% being overweight and 22% being obese (**Table 11.14.1**). Among adolescent women age 15–19, data on height, weight, and age were used to calculate two measures of nutritional status: height-for-age and BMI-for-age. Overall, 4% of adolescent women are short for their age (height-for-age below −2 SD), 17% are thin (with 2% being moderately or severely thin), and 14% are overweight or obese (**Table 11.14.2**).

11.7.2 Nutritional Status of Men

Height and weight data were collected for 6,166 eligible men age 15–49 (Appendix C, **Table C.6** and **Table C.11**). Among men age 20–49, data on height and weight were used to calculate BMI. **Table**

11.14.3 shows that only 6% of men are thin, with 1% being moderately or severely thin. Conversely, 21% of men are overweight or obese, with 17% being overweight and 4% being obese (**Table 11.14.3**).

Among adolescent men age 15–19, data on height, weight, and age were used to calculate BMI-for-age. The 2022 GDHS results show that 42% of adolescent men are thin (with 10% being moderately or severely thin) and 3% are overweight or obese (**Table 11.14.4**).

11.8 Women's Dietary Practices

Dietary practices that support a healthy diet include eating a variety of different foods and food groups and limiting consumption of sugary beverages and unhealthy foods. Eating a variety of unprocessed foods helps women consume the appropriate amount of essential vitamins and minerals. A healthy diet also protects against overweight, obesity, and noncommunicable diseases.

Minimum dietary diversity for women is an indicator of diet diversity validated for nonpregnant women age 15–49. The indicator is based on 10 food groups: grains, white/pale starchy roots, tubers, and plantains; pulses (beans, peas, and lentils); nuts and seeds; dairy (milk and milk products); flesh foods (meat, fish, poultry, and organ meat); eggs; dark green leafy vegetables; vitamin-A rich fruits and vegetables; other vegetables; and other fruits. Women who consumed at least five of the 10 possible food groups in the 24 hours before the survey were classified as having minimally adequate dietary diversity. Deficiencies in micronutrients such as iron, iodine, vitamin A, folate, and zinc can have devastating consequences for the human body. Women, particularly those of childbearing age, are especially vulnerable due to their greater needs for essential vitamins and minerals. Having minimally adequate dietary diversity is important for micronutrient adequacy (FAO 2021).

Unhealthy foods and sweet beverages should be limited because they are associated with overweight, obesity, and noncommunicable diseases (Askari et al. 2020). Overweight and obesity among women can affect reproductive health and increase complications in pregnancy (Mitchell and Shaw 2015). The indicator for unhealthy food consumption describes "sentinel unhealthy foods," which are fried foods or foods high in sugar, salt, and/or unhealthy fats that are commonly consumed by women (FAO 2021).

Minimum dietary diversity for women

Percentage of women who consumed foods from at least five out of 10 defined food groups during the previous day. The 10 food groups are as follows: grains, white/pale starchy roots, tubers, and plantains; pulses (beans, peas, and lentils); nuts and seeds; dairy (milk and milk products); flesh foods (meat, fish, poultry, and organ meat); eggs; dark green leafy vegetables; vitamin-A rich fruits and vegetables; other vegetables; and other fruits.

Sample: Women age 15–49

Sweet beverage consumption

Percentage of women who consumed sweet beverages during the previous day.

Sample: Women age 15–49

Unhealthy food consumption

Percentage of women who consumed selected sentinel unhealthy foods during the previous day.

Sample: Women age 15–49

Table 11.15 shows that commonly consumed foods are foods made from grains (93%); meat, fish, poultry, and organ meats (94%); and dark green leafy vegetables (81%).

Table 11.16 shows that half of women (50%) consumed five out of the 10 selected food groups during the previous day. Thirty-seven percent consumed sweet beverages and 28% consumed unhealthy foods within the same period.

11.9 Anaemia Prevalence in Adults

Anaemia in adults can cause fatigue, lethargy, reduced physical productivity, and poor work performance (Chaparro and Suchdev 2019). Anaemia is a major concern among pregnant women because it can lead to increased maternal mortality and poor birth outcomes (Haider et al. 2013).

Haemoglobin levels below which women and men are considered anaemic

Respondents	Haemoglobin level in grams/decilitre*
Nonpregnant women age 15–49	Less than 12.0
Pregnant women age 15–49	Less than 11.0
Men age 15–49	Less than 13.0

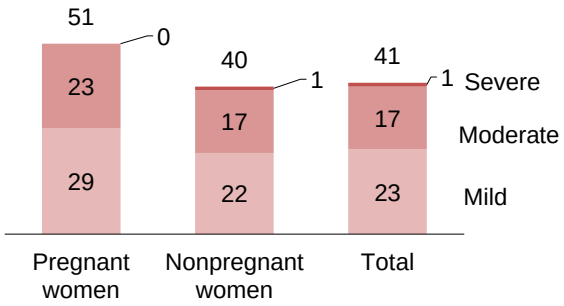
* Haemoglobin levels are adjusted for cigarette smoking and for altitude in enumeration areas above 1,000 metres.

Sample: Women and men age 15–49

The 2022 GDHS results show that anaemia among women age 15–49 is of severe public health importance. Forty-one percent of women are anaemic; 23% are mildly anaemic, 17% are moderately anaemic, and 1% are severely anaemic (**Table 11.17** and **Figure 11.7**).

Figure 11.7 **Anaemia in pregnant and nonpregnant women**

Percentage of women age 15–49 classified as anaemic



11.10 Presence of Iodised Salt in Households

Iodine is a micronutrient that plays an important role in thyroid function, which is critical for reproductive function, growth, and development. It is recommended that household salt be fortified with iodine. Sufficient iodine prevents goitre, brain damage, and other thyroid-related health problems (WHO 2014b). In Ghana, all salt is expected to be fortified with potassium iodate in compliance with Part Seven, Section 107 of the Public Health Act 2012 (Act 851) (FDA 2014).

Household salt iodisation

Percentage of households with iodised salt.

Sample: Households in which salt was tested for iodine content

Table 11.18 shows that 80% of households have iodised salt. This is an increase from 2003 (42%).

LIST OF TABLES

For more information on nutrition of children and adults, see the following tables:

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to 3 anthropometric indices of child growth: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Ghana DHS 2022

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age			
	Percentage below −3 SD	Percentage below −2 SD[2]	Mean *z* score (SD)	Number of children	Percentage below −3 SD	Percentage below −2 SD[2]	Percentage above +2 SD	Mean *z* score (SD)	Number of children	Percentage below −3 SD	Percentage below −2 SD[2]	Mean *z* score (SD)	Number of children
Age in months													
<6	5.7	13.2	−0.6	428	2.6	4.6	8.2	0.2	420	2.2	7.5	−0.3	430
6–11	4.4	11.5	−0.6	430	2.3	10.4	2.1	−0.5	430	2.6	14.4	−0.8	430
12–23	4.5	17.2	−1.0	920	1.7	9.0	1.6	−0.6	921	3.6	15.9	−0.9	920
24–35	5.4	24.6	−1.2	813	1.0	6.3	1.3	−0.4	816	3.2	14.0	−0.9	815
36–47	3.6	18.8	−1.0	869	0.3	2.2	1.1	−0.4	870	1.6	10.5	−0.9	870
48–59	2.5	14.2	−0.8	833	0.6	4.5	0.6	−0.4	834	1.1	9.9	−0.8	833
0–23	4.8	14.9	−0.8	1,778	2.1	8.3	3.3	−0.4	1,771	3.0	13.5	−0.7	1,781
24–59	3.8	19.2	−1.0	2,515	0.6	4.3	1.0	−0.4	2,520	2.0	11.4	−0.9	2,518
Sex													
Male	5.2	19.4	−1.0	2,192	1.5	6.7	2.0	−0.4	2,197	2.5	14.1	−0.8	2,198
Female	3.2	15.3	−0.9	2,101	0.9	5.2	1.9	−0.4	2,094	2.3	10.4	−0.8	2,100
Birth interval in months[3]													
First birth[4]	6.5	20.2	−1.1	841	1.3	6.2	2.0	−0.4	838	3.0	13.1	−0.9	843
<24	4.6	17.5	−0.9	566	1.6	5.8	2.5	−0.3	569	2.4	11.1	−0.7	566
24–47	3.7	17.9	−1.0	1,436	0.9	6.9	2.0	−0.4	1,433	2.6	13.5	−0.9	1,440
48+	3.3	12.8	−0.7	1,027	1.5	5.5	2.4	−0.4	1,027	2.0	10.4	−0.7	1,027
Size at birth[3,5]													
Very small	16.8	33.2	−1.5	105	2.6	10.3	1.4	−0.7	106	9.4	31.5	−1.5	106
Small	8.2	26.3	−1.4	212	5.3	14.4	1.9	−0.7	212	7.4	28.6	−1.4	213
Average or larger	4.1	16.1	−0.9	2,126	1.4	7.1	2.9	−0.3	2,121	2.3	11.3	−0.7	2,129
Don't know	*	*	*	7	*	*	*	*	7	*	*	*	7
Mother's interview status													
Interviewed	4.3	17.0	−0.9	3,870	1.3	6.2	2.1	−0.4	3,868	2.5	12.2	−0.8	3,876
Not interviewed but in household	1.7	21.4	−1.1	76	0.7	3.1	0.3	−0.3	76	1.5	12.2	−0.8	76
Not interviewed and not in the household[6]	3.1	21.1	−1.0	347	0.7	3.6	0.3	−0.3	346	1.8	13.1	−0.8	347
Mother's age[3]													
<20	9.7	25.6	−1.2	334	1.7	6.5	2.0	−0.5	334	3.9	17.5	−1.0	334
20–34	4.0	16.6	−1.0	2,764	1.0	6.1	2.3	−0.4	2,761	2.5	11.9	−0.8	2,768
35–49	3.4	14.7	−0.8	772	1.9	6.3	1.8	−0.4	774	1.7	11.1	−0.7	774
Mother's nutritional status[7]													
Thin	8.0	26.7	−1.4	165	3.3	12.1	0.0	−1.0	165	7.9	22.4	−1.4	165
Normal	4.8	19.8	−1.1	1,670	1.7	8.1	1.5	−0.5	1,672	3.0	14.9	−1.0	1,670
Overweight/obese	3.7	12.9	−0.7	1,490	0.4	4.3	2.5	−0.3	1,485	1.6	9.8	−0.6	1,492
Residence													
Urban	3.4	15.1	−0.8	2,096	0.8	5.8	2.3	−0.4	2,092	2.0	11.2	−0.7	2,101
Rural	5.0	19.6	−1.1	2,197	1.6	6.1	1.7	−0.4	2,199	2.8	13.3	−0.9	2,198

Continued...

Table 11.1—*Continued*

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age			
	Percentage below −3 SD	Percentage below −2 SD[2]	Mean *z* score (SD)	Number of children	Percentage below −3 SD	Percentage below −2 SD[2]	Percentage above +2 SD	Mean *z* score (SD)	Number of children	Percentage below −3 SD	Percentage below −2 SD[2]	Mean *z* score (SD)	Number of children
Region													
Western	3.1	13.5	−0.9	262	0.0	5.3	2.1	−0.4	264	1.2	9.9	−0.8	264
Central	4.5	16.5	−0.9	440	0.4	6.8	2.7	−0.5	440	2.3	12.0	−0.8	440
Greater Accra	1.6	11.4	−0.7	528	0.8	4.7	1.8	−0.3	525	1.0	8.5	−0.5	530
Volta	1.8	14.4	−0.9	165	1.2	7.4	2.5	−0.5	165	1.8	13.1	−0.8	165
Eastern	3.0	10.4	−0.7	334	0.5	4.3	2.3	−0.3	334	1.5	11.0	−0.7	334
Ashanti	4.2	17.2	−0.8	784	3.2	7.7	2.4	−0.4	782	3.7	10.9	−0.7	784
Western North	1.7	10.6	−0.8	102	0.4	1.8	1.8	−0.3	103	0.9	7.5	−0.6	102
Ahafo	4.7	16.5	−1.0	98	1.0	4.2	4.3	−0.2	98	2.3	8.0	−0.7	98
Bono	5.2	17.0	−0.9	136	0.0	4.0	3.9	−0.3	135	1.7	11.0	−0.8	136
Bono East	2.6	13.9	−0.8	208	0.2	5.1	0.9	−0.4	207	0.6	11.1	−0.7	208
Oti	3.3	20.3	−1.2	134	0.7	7.3	0.3	−0.5	134	3.0	15.5	−1.0	134
Northern	8.8	29.6	−1.4	477	1.5	7.8	0.7	−0.6	480	3.7	19.9	−1.2	477
Savannah	4.4	21.0	−1.2	128	0.9	4.4	2.1	−0.3	128	1.2	14.0	−0.9	128
North East	8.8	29.3	−1.4	148	1.9	6.8	0.8	−0.5	148	4.7	20.4	−1.2	148
Upper East	4.9	21.1	−1.2	212	0.3	3.2	2.3	−0.3	213	3.1	12.7	−0.9	213
Upper West	2.7	16.5	−1.0	137	2.0	6.4	1.2	−0.4	137	3.6	11.4	−0.8	137
Mother's education[8]													
No education	4.9	24.4	−1.2	948	1.1	7.1	1.2	−0.5	953	3.2	16.1	−1.0	951
Primary	4.5	18.5	−1.1	582	1.6	8.5	1.3	−0.5	582	2.2	13.5	−1.0	582
Secondary	4.4	15.3	−0.9	2,058	1.4	5.2	2.4	−0.4	2,054	2.6	11.0	−0.8	2,060
More than secondary	1.5	5.7	−0.4	359	0.3	5.5	3.8	−0.2	355	0.3	6.5	−0.3	359
Wealth quintile													
Lowest	6.0	22.8	−1.2	1,002	1.6	5.8	1.4	−0.4	1,003	3.2	14.3	−1.0	1,002
Second	5.5	22.0	−1.2	890	1.9	7.8	1.3	−0.5	890	2.9	16.1	−1.0	891
Middle	4.1	16.9	−1.0	808	0.1	4.7	2.3	−0.4	808	1.8	11.8	−0.8	812
Fourth	3.0	15.5	−0.8	835	1.6	6.2	1.9	−0.4	833	2.9	11.8	−0.8	835
Highest	1.7	7.5	−0.4	758	0.7	5.0	3.3	−0.2	757	0.9	6.2	−0.4	758
Total	4.2	17.4	−0.9	4,293	1.2	6.0	2.0	−0.4	4,291	2.4	12.3	−0.8	4,299

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Recumbent length is measured for children under age 2; standing height is measured for all other children.
[2] Includes children who are below −3 standard deviations (SD) from the WHO Child Growth Standards population median
[3] Excludes children whose mothers were not interviewed
[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.
[5] Information available only for children age 0–35 months
[6] Includes children whose mothers are deceased
[7] Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status is defined using body mass index (BMI) for mothers age 20–49 and BMI-for-age for mothers age 15–19 (as presented in Tables 11.14.1 and 11.14.2).
[8] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 11.2 Child growth monitoring

Percentage of children under age 5 who had selected measurements performed by a health care provider in the 3 months preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Weight	Height	Mid-upper-arm circumference (MUAC)	Weight and height	Weight, height, and MUAC	Number of children
Age in months						
<6	74.2	56.4	31.9	55.7	31.2	850
6–11	86.0	66.0	34.3	65.0	33.7	868
12–23	71.4	54.0	28.9	53.4	27.6	1,823
24–35	41.9	34.4	21.4	34.1	20.4	1,546
36–47	27.4	20.9	12.1	20.5	11.0	1,632
48–59	22.0	18.0	10.7	17.6	9.4	1,596
0–23	75.7	57.5	30.9	56.8	30.0	3,541
24–59	30.3	24.3	14.7	23.9	13.5	4,774
Sex						
Male	49.6	38.7	22.2	38.3	21.1	4,240
Female	49.6	38.2	20.9	37.5	19.9	4,075
Mother's age						
15–19	49.4	40.3	21.2	38.7	19.6	795
20–29	50.2	38.7	22.2	38.3	21.3	4,010
30–39	49.1	37.8	20.8	37.3	19.7	3,034
40–49	47.9	37.5	22.2	37.2	20.5	476
Residence						
Urban	45.6	35.7	20.3	35.2	19.2	4,048
Rural	53.4	41.1	22.8	40.5	21.8	4,267
Region						
Western	43.1	35.3	23.2	34.9	21.5	515
Central	50.3	33.0	6.8	32.9	6.1	841
Greater Accra	36.3	26.9	13.6	26.5	13.1	1,057
Volta	61.5	53.3	25.0	53.0	24.3	313
Eastern	48.3	35.1	21.4	34.6	20.7	611
Ashanti	44.0	30.9	11.8	29.9	10.9	1,495
Western North	58.4	55.3	33.6	54.7	32.7	222
Ahafo	52.4	42.1	13.5	41.6	13.2	186
Bono	64.3	44.5	33.3	43.4	30.7	277
Bono East	56.4	50.5	27.5	50.1	27.3	437
Oti	63.6	54.9	34.8	54.5	33.3	276
Northern	41.3	34.1	24.5	33.6	23.5	923
Savannah	51.7	46.5	32.1	46.2	31.3	247
North East	61.8	44.0	34.0	43.1	32.7	267
Upper East	75.2	60.6	54.4	60.3	50.5	406
Upper West	59.5	50.2	26.3	49.6	25.1	242
Mother's education						
No education	46.5	38.2	24.7	37.8	23.5	1,922
Primary	47.4	35.8	20.6	35.5	19.4	1,250
Secondary	51.2	38.9	20.4	38.2	19.4	4,348
More than secondary	51.9	41.1	22.0	40.5	21.1	794
Wealth quintile						
Lowest	52.0	42.7	26.2	42.1	25.0	1,966
Second	53.4	41.4	24.3	40.8	23.4	1,690
Middle	48.8	35.3	20.6	34.8	19.3	1,614
Fourth	46.2	33.6	16.7	33.2	15.6	1,584
Highest	46.5	38.2	18.7	37.7	17.8	1,460
Total	49.6	38.5	21.6	37.9	20.5	8,315

Note: "Height" refers to length (recumbent measurement) or height (standing measurement).

Table 11.3 Early breastfeeding

Percentage of children born in the last 2 years who were ever breastfed, percentage who were put to the breast within 1 hour of birth, and percentage who were exclusively breastfed for the first 2 days after birth, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage ever breastfed	Percentage put to the breast within 1 hour of birth	Percentage exclusively breastfed for the first 2 days after birth[1]	Number of children born in the last 2 years
Sex				
Male	96.6	57.3	80.3	1,889
Female	96.9	59.1	82.2	1,749
Breastfeeding counselling during ANC[2]				
Counselled	97.1	58.8	82.1	3,054
Not counselled/don't know	97.3	56.7	81.6	374
Did not receive ANC	90.5	51.5	67.1	209
Assistance at delivery				
Health personnel[3]	96.9	59.5	81.1	3,185
Traditional birth attendant	96.5	55.5	82.9	260
Other	96.5	44.6	85.5	106
No one	94.1	33.3	75.9	87
Place of delivery				
Health facility	97.0	59.4	81.2	3,137
At home	95.3	50.9	81.4	469
Other	(97.9)	(46.5)	(75.2)	31
Type of delivery				
Vaginal birth	97.3	65.4	84.5	2,882
Caesarean section	94.8	30.6	68.6	755
Breastfeeding counselling during PNC[2,4]				
Counselled	97.8	56.9	81.6	2,648
Not counselled/don't know	94.9	63.6	83.6	843
Breastfeeding observation during PNC[2,4]				
Observed	98.1	56.9	81.8	2,506
Not observed/don't know	94.6	62.7	82.9	985
Residence				
Urban	96.5	56.4	79.8	1,700
Rural	97.0	59.7	82.5	1,938
Region				
Western	96.8	65.0	80.4	212
Central	97.1	51.5	77.1	380
Greater Accra	98.7	43.8	74.2	427
Volta	98.9	68.4	88.9	135
Eastern	97.0	48.3	81.5	252
Ashanti	94.0	61.2	78.3	666
Western North	96.8	64.0	61.2	101
Ahafo	94.9	43.9	68.0	81
Bono	97.8	63.5	90.0	117
Bono East	97.6	70.6	88.4	202
Oti	97.0	65.1	91.3	128
Northern	96.5	56.5	85.5	406
Savannah	95.5	63.3	94.1	111
North East	98.9	66.8	86.5	116
Upper East	97.4	66.4	80.4	196
Upper West	98.2	61.2	92.6	109
Mother's education				
No education	97.1	61.6	85.9	761
Primary	97.1	58.2	83.7	562
Secondary	96.2	57.5	79.6	1,979
More than secondary	98.4	54.3	75.8	336

Continued...

Table 11.3—*Continued*

Background characteristic	Percentage ever breastfed	Percentage put to the breast within 1 hour of birth	Percentage exclusively breastfed for the first 2 days after birth[1]	Number of children born in the last 2 years
Wealth quintile				
Lowest	97.9	60.6	83.5	896
Second	95.3	62.4	84.1	749
Middle	95.7	59.1	83.5	730
Fourth	97.8	56.4	80.1	668
Highest	96.9	50.1	72.7	595
Total	96.8	58.2	81.2	3,638

Note: Table is based on children born in the 2 years preceding the survey regardless of whether the children were living or dead at the time of the interview. Figures in parentheses are based on 25–49 unweighted cases.
ANC = antenatal care
PNC = postnatal care
[1] Children given nothing other than breast milk to eat or drink during the first 2 days after delivery
[2] Information available for the most recent live birth only
[3] Skilled provider includes doctor and midwife/nurse (community health nurse, community health officer, enrolled nurse, public health nurse, or general nurse).
[4] Women were asked about counselling on breastfeeding by any health care provider in the first 2 days after their most recent live birth regardless of where they gave birth.

Table 11.4 Breastfeeding status according to age

Among youngest children age 0–5 months living with their mother, percentage exclusively breastfeeding and percentage receiving mixed milk feeding; among all children age 12–23 months, percentage currently breastfeeding; and among all children age 0–23 months, percentage using a bottle with a nipple, according to background characteristics, Ghana DHS 2022

Background characteristic	Among youngest children age 0–5 months living with their mother:			Among all children age 12–23 months:		Among all children age 0–23 months:	
	Percentage exclusively breast-feeding	Percentage receiving mixed milk feeding[1]	Number of children	Percentage currently breast-feeding[2]	Number of children	Percentage using a bottle with a nipple	Number of children
Age in months							
0–1	74.1	5.9	304	na	na	13.4	311
2–3	55.3	11.6	260	na	na	20.3	270
4–5	25.0	27.4	262	na	na	28.1	269
6–11	Na	Na	na	na	na	27.6	868
12–15	Na	Na	na	89.2	588	24.9	588
16–19	Na	Na	na	69.9	681	17.2	681
20–23	Na	Na	na	40.5	553	12.5	553
Sex							
Male	51.0	16.3	461	67.1	928	20.4	1,841
Female	54.6	12.3	365	67.3	895	21.8	1,699
Residence							
Urban	48.9	19.0	367	61.0	858	25.7	1,651
Rural	55.5	11.0	459	72.8	965	16.9	1,890
Region							
Western	(37.6)	(23.7)	42	61.0	112	27.6	207
Central	(40.5)	(19.1)	79	52.2	193	21.6	367
Greater Accra	(42.9)	(30.7)	110	50.1	207	27.0	416
Volta	(78.0)	(4.3)	23	66.6	75	17.7	134
Eastern	(40.1)	(21.6)	64	60.9	115	25.4	245
Ashanti	(43.6)	(12.7)	127	61.6	359	24.5	637
Western North	(27.5)	(20.3)	24	65.4	51	26.5	101
Ahafo	47.4	13.4	22	74.7	38	29.0	80
Bono	(57.9)	(15.4)	25	64.1	62	14.1	115
Bono East	65.6	3.4	46	74.3	106	19.4	196
Oti	71.7	5.9	36	78.2	56	8.3	123
Northern	73.2	3.0	84	91.0	200	13.3	401
Savannah	78.1	7.7	32	79.0	50	7.5	106
North East	65.5	5.2	35	85.5	53	19.8	115
Upper East	51.8	12.4	54	77.9	87	23.1	193
Upper West	68.1	6.3	24	90.1	58	10.9	105
Mother's education							
No education	63.2	8.6	171	81.8	390	12.6	742
Primary	53.8	17.0	125	73.4	291	17.4	544
Secondary	46.0	16.4	446	63.2	977	22.4	1,923
More than secondary	64.3	13.2	84	45.3	164	37.9	333
Wealth quintile							
Lowest	62.5	7.5	215	81.9	440	13.7	874
Second	55.0	7.9	172	75.6	384	15.0	718
Middle	43.5	22.9	144	64.4	377	24.3	712
Fourth	45.1	21.4	164	54.3	310	24.1	653
Highest	52.3	17.0	131	52.4	313	32.1	584
Total	52.6	14.5	826	67.2	1,823	21.0	3,541

Note: Breastfeeding status refers to a 24-hour period (yesterday during the day or at night). Figures in parentheses are based on 25–49 unweighted cases.
na = not applicable
[1] Received breast milk and infant formula and/or fresh, packaged, or powdered animal milk. Excludes yogurt drinks because they are generally not fed as a substitute for breast milk.
[2] Corresponds to the IYCF indicator "continued breastfeeding"

Table 11.5 Infant feeding practices by age

Percent distribution of youngest children age 0–5 months living with their mother by feeding category, according to age in months, Ghana DHS 2022

Age group in months	Breast milk only (exclusively breastfed)	Breast milk and plain water only	Breast milk and non-milk liquids[1]	Breast milk and formula and/or animal milk[2]	Breast milk and solid, semisolid, or soft foods[3]	Not breastfed	Unknown[4]	Total	Number of youngest children age 0–5 months living with their mother
0–1	74.1	16.2	0.1	4.1	2.8	2.2	0.5	100.0	304
2–3	55.3	25.3	0.2	8.4	7.1	1.8	1.8	100.0	260
4–5	25.0	31.6	0.1	14.0	24.2	4.7	0.5	100.0	262
0–5	52.6	23.9	0.1	8.6	11.0	2.9	0.9	100.0	826

Note: Breastfeeding status refers to a "24-hour" period (yesterday during the day or at night). The categories of breast milk only, breast milk and plain water only, breast milk and non-milk liquids, breast milk and formula and/or animal milk, breast milk and solid, semisolid, or soft foods, and not breastfed are hierarchical and mutually exclusive. Thus, children who receive breast milk and non-milk liquids and who do not receive breast milk and formula and/or animal milk and who do not receive any solid, semisolid, or soft foods are classified in the non-milk liquid category even though they may also get plain water. When combined with children whose feeding category is classified as unknown due to don't know responses, the percentages in each row add to 100%.

[1] Non-milk liquids include milo, fruit juice or fruit drinks, sobolo, clear broth, clear soup, and other liquids.

[2] Animal milk here includes liquid yogurt but does not include solid yogurt. Note that animal milk in Table 11.4 excludes liquid yogurt and solid yogurt.

[3] Solid, semi-solid, or soft foods includes solid yogurt but not liquid yogurt.

[4] Not classified elsewhere due to "don't know" responses

Table 11.6 Liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 living with their mother by type of liquids consumed in the day or night preceding the interview, according to age and breastfeeding status, Ghana DHS 2022

Age in months	Plain water	Infant formula[1]	Fresh, powdered, and packaged animal milk		Yogurt drinks		Soy milk and nut milks		Fruit juice and fruit-flavoured drinks	Sodas, malt drinks, sports drinks, and energy drinks	Tea, coffee, and herbal drinks		Clear broth and clear soup	Other liquids		Number of youngest children under age 2 living with their mother
			Any	Sweet/ flavoured	Any	Sweet/ flavoured	Any	Sweet/ flavoured			Any	Sweet/ flavoured		Any	Sweet/ flavoured	
BREASTFEEDING CHILDREN																
0–1	19.4	4.6	1.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	297
2–3	40.8	11.6	1.4	1.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.3	0.0	256
4–5	72.2	24.6	7.8	3.3	0.0	0.0	0.0	0.0	1.9	0.2	0.0	0.0	2.6	1.4	0.0	250
6–8	96.5	31.6	16.4	7.8	0.3	0.3	0.0	0.0	2.4	3.5	0.5	0.2	5.9	4.8	0.5	418
9–11	97.0	34.3	12.8	8.8	0.3	0.2	0.0	0.0	6.8	6.0	1.7	1.2	9.2	7.6	0.1	403
12–17	97.7	20.9	12.7	7.7	1.6	1.4	0.0	0.0	7.5	9.6	4.0	2.7	12.5	13.0	0.9	771
18–23	96.8	10.3	11.0	6.2	0.8	0.3	0.0	0.0	9.7	10.8	4.5	2.4	8.2	11.6	0.4	411
0–5	42.7	13.0	3.5	1.4	0.0	0.0	0.0	0.0	0.6	0.1	0.0	0.0	0.8	0.9	0.0	802
6–11	96.8	32.9	14.6	8.3	0.3	0.3	0.0	0.0	4.6	4.7	1.1	0.7	7.5	6.2	0.3	821
12–23	97.4	17.2	12.1	7.2	1.3	1.0	0.0	0.0	8.3	10.0	4.2	2.6	11.0	12.5	0.7	1,182
6–23	97.1	23.6	13.1	7.6	0.9	0.7	0.0	0.0	6.7	7.9	2.9	1.8	9.6	9.9	0.6	2,002
Total	81.6	20.6	10.4	5.9	0.7	0.5	0.0	0.0	5.0	5.6	2.1	1.3	7.1	7.3	0.4	2,804
NONBREASTFEEDING CHILDREN																
0–1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7
2–3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5
4–5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	12
6–8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	11
9–11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	13
12–17	95.5	32.9	40.0	28.0	2.6	0.3	0.0	0.0	27.6	26.1	4.7	2.7	15.7	26.3	0.0	116
18–23	94.5	17.6	21.8	15.2	2.9	1.8	0.0	0.0	15.6	23.5	7.6	5.3	12.7	23.7	0.0	419
0–5	(52.6)	(27.0)	(6.1)	(6.1)	(3.3)	(3.3)	(0.0)	(0.0)	(2.7)	(0.0)	(0.0)	(0.0)	(0.0)	(9.4)	(0.0)	24
6–11	(70.0)	(49.3)	(8.5)	(8.5)	(0.0)	(0.0)	(0.0)	(0.0)	(1.1)	(0.0)	(0.0)	(0.0)	(9.6)	(4.2)	(0.0)	25
12–23	94.7	20.9	25.8	18.0	2.8	1.5	0.0	0.0	18.2	24.1	7.0	4.8	13.4	24.3	0.0	535
6–23	93.6	22.2	25.0	17.6	2.7	1.4	0.0	0.0	17.5	23.0	6.7	4.6	13.2	23.4	0.0	560
Total	92.0	22.4	24.3	17.1	2.7	1.5	0.0	0.0	16.9	22.1	6.4	4.4	12.7	22.8	0.0	584

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Infant formula includes Cerelac, NAN, and SMA.

Table 11.7 Foods consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 living with their mother by type of foods consumed in the day or night preceding the interview, according to age and breastfeeding status, Ghana DHS 2022

	Solid or semisolid foods													
Age in months	Foods made from grains[1]	White/pale starchy roots, tubers, and plantains[2]	Beans, peas, lentils, nuts, and seeds[3]	Cheese and yogurt[4]	Meat, fish, poultry, and organ meats[5]	Eggs	Vitamin A-rich fruits and vegetables[6]	Other fruits and vegetables[7]	Insects and other small protein foods[8]	Red palm oil	Sweet foods such as chocolates, candies, pastries, cakes, biscuits, ice cream, and popsicles	Fried and salty foods such as chips, crisps, puffs, french fries, and fried dough	Other solid, semisolid, and soft food	Number of youngest children under age 2 living with their mother
BREASTFEEDING CHILDREN														
0–1	2.0	0.5	0.6	0.0	0.7	0.3	0.2	0.5	0.0	0.3	0.3	0.3	0.5	297
2–3	7.3	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.7	0.1	256
4–5	21.7	1.2	1.7	0.6	2.4	0.7	2.5	4.9	0.0	1.5	3.2	1.4	1.5	250
6–8	62.2	10.0	5.8	1.0	21.5	7.5	14.0	34.0	0.0	9.2	10.7	0.7	2.9	418
9–11	73.8	24.2	22.4	1.4	49.2	17.0	28.8	59.1	0.1	17.2	26.5	4.0	8.6	403
12–17	85.0	34.7	29.1	1.7	60.0	21.7	33.6	68.1	0.0	14.9	25.0	3.2	6.6	771
18–23	84.7	40.1	42.5	1.8	67.3	16.8	38.9	71.5	0.0	16.9	24.4	4.2	4.7	411
0–5	9.8	0.6	0.8	0.2	1.1	0.3	0.9	1.7	0.0	0.5	1.1	0.7	0.7	802
6–11	67.9	16.9	14.0	1.2	35.1	12.1	21.3	46.4	0.1	13.1	18.5	2.3	5.7	821
12–23	84.9	36.6	33.7	1.7	62.6	20.0	35.4	69.3	0.0	15.6	24.8	3.5	5.9	1,182
6–23	77.9	28.5	25.6	1.5	51.3	16.8	29.6	59.9	0.0	14.6	22.2	3.0	5.8	2,002
Total	58.5	20.5	18.5	1.1	36.9	12.1	21.4	43.3	0.0	10.6	16.1	2.4	4.4	2,804
NONBREASTFEEDING CHILDREN														
0–1	*	*	*	*	*	*	*	*	*	*	*	*	*	7
2–3	*	*	*	*	*	*	*	*	*	*	*	*	*	5
4–5	*	*	*	*	*	*	*	*	*	*	*	*	*	12
6–8	*	*	*	*	*	*	*	*	*	*	*	*	*	11
9–11	*	*	*	*	*	*	*	*	*	*	*	*	*	13
12–17	90.9	34.4	21.8	2.4	79.1	45.1	36.7	83.1	0.0	21.1	46.9	18.0	9.8	116
18–23	91.6	53.9	42.9	0.7	79.2	37.5	38.5	80.5	0.0	24.3	47.5	11.0	5.9	419
0–5	(8.8)	(0.0)	(0.0)	(3.5)	(2.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	24
6–11	(82.0)	(16.1)	(37.0)	(1.7)	(46.3)	(22.7)	(34.6)	(36.4)	(0.0)	(7.0)	(12.0)	(0.0)	(1.5)	25
12–23	91.4	49.7	38.3	1.1	79.2	39.1	38.2	81.1	0.0	23.6	47.4	12.5	6.7	535
6–23	91.0	48.2	38.3	1.1	77.7	38.4	38.0	79.1	0.0	22.9	45.8	12.0	6.5	560
Total	87.7	46.2	36.7	1.2	74.7	36.8	36.4	75.9	0.0	22.0	43.9	11.5	6.2	584

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes bread, rice, maize, kenkey, banku, akple, tuo zaafi, Hausa koko, and tom brown
[2] Includes fufu, gari, kokonte, cassava, yam, cocoyam, plantain, and white sweet potato
[3] Includes beans, bambara beans, groundnuts, kuli kuli, groundnut paste, groundnut soup, agushi stew, neri soup, and cashews
[4] Includes hard and soft cheeses such as brukina, drink yogurt, cheese curds and wagashi
[5] Includes gizzard, liver, sausages, corned beef, beef, goat, sheep, pork, grasscutter, chicken, guinea fowl, fish, dried fish, koobi, anchovies, smoked herring, crab, and shrimp
[6] Includes carrots, sweet potatoes that are yellow or orange inside, dark green leafy vegetables such as cocoyam leaves, amaranth leaves, ademe, ayoyo, cassava leaves or other dark green leafy vegetables, ripe mango, ripe papaya, and African star apple
[7] Includes tomatoes, okro, garden eggs, cabbage, mushrooms or other vegetables, and banana, pineapple, avocado pear, watermelon, orange, or other fruits
[8] Includes termites

Table 11.8 Minimum dietary diversity, minimum meal frequency, and minimum acceptable diet among children

Percentage of youngest children age 6–23 months living with their mother who received minimum dietary diversity, minimum meal frequency, and a minimum acceptable diet during the day or night preceding the survey, by breastfeeding status, according to background characteristics, Ghana DHS 2022

	Among youngest breastfed children age 6–23 months living with their mother, percentage who received:				Among youngest nonbreastfed children age 6–23 months living with their mother, percentage who received:					Among all youngest children age 6–23 months living with their mother, percentage who received:			
Background characteristic	Minimum dietary diversity[1]	Minimum meal frequency[2]	Minimum acceptable diet[3]	Number of breastfed children age 6–23 months	Minimum milk feeding frequency[4]	Minimum dietary diversity[1]	Minimum meal frequency[5]	Minimum acceptable diet[6]	Number of nonbreastfed children age 6–23 months	Minimum dietary diversity[1]	Minimum meal frequency[7]	Minimum acceptable diet[8]	Number of all children age 6–23 months
Age in months													
6–11	28.7	47.1	19.2	821	(51.0)	(31.1)	(54.7)	(21.9)	25	28.7	47.3	19.3	845
6–8	16.3	53.7	13.1	418	*	*	*	*	11	16.2	53.2	13.1	429
9–11	41.5	40.2	25.6	403	*	*	*	*	13	41.7	41.1	25.8	416
12–17	49.8	48.5	30.7	771	33.7	44.5	59.4	20.1	116	49.1	49.9	29.3	887
18–23	52.6	46.0	29.8	411	22.7	39.9	53.7	13.0	419	46.2	49.9	21.3	830
Sex													
Male	40.2	46.5	23.0	1,008	28.2	41.1	59.6	12.7	282	40.4	49.4	20.8	1,290
Female	43.2	48.3	28.7	995	24.2	39.9	50.2	17.1	278	42.5	48.7	26.1	1,273
Residence													
Urban	45.9	49.9	29.3	893	30.8	46.1	60.3	17.9	314	45.9	52.6	26.3	1,206
Rural	38.4	45.4	23.1	1,110	20.4	33.4	48.0	11.1	246	37.4	45.9	20.9	1,356
Region													
Western	42.1	43.8	27.4	117	(30.2)	(52.4)	(71.6)	(18.2)	40	44.7	50.9	25.0	157
Central	48.9	70.3	35.6	180	17.0	40.1	65.9	9.7	87	46.1	68.9	27.2	268
Greater Accra	44.7	54.0	34.5	192	(43.4)	(44.9)	(68.8)	(21.2)	97	44.7	58.9	30.0	289
Volta	46.8	52.6	30.8	84	(3.8)	(16.4)	(23.3)	(0.0)	24	40.1	46.1	24.0	107
Eastern	33.5	50.7	24.7	132	(31.3)	(27.6)	(41.6)	(21.7)	43	32.0	48.4	24.0	175
Ashanti	41.5	54.3	26.3	342	29.9	45.8	60.7	20.5	134	42.7	56.1	24.6	476
Western North	37.7	53.4	24.6	55	(18.8)	(32.5)	(49.5)	(5.6)	16	36.5	52.5	20.3	72
Ahafo	45.1	40.1	23.3	46	*	*	*	*	7	44.7	40.0	20.8	54
Bono	37.5	47.0	24.3	65	(7.8)	(43.5)	(57.9)	(0.0)	19	38.8	49.5	18.8	85
Bono East	31.9	22.0	11.7	116	(18.0)	(33.9)	(4.4)	(4.4)	21	32.2	19.2	10.6	137
Oti	42.1	43.5	26.7	72	*	*	*	*	10	40.2	41.2	23.7	82
Northern	40.9	29.9	14.3	279	(24.7)	(31.4)	(31.4)	(9.1)	22	40.2	30.0	13.9	302
Savannah	19.2	44.8	11.7	63	(1.9)	(5.5)	(41.0)	(1.9)	9	17.5	44.3	10.5	72
North East	49.8	42.9	36.1	69	*	*	*	*	7	51.4	44.3	34.5	76
Upper East	55.5	49.9	35.3	116	*	*	*	*	17	55.8	48.8	33.9	133
Upper West	37.7	49.1	27.8	73	*	*	*	*	5	36.8	49.0	26.3	79
Mother's education													
No education	34.9	39.2	19.3	473	12.3	27.0	36.4	5.1	67	33.9	38.8	17.5	540
Primary	33.8	44.1	18.1	328	14.9	34.8	37.7	14.9	69	34.0	43.0	17.6	397
Secondary	44.1	50.4	28.2	1,060	28.0	39.4	60.8	13.1	329	43.0	52.9	24.7	1,389
More than secondary	65.1	59.9	47.5	141	38.1	58.1	60.0	28.0	95	62.3	59.9	39.7	236

Continued...

Table 11.8—*Continued*

Background characteristic	Among youngest breastfed children age 6–23 months living with their mother, percentage who received:				Among youngest nonbreastfed children age 6–23 months living with their mother, percentage who received:					Among all youngest children age 6–23 months living with their mother, percentage who received:			
	Minimum dietary diversity[1]	Minimum meal frequency[2]	Minimum acceptable diet[3]	Number of breastfed children age 6–23 months	Minimum milk feeding frequency[4]	Minimum dietary diversity[1]	Minimum meal frequency[5]	Minimum acceptable diet[6]	Number of nonbreastfed children age 6–23 months	Minimum dietary diversity[1]	Minimum meal frequency[7]	Minimum acceptable diet[8]	Number of all children age 6–23 months
Wealth quintile													
Lowest	36.4	42.7	21.3	542	13.1	34.4	32.1	12.1	71	36.2	41.5	20.3	613
Second	36.2	42.1	21.7	435	11.9	27.2	41.0	9.3	85	34.8	41.9	19.7	520
Middle	37.6	48.6	22.5	418	21.3	26.5	49.1	9.5	126	35.0	48.7	19.4	544
Fourth	50.4	50.8	30.6	325	28.0	46.4	74.3	13.5	129	49.3	57.5	25.8	454
Highest	56.3	59.0	40.3	282	43.2	57.6	61.8	25.2	149	56.7	59.9	35.1	431
Total	41.7	47.4	25.8	2,002	26.2	40.5	54.9	14.9	560	41.4	49.0	23.4	2,562

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Minimum dietary diversity is receiving foods from five or more of the following eight food groups: a. breast milk; b. grains, white/pale starchy roots, tubers, and plantains; c. beans, peas, lentils, nuts, and seeds; d. dairy products (tinned, powdered, or fresh animal milk; infant formula; yogurt; cheese); e. flesh foods (meat, fish, poultry, organ meats); f. eggs; g. vitamin A-rich fruits and vegetables; h. other fruits and vegetables.
[2] For breastfed children, minimum meal frequency is receiving solid, semisolid, or soft food at least twice a day for infants age 6–8 months and at least three times a day for children age 9–23 months.
[3] For breastfed children, minimum acceptable diet is receiving minimum dietary diversity (footnote 1) and minimum meal frequency (footnote 2).
[4] For nonbreastfed children, minimum milk feeding frequency is two or more feedings of infant formula; tinned, powdered, or fresh animal milk; and liquid or solid yogurt.
[5] For nonbreastfed children, minimum meal frequency is receiving solid, semisolid, or soft food or milk feeds at least four times a day. At least one of the feeds must be a solid, semisolid, or soft feed.
[6] For nonbreastfed children, minimum acceptable diet is receiving minimum dietary diversity (footnote 1), minimum milk feeding frequency (footnote 4), and minimum meal frequency (footnote 5).
[7] Minimum meal frequency is receiving the minimum recommended number of feeds per day according to age and breastfeeding status as defined in footnotes 2 and 5.
[8] Minimum acceptable diet is receiving minimum dietary diversity (footnote 1), minimum meal frequency (footnote 2 for breastfed children and footnote 5 for nonbreastfed children), and minimum milk feeding frequency (footnote 4 for nonbreastfed children).

Table 11.9 Egg and/or flesh food consumption and unhealthy feeding practices among children age 6–23 months

Percentage of youngest children age 6–23 months living with their mother who consumed eggs and/or flesh food, and percentage who experienced each specified unhealthy feeding practice, during the day or night preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Eggs and/or flesh food[1]	Unhealthy feeding practices:			Number of youngest children age 6–23 months living with their mother
		Sweet beverage[2]	Unhealthy food[3]	Zero vegetables or fruits[4]	
Age in months					
6–11	38.6	18.8	21.0	50.7	845
6–8	24.6	14.8	12.7	63.6	429
9–11	53.0	22.8	29.6	37.5	416
12–17	69.7	35.2	34.0	24.9	887
18–23	78.7	40.7	43.7	18.1	830
Sex					
Male	60.7	30.7	32.5	32.1	1,290
Female	64.0	32.4	33.2	30.3	1,273
Breastfeeding status					
Breastfeeding	55.8	25.6	26.3	35.9	2,002
Not breastfeeding	85.8	53.0	56.3	14.6	560
Residence					
Urban	65.7	38.7	40.1	29.6	1,206
Rural	59.3	25.2	26.4	32.7	1,356
Region					
Western	69.6	44.5	52.0	30.7	157
Central	81.7	43.1	57.2	15.3	268
Greater Accra	62.3	36.3	46.1	26.4	289
Volta	67.0	33.7	46.0	21.2	107
Eastern	53.5	37.7	37.8	39.2	175
Ashanti	64.4	36.3	35.0	33.2	476
Western North	62.2	29.8	25.2	30.9	72
Ahafo	61.2	20.3	21.7	33.7	54
Bono	61.6	27.5	22.0	30.6	85
Bono East	59.2	28.9	25.0	35.9	137
Oti	69.6	13.8	22.0	29.0	82
Northern	51.3	18.7	11.4	45.1	302
Savannah	41.2	17.2	11.4	40.0	72
North East	60.3	20.6	11.6	30.6	76
Upper East	63.0	26.1	20.8	25.7	133
Upper West	45.8	23.0	15.2	29.5	79
Mother's education					
No education	52.5	17.0	15.1	38.0	540
Primary	58.0	21.2	26.8	35.8	397
Secondary	65.0	36.5	39.3	28.9	1,389
More than secondary	76.4	53.3	46.0	21.5	236
Wealth quintile					
Lowest	51.7	14.1	16.3	33.5	613
Second	62.0	23.1	24.6	35.6	520
Middle	61.6	34.9	38.0	32.0	544
Fourth	69.9	43.3	45.8	30.2	454
Highest	70.8	50.1	46.3	22.7	431
Total	62.3	31.6	32.9	31.2	2,562

[1] Eggs and/or flesh food include meat, fish, poultry, organ meats, and eggs.
[2] Sweet beverages include sweet/flavoured milk and yogurt drinks, sweet/flavoured soy milks or nut milks, fruit juice and fruit-flavoured drinks, chocolate-flavoured drinks, sodas, malt drinks, sports drinks, energy drinks, sweetened tea, coffee, herbal drinks, and other sweetened liquids.
[3] Unhealthy foods are a group of sentinel food types that include sweet foods such as toffees, chocolates, ice cream, FanYogo, cakes, biscuits, rock bun, toogbee, and bofrot and fried and salty foods such as packaged yellow plantain chips or potato chips, indomie, french fries, fried yam, fried potato, atomo, and spring rolls.
[4] Vegetables or fruits include dark green leafy vegetables such as cocoyam leaves, amaranth leaves, ademe, ayoyo, cassava leaves, or other dark green leafy vegetables; carrots or sweet potatoes that are yellow or orange inside; ripe mangoes, ripe papaya, or African star apple; other fruits and vegetables including banana, pineapple, avocado pear, watermelon, orange, tomatoes, okro, garden eggs, cabbage, and mushrooms.

Table 11.10 Infant and young child feeding (IYCF) indicators

Percentage of children fed according to various IYCF practices, Ghana DHS 2022

IYCF w#	IYCF abbrev.	DHS-8 table #	Indicator	Indicator definition and denominator	Value
1	EvBF	11.3	Ever breastfed[1]	Percentage of children born in the last 2 years who were ever breastfed	96.8
				Number of children born in the last 2 years	3,638
2	EIBF	11.3	Early initiation of breastfeeding[1]	Percentage of children born in the last 2 years who were put to the breast within 1 hour of birth	58.2
				Number of children born in the last 2 years	3,638
3	EBF2D	11.3	Exclusively breastfed for the first 2 days after birth[1]	Percentage of children born in the last 2 years who were fed exclusively with breast milk for the first 2 days after birth	58.2
				Number of children born in the last 2 years	3,638
4	EBF	11.4	Exclusive breastfeeding under 6 months	Percentage of children age 0–5 months who were fed exclusively with breast milk during the previous day	52.6
				Number of youngest children age 0–5 months living with their mother	826
5	MixMF	11.4	Mixed milk feeding under 6 months	Percentage of children age 0–5 months who were fed both breast milk and formula and/or animal milk during the previous day	14.5
				Number of youngest children age 0–5 months living with their mother	826
6	CBF	11.4	Continued breastfeeding 12–23 months	Percentage of children age 12–23 months who were fed breast milk during the previous day	67.2
				Number of children age 12–23 months	1,823
7	ISSSF	-	Introduction of solid, semisolid, or soft foods 6–8 months	Percentage of children age 6–8 months who were fed solid, semisolid, or soft foods during the previous day	69.4
				Number of youngest children age 6–8 months living with their mother	429
8	MDD	11.8	Minimum dietary diversity 6–23 months	Percentage of children age 6–23 months who were fed foods and beverages from at least five out of eight defined food groups during the previous day	41.4
				Number of youngest children age 6–23 months living with their mother	2,562
9	MMF	11.8	Minimum meal frequency 6–23 months	Percentage of children age 6–23 months who were fed solid, semisolid, or soft foods (also including milk feeds for nonbreastfed children) the minimum number of times or more during the previous day	49.0
				Number of youngest children age 6–23 months living with their mother	2,562
10	MMFF	11.8	Minimum milk feeding frequency for nonbreastfed children 6–23 months	Percentage of nonbreastfed children age 6–23 months who were given at least two milk feeds during the previous day	26.2
				Number of youngest children age 6–23 months living with their mother who were not breastfed	560
11	MAD	11.8	Minimum acceptable diet 6–23 months	Percentage of children age 6-23 months who were fed a minimum acceptable diet during the previous day	23.4
				Number of youngest children age 6-23 months living with the mother	2,562
12	EFF	11.9	Egg and/or flesh food consumption 6–23 months	Percentage of children age 6–23 months who were fed eggs and/or flesh food during the previous day	62.3
				Number of youngest children age 6—3 months living with their mother	2,562
13	SWB	11.9	Sweet beverage consumption 6–23 months	Percentage of children age 6–23 months who were given a sweet beverage during the previous day	31.6
				Number of youngest children age 6–23 months living with their mother	2,562
14	UFC	11.9	Unhealthy food consumption 6–23 months	Percentage of children age 6–23 months who were fed selected sentinel unhealthy foods during the previous day	32.9
				Number of youngest children age 6–23 months living with their mother	2,562
15	ZVF	11.9	Zero vegetable or fruit consumption 6–23 months	Percentage of children age 6–23 months who were not fed any vegetables or fruits during the previous day	31.2
				Number of youngest children age 6–23 months living with their mother	2,562
16	BoF	11.4	Bottle feeding 0–23 months	Percentage of children age 0–23 months who were fed from a bottle with a nipple during the previous day	21.0
				Number of children age 0–23 months	3,541

[1] Includes children born in the 2 years preceding the survey regardless of whether the children were living or dead at the time of the interview

Table 11.11 Infant and young child feeding counselling

Among women age 15–49 whose youngest child age 6–23 months is living with them, percentage who talked with a health care provider or community health worker about how or what to feed their child in the last 6 months, according to background characteristics, Ghana DHS 2022

Background characteristic	Counselled in last 6 months about how or what to feed their child	Number of women whose youngest child age 6–23 months is living with them
Child's age in months		
6–11	52.9	845
12–23	47.9	1,717
Child's sex		
Male	50.1	1,290
Female	49.0	1,273
Age		
15–19	44.0	150
20–29	50.0	1,161
30–39	49.1	1,037
40–49	52.6	214
Residence		
Urban	53.3	1,206
Rural	46.2	1,356
Region		
Western	49.0	157
Central	53.5	268
Greater Accra	65.7	289
Volta	63.9	107
Eastern	52.3	175
Ashanti	47.5	476
Western North	55.8	72
Ahafo	44.6	54
Bono	61.0	85
Bono East	25.7	137
Oti	44.7	82
Northern	38.0	302
Savannah	31.4	72
North East	40.8	76
Upper East	65.1	133
Upper West	39.6	79
Education		
No education	36.7	540
Primary	45.8	397
Secondary	54.9	1,389
More than secondary	53.9	236
Wealth quintile		
Lowest	38.4	613
Second	48.0	520
Middle	50.3	544
Fourth	57.1	454
Highest	58.4	431
Total	49.5	2,562

Table 11.12 Prevalence of anaemia in children

Percentage of children age 6–59 months classified as having anaemia, according to background characteristics, Ghana DHS 2022

Background characteristic	Anaemia status by haemoglobin level				Number of children age 6–59 months
	Any (<11.0 g/dl)	Mild (10.0–10.9 g/dl)	Moderate (7.0–9.9 g/dl)	Severe (< 7.0 g/dl)	
Age in months					
6–11	60.5	34.2	26.2	0.0	422
12–23	60.0	28.7	29.7	1.7	918
24–35	49.0	29.6	18.3	1.1	811
36–47	44.0	26.4	17.1	0.5	860
48–59	35.9	23.6	12.0	0.2	826
6–23	60.2	30.4	28.6	1.2	1,340
24–59	42.9	26.5	15.8	0.6	2,497
Sex					
Male	51.7	29.1	21.8	0.7	1,947
Female	46.2	26.6	18.7	0.9	1,889
Mother's interview status					
Interviewed	49.2	27.7	20.6	0.9	3,424
Not interviewed but in household	54.5	27.0	27.1	0.5	67
Not interviewed and not in the household[1]	45.1	29.5	15.4	0.2	346
Residence					
Urban	41.4	26.0	14.9	0.5	1,881
Rural	56.2	29.7	25.4	1.1	1,956
Region					
Western	46.1	28.5	16.5	1.1	241
Central	44.7	27.9	16.4	0.3	397
Greater Accra	36.2	24.2	11.5	0.6	462
Volta	51.3	32.8	17.6	0.9	154
Eastern	38.3	22.8	15.1	0.4	294
Ashanti	40.6	27.9	12.7	0.0	705
Western North	45.1	33.5	11.6	0.0	90
Ahafo	35.4	25.2	9.8	0.4	87
Bono	40.1	23.1	17.0	0.0	124
Bono East	51.4	27.1	23.7	0.7	185
Oti	60.6	35.2	25.4	0.0	119
Northern	69.4	32.2	35.0	2.2	430
Savannah	62.8	28.5	32.6	1.6	113
North East	64.9	28.0	34.7	2.2	130
Upper East	69.3	27.0	40.6	1.8	184
Upper West	61.2	29.0	30.5	1.7	122
Mother's education					
No education	60.0	28.7	29.7	1.6	858
Primary	58.7	31.5	25.9	1.3	517
Secondary	44.0	26.2	17.3	0.5	1,815
More than secondary	34.7	27.4	7.1	0.2	300
Wealth quintile					
Lowest	63.9	30.0	32.3	1.6	900
Second	53.2	29.0	23.3	1.0	789
Middle	48.1	29.3	18.3	0.5	742
Fourth	43.2	27.7	14.9	0.6	730
Highest	31.2	22.4	8.8	0.1	676
Total	48.9	27.9	20.3	0.8	3,837

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anaemia. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC 1998 and cutoffs defined in WHO 2017d. Haemoglobin is measured in grams per decilitre (g/dl) using the HemoCue 201+ device.

[1] Includes children whose mothers are deceased

Table 11.13 Micronutrient supplementation and deworming among children

Among children age 6–59 months, percentages who were given iron tablets or syrups, micronutrient powders, and iron-containing supplements in the last 12 months and percentage who were given vitamin A supplements in the last 6 months, and among children age 12–59 months, percentage who were given deworming medication in the last 6 months, according to background characteristics, Ghana DHS 2022

	Among children age 6–59 months:			Among children age 12–59 months:	
Background characteristic	Percentage given iron-containing supplements in last 12 months[1,2]	Percentage given vitamin A supplements in last 6 months[3]	Number of children	Percentage given deworming medication in last 6 months[1,4]	Number of children
Age in months					
6–8	29.0	73.3	439	na	na
9–11	38.4	87.9	428	na	na
12–17	52.8	88.5	918	29.9	918
18–23	58.7	86.0	905	41.2	905
24–35	59.3	78.2	1,546	51.4	1,546
36–47	53.0	70.3	1,632	50.8	1,632
48–59	46.1	57.9	1,596	48.9	1,596
6–23	48.6	85.1	2,691	35.5	1,823
24–59	52.8	68.7	4,774	50.3	4,774
Sex					
Male	50.9	74.1	3,764	46.1	3,326
Female	51.7	75.2	3,700	46.4	3,271
Breastfeeding status[5]					
Breastfeeding	45.5	84.5	2,163	33.2	1,326
Not breastfeeding	59.2	78.8	2,323	49.9	2,292
Mother's age					
15–19	48.5	83.6	230	42.1	160
20–29	51.5	75.2	2,996	43.9	2,590
30–39	51.0	73.5	3,351	47.4	3,020
40–49	52.1	74.8	887	50.1	827
Residence					
Urban	55.5	75.2	3,668	51.7	3,255
Rural	47.1	74.0	3,796	41.0	3,342
Region					
Western	59.7	71.5	473	48.2	420
Central	59.2	78.9	760	52.0	666
Greater Accra	51.5	72.4	943	51.1	848
Volta	41.7	74.9	290	35.3	255
Eastern	60.0	84.7	546	58.2	481
Ashanti	59.0	75.7	1,360	55.7	1,218
Western North	52.2	72.4	198	52.3	173
Ahafo	53.6	81.5	164	53.5	144
Bono	47.8	83.3	251	41.1	225
Bono East	47.6	67.6	390	42.6	347
Oti	37.0	78.5	238	36.7	208
Northern	32.0	60.9	837	29.3	722
Savannah	51.7	67.6	216	30.1	192
North East	50.6	78.8	231	30.5	206
Upper East	53.4	87.3	350	48.2	300
Upper West	40.8	74.2	218	31.3	195
Mother's education					
No education	40.2	67.1	1,746	34.9	1,570
Primary	49.4	73.5	1,119	38.4	998
Secondary	55.0	77.5	3,893	51.8	3,403
More than secondary	60.9	78.9	707	56.8	625
Wealth quintile					
Lowest	40.6	69.7	1,746	34.0	1,533
Second	47.6	77.0	1,512	40.6	1,356
Middle	51.9	73.5	1,467	46.3	1,279
Fourth	60.8	75.9	1,411	53.6	1,241
Highest	58.6	78.2	1,329	60.9	1,188
Total	51.3	74.6	7,465	46.3	6,597

na = not applicable
[1] Based on mother's recall
[2] Iron-containing supplements include tablets, syrup, and micronutrient powders.
[3] Based on both mother's recall and the vaccination card (where available)
[4] Deworming for intestinal parasites is commonly done for helminths and schistosomiasis.
[5] Information available for children age 0–35 months only

Table 11.14.1 Nutritional status of women age 20–49

Among women age 20–49, percentage with height below 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, according to background characteristics, Ghana DHS 2022

	Short stature		Body mass index[1]								
Background characteristic	Height below 145 cm	Number of women	Mean body mass index (BMI)	18.5–24.9 (total normal)	<18.5 (total thin)	17.0–18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total over-weight or obese)	25.0–29.9 (overweight)	≥30.0 (obese)	Number of women
Age											
20–29	0.5	2,579	24.4	56.8	6.0	4.8	1.2	37.2	24.0	13.2	2,262
30–39	0.3	2,230	26.8	39.0	3.1	2.4	0.7	57.9	31.7	26.3	1,935
40–49	0.6	1,533	27.1	35.9	4.3	3.3	1.0	59.7	30.0	29.8	1,508
Residence											
Urban	0.4	3,663	27.1	36.8	3.5	2.7	0.8	59.7	30.9	28.8	3,342
Rural	0.5	2,680	24.2	57.1	6.1	4.9	1.2	36.7	24.3	12.5	2,362
Region											
Western	0.6	394	26.1	42.2	4.8	3.4	1.5	53.0	31.5	21.6	355
Central	0.3	694	26.6	38.0	5.6	3.6	2.0	56.4	30.0	26.4	648
Greater Accra	0.3	1,076	27.8	36.0	2.6	2.2	0.5	61.3	26.4	34.9	970
Volta	1.1	272	25.9	44.3	4.9	3.6	1.3	50.8	31.1	19.8	245
Eastern	0.6	515	26.7	40.7	3.4	3.1	0.3	55.8	29.8	26.0	455
Ashanti	0.4	1,261	26.5	37.9	2.6	1.9	0.7	59.5	35.1	24.3	1,152
Western North	1.2	154	25.8	46.5	3.4	2.3	1.2	50.1	31.3	18.8	141
Ahafo	0.5	134	25.8	48.0	3.1	1.7	1.3	48.9	31.6	17.3	117
Bono	0.4	240	25.6	45.9	4.1	3.8	0.3	50.0	31.9	18.1	218
Bono East	0.3	268	25.1	54.5	5.7	5.3	0.4	39.8	24.1	15.7	239
Oti	0.0	154	24.0	62.5	5.4	3.0	2.3	32.1	19.2	13.0	136
Northern	0.5	497	23.1	64.1	8.8	7.5	1.3	27.1	19.2	7.9	428
Savannah	0.8	133	23.4	61.1	9.0	6.1	3.0	29.9	21.9	8.0	113
North East	0.3	111	22.4	72.5	9.2	7.9	1.3	18.3	14.5	3.8	91
Upper East	1.1	283	23.4	63.9	8.0	7.4	0.5	28.1	18.8	9.4	256
Upper West	0.0	157	23.2	67.8	6.1	5.8	0.3	26.0	18.2	7.8	140
Education											
No education	0.5	1,171	23.7	61.0	7.3	5.9	1.4	31.7	21.3	10.4	1,056
Primary	0.6	864	26.0	40.6	5.1	3.3	1.8	54.2	32.6	21.7	773
Secondary	0.5	3,548	26.3	42.1	4.0	3.3	0.8	53.9	29.9	23.9	3,185
More than secondary	0.0	759	27.4	40.6	2.4	2.0	0.4	57.0	25.6	31.3	690
Wealth quintile											
Lowest	0.5	998	22.4	70.7	9.5	7.7	1.8	19.8	14.8	5.0	874
Second	0.6	1,108	24.0	55.5	6.9	5.3	1.6	37.6	27.3	10.4	989
Middle	0.6	1,224	25.7	44.5	4.6	3.3	1.3	51.0	32.7	18.3	1,109
Fourth	0.4	1,526	27.2	37.4	2.2	2.1	0.1	60.4	31.5	28.9	1,371
Highest	0.2	1,487	28.4	30.0	2.0	1.6	0.5	68.0	30.5	37.5	1,362
Total	0.5	6,343	25.9	45.2	4.6	3.6	1.0	50.2	28.2	22.0	5,704

Note: Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres (kg/m^2).
[1] Excludes pregnant women and women with a birth in the preceding 2 months

Table 11.14.2 Nutritional status of adolescent women age 15–19

Among women age 15–19, percentage with height-for-age below −2 standard deviations (SD), mean body mass index (BMI)-for-age *z* score, and percentage with specific BMI-for-age levels, according to background characteristics, Ghana DHS 2022

	Short stature		Body mass index-for-age[1]								
Background characteristic	Height-for-age below −2 SD	Number of women	Mean BMI-for-age *z* score	−1 SD to +1 SD (total normal)	Below −1 SD (total thin)[2]	Below −1 SD to −2 SD (mildly thin)	Below −2 SD (moderately or severely thin)	Above +1 SD (total overweight or obese)[3]	Above +1 SD to +2 SD (overweight)	Above +2 SD (obese)	Number of women
Residence											
Urban	3.2	765	0.1	66.9	15.1	13.7	1.4	18.0	12.6	5.4	748
Rural	5.2	617	−0.2	73.6	18.4	14.7	3.7	8.0	5.7	2.3	591
Region											
Western	5.0	102	−0.0	64.1	21.3	21.3	0.0	14.6	7.1	7.5	96
Central	4.0	211	−0.2	65.8	21.3	19.5	1.8	12.9	11.9	0.9	206
Greater Accra	3.1	193	0.3	64.5	12.3	11.3	1.0	23.2	16.1	7.1	193
Volta	1.4	67	−0.1	74.1	18.0	18.0	0.0	8.0	4.0	4.0	66
Eastern	5.8	120	0.1	67.1	16.3	16.3	0.0	16.7	7.9	8.7	120
Ashanti	2.5	232	0.1	74.5	8.5	3.6	4.9	17.0	13.0	4.0	223
Western North	9.1	35	0.1	72.6	13.8	10.9	2.9	13.6	10.4	3.2	33
Ahafo	5.0	28	−0.1	73.6	14.1	12.7	1.4	12.3	10.7	1.7	26
Bono	7.9	58	−0.0	77.3	14.5	10.4	4.1	8.2	5.1	3.1	58
Bono East	8.9	60	−0.3	68.8	24.3	18.1	6.2	6.9	5.7	1.2	58
Oti	5.8	40	−0.2	74.2	14.1	13.1	1.0	11.7	7.4	4.3	37
Northern	3.5	74	−0.4	67.9	27.8	22.3	5.5	4.3	1.5	2.8	67
Savannah	4.4	39	−0.1	81.3	11.9	11.9	0.0	6.8	5.1	1.7	34
North East	0.0	29	−0.2	73.6	18.5	16.9	1.6	7.9	6.0	1.9	26
Upper East	3.2	51	−0.3	68.4	24.5	19.6	5.0	7.1	6.3	0.8	51
Upper West	2.0	44	−0.3	79.6	16.6	13.6	3.0	3.8	3.8	0.0	43
Education											
No education	5.3	45	−0.4	77.9	19.5	16.4	3.2	2.5	2.5	0.0	38
Primary	5.0	214	−0.2	70.9	20.3	18.0	2.3	8.8	5.7	3.1	205
Secondary	3.9	1,110	−0.0	69.6	15.8	13.4	2.4	14.5	10.1	4.4	1,081
More than secondary	*	14	*	*	*	*	*	*	*	*	14
Wealth quintile											
Lowest	5.6	230	−0.4	73.1	23.2	18.0	5.2	3.7	2.6	1.1	213
Second	4.4	268	−0.2	76.6	17.3	14.7	2.6	6.1	5.0	1.0	257
Middle	4.8	347	−0.1	69.8	17.2	15.6	1.6	13.0	10.2	2.8	343
Fourth	2.9	281	−0.0	69.1	13.3	11.8	1.5	17.6	14.0	3.6	273
Highest	3.0	258	0.4	61.1	12.9	11.0	1.9	26.0	14.3	11.7	253
Total	4.1	1,383	−0.0	69.8	16.6	14.2	2.4	13.6	9.6	4.0	1,338

Note: Height-for-age and body mass index (BMI)-for-age are expressed in standard deviation units (SD) from the median of the WHO Growth Reference for adolescent women age 15–19. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Excludes pregnant women and women with a birth in the preceding 2 months

[2] Includes adolescent women age 15–19 who are below −2 standard deviations (SD) from the WHO Growth Reference population median

[3] Includes adolescent women age 15–19 who are above +2 standard deviations (SD) from the WHO Growth Reference population median

Table 11.14.3 Nutritional status of men age 20–49

Among men age 20–49, mean body mass index (BMI) and percentage with specific BMI levels, according to background characteristics, Ghana DHS 2022

Background characteristic	Body mass index								
	Mean body mass index (BMI)	18.5–24.9 (total normal)	<18.5 (total thin)	17.0–18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total over-weight or obese)	25.0–29.9 (overweight)	≥30.0 (obese)	Number of men
Age									
20–29	21.9	81.2	7.5	6.5	1.0	11.3	9.3	2.0	1,906
30–39	23.1	71.3	4.1	3.4	0.7	24.7	20.8	3.9	1,650
40–49	23.4	63.5	6.4	5.3	1.2	30.1	23.2	6.9	1,238
Residence									
Urban	23.2	66.7	5.8	4.8	1.0	27.5	21.7	5.8	2,707
Rural	22.0	81.6	6.4	5.5	0.9	12.0	10.5	1.5	2,087
Region									
Western	22.5	77.9	4.6	3.8	0.8	17.5	15.8	1.7	319
Central	22.5	71.3	7.7	7.4	0.3	21.0	17.0	4.0	513
Greater Accra	24.1	60.2	4.2	3.5	0.7	35.6	26.6	9.0	884
Volta	23.0	68.7	5.6	3.7	1.9	25.7	19.5	6.3	171
Eastern	22.6	75.9	4.6	3.9	0.7	19.5	16.4	3.1	343
Ashanti	22.6	71.8	7.3	5.8	1.5	20.9	17.4	3.5	878
Western North	22.1	77.9	7.1	5.8	1.4	14.9	12.3	2.6	135
Ahafo	22.0	79.2	6.6	4.9	1.7	14.2	12.7	1.4	103
Bono	22.0	81.0	5.9	5.0	0.8	13.2	12.3	0.9	166
Bono East	22.3	79.1	6.9	5.0	1.9	14.1	12.6	1.4	254
Oti	22.2	79.9	6.4	6.4	0.0	13.7	11.4	2.2	138
Northern	22.0	80.8	6.6	6.1	0.5	12.6	10.6	2.0	374
Savannah	22.4	79.9	6.5	5.2	1.2	13.6	11.8	1.8	121
North East	21.9	84.5	7.1	5.8	1.3	8.4	6.8	1.6	89
Upper East	22.0	83.9	4.9	4.1	0.8	11.2	10.2	1.0	190
Upper West	22.5	76.2	7.7	7.1	0.5	16.1	12.4	3.7	116
Education									
No education	22.0	81.0	6.6	5.9	0.7	12.4	10.2	2.2	562
Primary	22.0	81.7	5.0	4.1	0.8	13.4	11.5	1.8	503
Secondary	22.6	73.2	6.3	5.4	1.0	20.5	16.9	3.6	2,822
More than secondary	23.8	63.7	5.4	4.4	1.0	30.9	23.7	7.3	907
Wealth quintile									
Lowest	21.3	85.4	9.0	7.9	1.1	5.6	5.3	0.3	791
Second	21.7	81.8	7.1	6.5	0.6	11.1	10.2	1.0	769
Middle	21.9	80.0	7.9	7.1	0.8	12.1	9.9	2.1	846
Fourth	23.1	69.5	4.7	3.3	1.4	25.9	22.5	3.4	1,186
Highest	24.4	58.6	3.4	2.7	0.7	38.0	28.0	10.0	1,202
Total 20–49	22.7	73.2	6.0	5.1	0.9	20.8	16.8	3.9	4,794
Total 20–59	22.7	73.2	6.0	5.1	0.9	20.8	16.8	3.9	4,794

Note: Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres (kg/m^2).

Table 11.14.4 Nutritional status of adolescent men age 15–19

Among men age 15–19, mean body mass index (BMI)-for-age *z* score and percentage with specific BMI-for-age levels, according to background characteristics, Ghana DHS 2022

Background characteristic	Body mass index-for-age[1]								
	Mean BMI-for-age *z* score	−1 SD to +1 SD (total normal)	Below −1 SD (total thin)[2]	Below −1 SD to −2 SD (mildly thin)	Below −2 SD (moderately or severely thin)	Above +1 SD (total overweight or obese)[3]	Above +1 SD to +2 SD (overweight)	Above +2 SD (obese)	Number of men
Residence									
Urban	−0.7	59.2	36.7	27.8	8.9	4.0	2.6	1.4	703
Rural	−1.0	52.7	46.3	35.0	11.3	1.0	0.9	0.2	719
Region									
Western	−0.9	46.3	50.2	39.2	11.0	3.5	2.4	1.1	92
Central	−1.0	52.3	44.4	30.8	13.7	3.3	3.3	0.0	173
Greater Accra	−0.7	56.8	39.4	31.4	8.0	3.7	1.1	2.7	183
Volta	−0.7	63.7	32.4	27.1	5.3	3.9	3.9	0.0	64
Eastern	−0.8	57.0	42.1	32.4	9.7	0.9	0.0	0.9	121
Ashanti	−0.7	57.0	39.2	29.1	10.0	3.8	2.5	1.3	293
Western North	−0.8	58.3	40.4	33.5	6.9	1.3	0.0	1.3	43
Ahafo	−0.9	48.3	50.5	44.3	6.3	1.1	1.1	0.0	29
Bono	−0.9	56.1	42.1	31.5	10.6	1.8	1.8	0.0	54
Bono East	−0.8	63.5	35.2	25.1	10.0	1.3	1.3	0.0	58
Oti	−0.8	58.0	40.4	25.7	14.7	1.5	1.5	0.0	46
Northern	−1.0	48.7	51.3	39.5	11.8	0.0	0.0	0.0	99
Savannah	−0.5	62.8	32.9	27.7	5.2	4.3	4.3	0.0	33
North East	−0.8	64.8	33.6	22.2	11.4	1.6	1.6	0.0	28
Upper East	−0.9	59.3	40.7	29.4	11.3	0.0	0.0	0.0	69
Upper West	−0.9	56.2	43.8	34.2	9.6	0.0	0.0	0.0	37
Education									
No education	−1.0	50.7	47.7	32.0	15.7	1.6	1.6	0.0	52
Primary	−1.0	51.5	46.6	34.2	12.4	1.9	1.9	0.0	218
Secondary	−0.8	56.8	40.7	31.1	9.6	2.5	1.7	0.8	1,134
More than secondary	*	*	*	*	*	*	*	*	19
Wealth quintile									
Lowest	−1.0	53.4	46.1	36.7	9.4	0.5	0.5	0.0	283
Second	−0.9	55.7	42.2	28.1	14.1	2.1	2.1	0.0	350
Middle	−0.8	54.5	43.7	34.7	9.0	1.8	1.8	0.0	282
Fourth	−0.8	57.0	40.8	30.5	10.3	2.1	0.5	1.6	268
Highest	−0.6	59.8	33.5	27.3	6.3	6.7	3.8	2.9	240
Total	−0.8	55.9	41.6	31.4	10.1	2.5	1.7	0.8	1,422

Note: Body mass index (BMI)-for-age is expressed in standard deviation units (SD) from the median of the WHO Growth Reference for adolescent men age 15–19. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes adolescent men age 15–19 who are below −2 standard deviations (SD) from the WHO Growth Reference population median

[2] Includes adolescent men age 15–19 who are above +2 standard deviations (SD) from the WHO Growth Reference population median

Table 11.15 Foods and liquids consumed by women in the day or night preceding the interview

Percentage of women age 15–49 by type of foods and liquids consumed in the day or night preceding the interview, according to background characteristics, Ghana DHS 2022

Background characteristic	Foods made from grains[1]	White/ pale starchy roots, tubers, and plantains[2]	Beans, peas, lentils[3]	Nuts and seeds[4]	Milk, cheese, yogurt, other milk products	Meat, fish, poultry, organ meats[5]	Eggs	Dark green leafy vegetables[6]	Other vitamin A-rich fruits and vegetables[7]	Other vegetables[8]	Other fruits[9]	Insects and other small protein foods[10]	Red palm oil	Sweet foods such as chocolates, candies, pastries, cakes, biscuits, ice cream, and popsicles	Fried and salty foods such as chips, crisps, puffs, french fries, and fried dough	Fruit juice and fruit-flavoured drinks	Sodas, malt drinks, sports drinks, and energy drinks	Sweetened tea, coffee, herbal drinks, and other sweetened beverages[11]	Number of women
Age																			
15–19	92.5	61.4	26.2	33.3	15.9	88.6	32.2	71.6	15.0	48.3	33.9	0.2	27.2	34.0	16.3	12.1	19.7	16.6	2,682
20–29	91.4	59.3	24.9	34.2	16.8	90.3	30.0	72.8	16.3	49.0	33.1	0.1	29.3	22.9	11.4	10.9	20.0	17.9	5,034
30–39	90.8	62.0	22.6	36.2	16.0	92.2	26.0	73.2	16.9	52.6	34.8	0.3	31.3	18.6	9.0	8.8	18.8	18.1	4,311
40–49	89.6	66.1	20.3	32.2	11.7	92.5	21.8	68.3	13.8	57.1	34.4	0.1	32.7	14.0	6.5	8.2	17.1	16.3	2,987
Maternity status																			
Pregnant	91.0	62.2	27.8	36.6	14.7	90.6	29.2	71.0	17.0	50.1	37.1	0.3	29.9	19.7	8.9	9.1	17.5	17.2	1,025
Not pregnant[12]	91.1	61.8	23.2	34.0	15.4	91.0	27.5	71.9	15.7	51.6	33.8	0.2	30.2	22.0	10.7	10.0	19.1	17.4	13,989
Residence																			
Urban	92.1	58.7	22.0	30.8	20.9	91.9	34.7	70.9	18.7	49.2	35.9	0.2	31.7	25.7	13.6	12.6	22.7	21.8	8,557
Rural	89.7	65.9	25.5	38.7	8.1	89.8	18.3	73.1	11.8	54.6	31.4	0.1	28.3	16.8	6.6	6.5	14.1	11.6	6,457
Region																			
Western	92.5	66.4	20.3	30.6	20.9	96.3	41.3	91.2	16.0	37.5	43.8	0.0	36.1	33.3	14.1	13.7	31.0	22.1	955
Central	92.0	70.3	23.9	28.7	17.3	95.4	32.5	46.9	13.6	72.3	45.2	0.2	51.9	30.5	13.7	7.7	22.2	14.4	1,703
Greater Accra	93.0	44.9	19.8	23.0	25.3	92.6	37.4	70.5	27.4	45.4	35.8	0.0	32.2	29.2	17.0	15.2	25.7	24.7	2,327
Volta	97.4	52.0	19.0	23.0	12.4	94.6	20.7	93.4	15.4	35.2	39.2	0.2	30.4	28.6	11.7	10.5	20.2	12.0	713
Eastern	88.3	69.3	24.6	33.2	17.6	94.7	30.8	59.9	15.9	61.9	35.9	0.1	46.6	22.5	6.6	7.7	18.1	14.4	1,220
Ashanti	88.3	67.0	18.8	31.0	13.6	86.8	34.4	64.3	12.9	54.1	32.6	0.1	33.6	19.6	11.0	8.6	18.5	14.4	2,928
Western North	88.2	78.8	23.9	33.1	8.8	91.2	24.9	85.3	6.5	49.1	42.4	0.3	33.2	17.8	6.7	5.7	14.7	9.3	411
Ahafo	89.6	80.9	20.8	42.2	8.2	92.2	26.1	84.0	8.4	54.0	48.1	0.1	36.4	11.9	6.8	7.0	11.1	11.1	317
Bono	90.5	80.4	15.9	28.4	11.0	94.3	24.7	85.3	12.1	43.7	30.1	0.2	17.6	15.4	9.6	11.1	18.1	14.1	567
Bono East	87.2	79.2	18.4	34.2	8.8	92.2	20.5	75.9	9.2	47.0	28.7	0.0	19.3	16.5	7.8	8.7	22.7	16.6	676
Oti	82.8	75.8	24.6	34.7	8.5	96.0	9.5	86.4	10.3	36.0	35.1	0.0	24.2	17.0	8.0	8.0	9.7	10.2	403
Northern	90.0	57.3	34.0	60.1	14.3	85.5	12.2	74.7	12.6	44.5	20.9	1.0	7.3	13.2	5.9	8.2	8.4	27.8	1,149
Savannah	90.8	55.9	21.8	30.5	8.9	86.0	4.4	79.8	4.8	40.4	13.5	0.1	2.6	10.4	3.0	2.7	9.7	18.3	319
North East	98.4	31.1	56.5	62.1	8.9	87.7	11.3	85.1	9.2	73.2	20.9	0.2	10.0	7.4	3.0	14.5	12.2	25.1	290
Upper East	97.9	34.5	41.6	65.8	8.9	84.7	12.9	84.0	35.4	57.6	30.8	0.2	11.0	14.6	9.1	14.4	13.7	11.8	640
Upper West	96.0	50.7	29.7	38.7	8.0	82.1	6.6	84.3	5.7	49.7	9.6	0.0	4.2	8.9	2.0	5.2	8.1	17.3	398
Education																			
No education	89.3	61.0	28.1	44.5	6.5	88.7	10.8	73.3	9.2	56.3	24.8	0.1	18.7	7.3	2.5	4.3	8.0	13.1	2,411
Primary	90.8	65.0	21.0	33.7	8.4	91.0	18.5	68.4	10.3	53.9	27.7	0.1	28.3	15.9	6.2	7.2	13.8	11.9	2,071
Secondary	91.3	62.8	22.9	32.0	15.6	91.0	31.0	70.6	16.6	51.6	36.1	0.2	33.2	25.8	12.8	10.7	21.9	17.3	8,999
More than secondary	93.1	52.8	23.5	31.6	37.2	94.0	46.6	80.8	28.5	40.3	44.9	0.4	33.1	29.6	16.4	18.4	26.4	32.6	1,533

Continued...

Table 11.15—*Continued*

Background characteristic	Foods made from grains[1]	White/ pale starchy roots, tubers, and plantains[2]	Beans, peas, lentils[3]	Nuts and seeds[4]	Milk, cheese, yogurt, other milk products	Meat, fish, poultry, organ meats[5]	Eggs	Dark green leafy vegetables[6]	Other vitamin A-rich fruits and vegetables[7]	Other vegetables[8]	Other fruits[9]	Insects and other small protein foods[10]	Red palm oil	Sweet foods such as chocolates, candies, pastries, cakes, biscuits, ice cream, and popsicles	Fried and salty foods such as chips, crisps, puffs, french fries, and fried dough	Fruit juice and fruit-flavoured drinks	Sodas, malt drinks, sports drinks, and energy drinks	Sweetened tea, coffee, herbal drinks, and other sweetened beverages[11]	Number of women
Wealth quintile																			
Lowest	90.6	59.4	27.9	45.0	4.5	87.3	8.9	79.3	10.0	53.8	24.5	0.1	19.1	9.5	2.9	4.7	7.9	8.7	2,447
Second	89.1	69.1	23.7	38.7	7.1	90.2	16.5	72.4	11.4	54.2	29.2	0.1	27.0	16.3	5.9	6.4	12.4	11.1	2,712
Middle	90.6	66.6	22.3	34.3	11.8	91.4	25.8	68.0	11.3	53.2	34.5	0.2	32.0	22.5	10.0	9.2	16.8	14.2	3,121
Fourth	91.6	59.0	23.1	29.9	18.0	91.6	33.8	67.8	17.4	52.5	36.6	0.2	34.1	26.0	13.8	11.0	23.0	19.9	3,379
Highest	92.8	55.9	21.8	26.9	30.7	93.2	45.7	73.5	25.9	45.3	41.7	0.3	35.3	30.6	17.3	16.3	30.4	29.3	3,355
Total	91.1	61.8	23.5	34.2	15.4	91.0	27.6	71.8	15.7	51.5	34.0	0.2	30.2	21.9	10.6	10.0	19.0	17.4	15,014

[1] Includes bread, rice, maize, kenkey, banku, akple, tuo zaafi, Hausa koko, and tom brown
[2] Includes fufu, gari, kokonte, cassava, yam, cocoyam, plantain, and white sweet potato
[3] Includes beans and bambara beans
[4] Includes groundnuts, kuli kuli, groundnut paste, groundnut soup, agushi stew, neri soup, and cashews
[5] Includes gizzard, liver, sausages, corned beef, beef, goat, sheep, pork, grasscutter, chicken, guinea fowl, fish, dried fish, koobi, anchovies, smoked herring, crab, and shrimp
[6] Includes cocoyam leaves, amaranth leaves, ademe, ayoyo, cassava leaves, and other dark green leafy vegetables
[7] Includes carrots or sweet potatoes that are yellow or orange inside, ripe mango, ripe papaya, and African star apple
[8] Includes tomatoes, okro, garden eggs, cabbage, mushrooms, and other vegetables
[9] Includes banana, pineapple, avocado pear, watermelon, orange, and other fruits
[10] Includes termites
[11] Includes milo, tea with sugar, and coffee with sugar
[12] Includes women who do not know if they are pregnant

Table 11.16 Minimum dietary diversity and unhealthy food and beverage consumption among women

Percentage of women age 15–49 consuming sweet beverages, percentage consuming sentinel unhealthy foods, and percentage achieving minimum dietary diversity for women, according to background characteristics, Ghana DHS 2022

Background characteristic	Minimum dietary diversity for women[1]	Sweet beverage consumption[2]	Unhealthy food consumption[3]	Number of women
Age				
15–19	50.1	37.0	40.7	2,682
20–29	50.9	39.1	29.6	5,034
30–39	51.1	36.6	24.1	4,311
40–49	46.5	34.6	18.0	2,987
Maternity status				
Pregnant	51.3	35.4	25.5	1,025
Not pregnant[4]	49.8	37.2	27.9	13,989
Residence				
Urban	52.4	44.7	33.0	8,557
Rural	46.7	27.0	20.7	6,457
Region				
Western	60.8	51.9	40.7	955
Central	55.7	37.1	37.7	1,703
Greater Accra	52.6	51.4	38.4	2,327
Volta	46.1	34.1	33.7	713
Eastern	53.4	34.9	26.4	1,220
Ashanti	45.6	34.9	27.0	2,928
Western North	50.4	24.8	21.5	411
Ahafo	56.8	24.6	16.3	317
Bono	44.8	31.8	21.1	567
Bono East	37.3	36.5	19.5	676
Oti	40.8	22.3	21.4	403
Northern	46.1	33.5	15.3	1,149
Savannah	25.3	26.3	12.6	319
North East	64.7	39.9	9.2	290
Upper East	68.1	28.0	18.9	640
Upper West	34.8	25.1	10.0	398
Education				
No education	42.4	22.1	9.1	2,411
Primary	40.9	27.6	19.5	2,071
Secondary	51.0	39.9	32.8	8,999
More than secondary	67.6	57.1	38.1	1,533
Wealth quintile				
Lowest	43.6	18.2	11.3	2,447
Second	43.5	25.1	19.4	2,712
Middle	47.7	33.8	28.0	3,121
Fourth	51.2	43.0	34.2	3,379
Highest	60.6	57.8	39.5	3,355
Total	49.9	37.1	27.7	15,014

[1] Minimum dietary diversity for women is defined as consuming foods from five or more of the following 10 food groups: a. grains, white/pale starchy roots, tubers, and plantains; b. pulses (beans, peas, lentils); c. nuts and seeds; d. dairy (milk, cheese, yogurt, other milk products); e. meat, fish, poultry, organ meats; f. eggs; g. dark green leafy vegetables; h. other vitamin A-rich fruits and vegetables; i. other vegetables; j. other fruits.
[2] Sweet beverages include fruit juice and fruit-flavoured drinks, sodas, malt drinks, sports drinks, energy drinks, sweetened tea, coffee, herbal drinks, and other sweetened liquids.
[3] Unhealthy foods include sweet foods such as toffees, chocolates, ice cream, FanYogo, cakes, biscuits, rock bun, toogbee, and bofrot and fried and salty foods such as packaged yellow plantain chips or potato chips, indomie, french fries, fried yam, fried potato, atomo, and spring rolls.
[4] Includes women who do not know if they are pregnant

Table 11.17 Prevalence of anaemia in women

Percentage of women age 15–49 classified as having anaemia, according to background characteristics, Ghana DHS 2022

Background characteristic	Anaemia status by haemoglobin level				Number of women
	Any (NP <12.0 g/dl/ P <11.0 g/dl)	Mild (NP 11.0–11.9 g/dl/ P 10.0–10.9 g/dl)	Moderate (NP 8.0–10.9 g/dl/ P 7.0–9.9 g/dl)	Severe (NP < 8.0 g/dl/ P < 7.0 g/dl)	
Age					
15–19	43.8	22.6	19.7	1.6	1,365
20–29	39.3	22.7	16.2	0.3	2,564
30–39	38.9	22.1	15.7	1.2	2,205
40–49	45.0	23.3	19.5	2.2	1,521
Number of children ever born					
0	41.3	21.9	18.0	1.3	2,453
1	39.6	23.5	15.5	0.7	1,261
2–3	38.9	22.8	14.9	1.1	1,917
4–5	42.9	22.4	19.6	1.0	1,312
6+	46.0	23.4	20.7	1.8	712
Maternity status					
Pregnant	51.4	28.6	22.6	0.2	514
Not pregnant[1]	40.4	22.2	17.0	1.2	7,141
Using IUD					
Yes	(60.4)	(35.0)	(25.4)	(0.0)	48
No	41.0	22.6	17.3	1.2	7,607
Residence					
Urban	39.4	22.4	15.5	1.5	4,377
Rural	43.4	23.0	19.8	0.7	3,278
Region					
Western	45.9	23.8	21.2	1.0	487
Central	44.4	23.6	19.5	1.2	894
Greater Accra	38.8	21.7	14.7	2.4	1,246
Volta	43.0	21.0	20.1	1.9	337
Eastern	37.5	22.9	13.2	1.5	630
Ashanti	37.5	22.0	14.7	0.8	1,486
Western North	36.3	20.0	15.8	0.5	189
Ahafo	35.6	22.0	13.3	0.3	160
Bono	30.1	17.8	11.9	0.4	297
Bono East	40.3	20.4	19.0	0.9	327
Oti	51.8	27.3	24.0	0.5	194
Northern	48.4	25.6	22.2	0.6	568
Savannah	43.2	24.6	17.9	0.6	169
North East	45.0	23.7	20.4	0.9	139
Upper East	47.0	23.5	22.9	0.6	331
Upper West	46.3	25.3	21.0	0.0	200
Education					
No education	45.4	22.3	21.7	1.5	1,214
Primary	42.6	22.8	18.9	0.9	1,072
Secondary	40.3	22.9	16.3	1.2	4,619
More than secondary	36.8	21.4	14.6	0.8	751
Wealth quintile					
Lowest	46.6	23.3	22.5	0.8	1,224
Second	41.8	23.1	17.6	1.1	1,366
Middle	40.8	21.8	17.9	1.2	1,563
Fourth	39.3	21.9	16.2	1.2	1,788
Highest	38.8	23.4	14.2	1.3	1,714
Total	41.1	22.6	17.3	1.1	7,655

Note: Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude and for cigarette smoking, if known, using formulas in CDC 1998 and cutoffs defined in WHO 2017d. Haemoglobin is measured in grams per decilitre (g/dl) using the HemoCue 201+ device. Figures in parentheses are based on 25–49 unweighted cases.
NP = nonpregnant
P = pregnant
[1] Includes women who do not know if they are pregnant

Table 11.18 Presence of iodised salt in household

Among all households, percentage with salt tested for iodine content, percentage with salt in the household but the salt was not tested, and percentage with no salt in the household, and among households with salt tested, percentage with iodised salt, according to background characteristics, Ghana DHS 2022

	Among all households, percentage:				Among households with tested salt:	
Background characteristic	With salt tested	With salt but salt not tested[1]	With no salt in the household	Number of households	Percentage with iodised salt	Number of households
Residence						
Urban	90.2	0.2	9.6	10,320	83.8	9,311
Rural	91.6	1.0	7.4	7,613	74.5	6,975
Region						
Western	88.9	1.9	9.2	1,282	91.6	1,140
Central	88.9	0.0	11.1	1,950	68.1	1,734
Greater Accra	91.3	0.2	8.5	3,183	80.1	2,907
Volta	93.2	0.1	6.7	888	71.2	827
Eastern	94.3	0.3	5.4	1,701	68.8	1,603
Ashanti	86.4	1.3	12.2	3,469	87.7	2,997
Western North	89.6	0.7	9.7	521	95.3	467
Ahafo	91.8	0.0	8.2	388	92.4	356
Bono	90.9	0.0	9.1	668	95.6	607
Bono East	93.3	0.0	6.7	693	77.6	646
Oti	94.6	0.0	5.4	444	69.7	420
Northern	94.6	0.3	5.1	1,064	77.1	1,006
Savannah	91.1	0.1	8.8	316	75.3	288
North East	95.2	0.1	4.7	287	81.6	273
Upper East	94.6	0.2	5.1	654	73.3	619
Upper West	92.4	0.1	7.6	427	76.2	395
Wealth quintile						
Lowest	94.1	0.1	5.7	2,797	70.1	2,632
Second	91.2	0.6	8.2	3,151	73.4	2,875
Middle	87.9	0.6	11.5	3,762	77.5	3,305
Fourth	88.1	0.6	11.3	4,204	82.3	3,702
Highest	93.8	0.5	5.7	4,020	91.0	3,772
Total	90.8	0.5	8.7	17,933	79.8	16,286

Note: Salt was tested for the presence of potassium iodate.
[1] Includes households in which salt could not be tested for technical or logistical reasons, including availability of test kits

MALARIA 12

Key Findings

- ***Ownership of insecticide-treated nets (ITNs):*** 67% of households in Ghana own at least one ITN, and 47% of households own at least one ITN for every two people.
- ***Sources of ITNs:*** 71% of ITNs owned by households were obtained from the latest mass distribution campaign in 2021.
- ***Access to ITNs:*** 61% of the population could sleep under ITN if every ITN in the household were used by two people.
- ***Use of ITNs:*** 40% of the household population, 49% of children under age 5, and 48% of pregnant women slept under an ITN the night before the survey.
- ***Intermittent preventive treatment (IPTp):*** 78% of pregnant women received at least two doses of sulfadoxine-pyrimethamine (SP)/Fansidar for malaria prevention, and 60% received at least three doses.
- ***Fever prevalence:*** 15% of children under age 5 had a fever in the 2 weeks before the survey. Advice or treatment was sought for 57% of these children, and 40% had blood taken from a finger or heel for testing.
- ***Type of antimalarial drug used:*** Among children under age 5 with a recent fever who received an antimalarial, 78% received artemisinin-based combination therapy.
- ***Low haemoglobin:*** 2% of children age 6–59 months had a haemoglobin level below 8 g/dl.
- ***Malaria:*** 9% of children age 6–59 months tested positive for malaria via microscopy.

This chapter presents data that are useful in assessing how well malaria control strategies are being implemented, including the availability and use of mosquito nets, prophylactic use of antimalarial drugs among pregnant women, care seeking and therapeutic use of antimalarial drugs among children with fever, and the prevalence of anaemia and malaria among children under age 5.

12.1 OWNERSHIP OF INSECTICIDE-TREATED NETS

Ownership of insecticide-treated nets

Households that have at least one insecticide-treated net (ITN). An ITN is a factory-treated net that does not require any further treatment.

Sample: Households

Full household ITN coverage

Percentage of households with at least one ITN for every two people.

Sample: Households (with at least one person who stayed in the household the night before the survey)

Sixty-seven percent of households in Ghana own at least one ITN, and 47% have at least one ITN for every two people who stayed in the household the night before the survey. Thirty-three percent of households do not own any ITNs (**Table 12.1**).

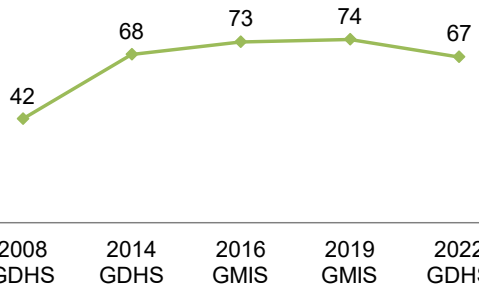
Trends: The percentage of households that own at least one ITN increased from 42% in the 2008 GDHS to 74% in the 2019 GMIS before decreasing to 67% in the 2022 GDHS (**Figure 12.1**).

Source of Nets

The main source of ITNs in Ghana was the 2021 mass national distribution campaign, which accounted for 71% of household nets (**Table 12.2** and **Figure 12.2**). Eight percent of ITNs were obtained through prior mass distribution campaigns. Seven percent of households obtained their ITNs during antenatal care (ANC) visits, 6% via school distribution campaigns, and 3% during immunisation visits.

Figure 12.1 **Trends in household ownership of ITNs**

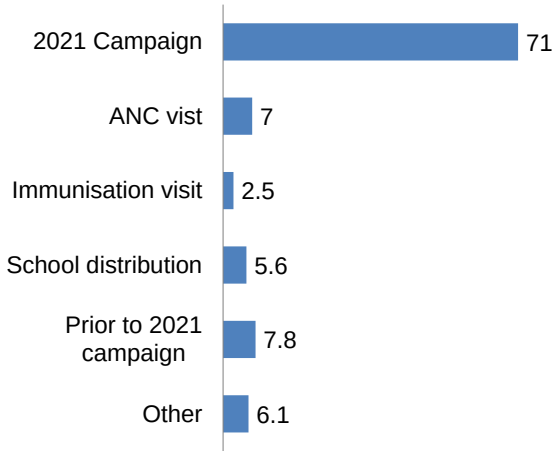
Percentage of households owning at least one insecticide-treated net (ITN)



Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Figure 12.2 **Source of ITNs**

Percent distribution of ITNs in households



12.2 HOUSEHOLD ACCESS TO AND USE OF ITNS

Access to an ITN

Percentage of the population that could sleep under an ITN if each ITN in the household were used by up to two people.

Sample: De facto household population

Use of ITNs

Percentage of the population that slept under an ITN the night before the survey.

Sample: De facto household population

Use of ITNs among those with access

Percentage of the population that slept under an ITN the night before the survey in households with at least one ITN for every two people.

Sample: De facto household population

ITNs act as both a physical and a chemical barrier against mosquitoes. By reducing the vector population, ITNs can help to reduce malaria risk at the community level as well as among individuals who use them.

Access to an ITN is measured by the proportion of the population that could sleep under an ITN if each ITN in the household were used by up to two people. Comparing ITN access and ITN use indicators can help programmes identify if there is a behavioural gap in which available ITNs are not being used. If the difference between these indicators is substantial, the ITN programme may need to design an appropriate intervention that focuses on behaviour change and on how to identify the main drivers of or barriers to ITN use. This analysis helps ITN programmes determine whether they need to achieve higher ITN coverage, promote ITN use, or both.

Although 61% of household residents in Ghana have access to an ITN, only 40% slept under an ITN the night before the survey (**Table 12.3** and **Table 12.4**). In households with at least one ITN, 54% of the population slept under an ITN the previous night (**Table 12.4**). Overall, 49% of all existing ITNs were used the night before the survey (**Table 12.5**).

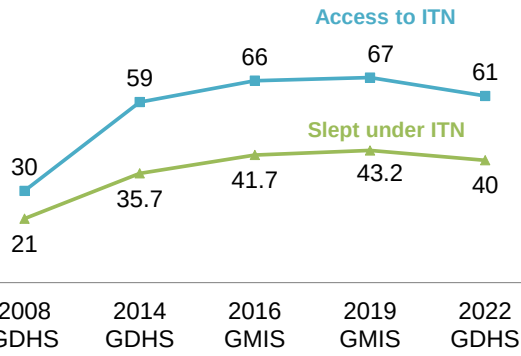
Trends: The percentage of the household population with access to an ITN increased from 30% in 2008 to 61% in 2022. Over the same period, the percentage of the population that slept under an ITN the night before the survey increased from 21% to 40% (**Figure 12.3**).

Patterns by background characteristics

- The percentage of the household population with access to an ITN generally decreases with increasing household wealth, from 67% in the lowest wealth quintile to 51% in the highest wealth quintile (**Table 12.3**).

Figure 12.3 **Trends in ITN access and use**

Percentage of the household population with access to an ITN and percentage of the population that slept under an ITN the night before the survey



Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

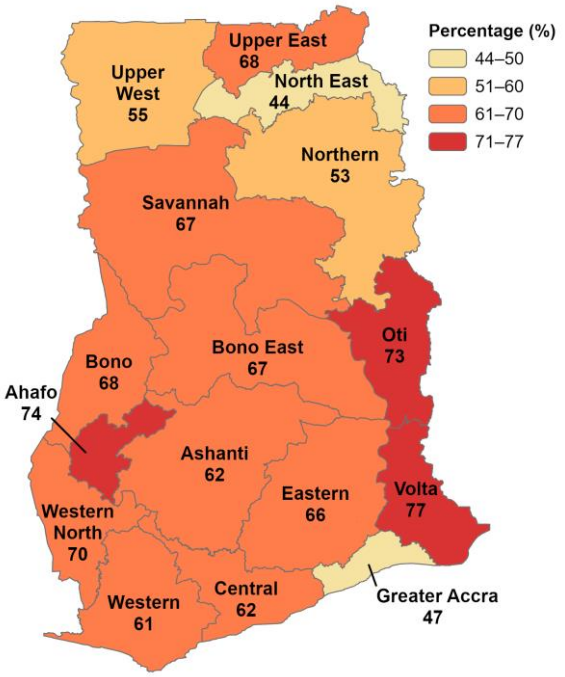
- ITN access ranges from 44% in the North East region to 77% in the Volta region (**Map 12.1**).
- ITN use by the household population ranges from 20% in the Greater Accra region to 60% in the Ahafo region (**Table 12.4**).

12.3 Use of ITNs by Children and Pregnant Women

Children under age 5 and pregnant women are most vulnerable to malaria due to slow rates of acquisition of immunity and suppression of immunity in pregnancy, respectively. In highly malaria-endemic areas, children are thought to attain a high level of immunity by their fifth birthday (Shulman and Dorman 2003). Malaria in pregnancy is frequently associated with the development of anaemia, which interferes with the maternal-foetus exchange and may lead to low birth weight infants, placental parasitaemia, foetal death, abortion, stillbirth, and prematurity (Shulman and Dorman 2003).

Map 12.1 **ITN access by region**

Percentage of the household population that could sleep under an ITN if each ITN in the household were used by up to 2 people



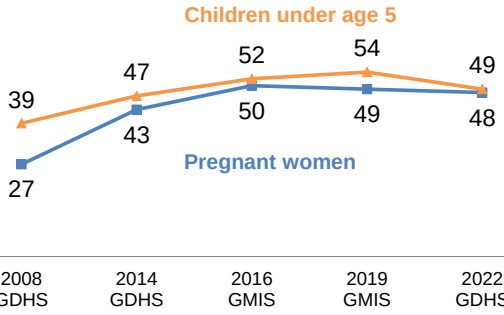
As stated in the 2021–2025 Strategic Plan for Malaria Elimination in Ghana, children under age 5 and pregnant women should sleep under an ITN every night to prevent malaria complications (MoH 2021).

Forty-nine percent of children under age 5 slept under an ITN the night before the survey, and 62% of children in households with at least one ITN slept under an ITN the night before the survey (**Table 12.6**). Overall, 48% of pregnant women age 15–49 slept under an ITN the night before the survey, and 60% of pregnant women living in households with at least one ITN slept under an ITN the night before the survey (**Table 12.7**).

Trends: ITN use among children under age 5 has increased markedly since 2008, from 39% to 49%. Similarly, the percentage of pregnant women who slept under an ITN the night before the survey has nearly doubled, from 27% to 48% (**Figure 12.4**).

Figure 12.4 **Trends in ITN use**

Percentage who slept under an ITN the night before the survey



Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

12.4 Reasons Mosquito Nets Were Not Used

Table 12.8 presents reasons why mosquito nets were not used the night before the survey. This information is important to the National Malaria Elimination Programme (NMEP) for identifying barriers to net usage. Overall, 51% of mosquito nets in households were not used the night before the survey. Twenty-six percent of respondents reported that the net was too hot, 12% said they preferred other mosquito control methods (coils, spray, or fans), and 9% said there were no mosquitoes.

12.5 MALARIA IN PREGNANCY

Intermittent preventive treatment (IPTp) during pregnancy

Percentage of women who took at least three doses of sulfadoxine-pyrimethamine (SP)/Fansidar during their last pregnancy.

Sample: Women age 15–49 with a live birth or a stillbirth in the 2 years before the survey

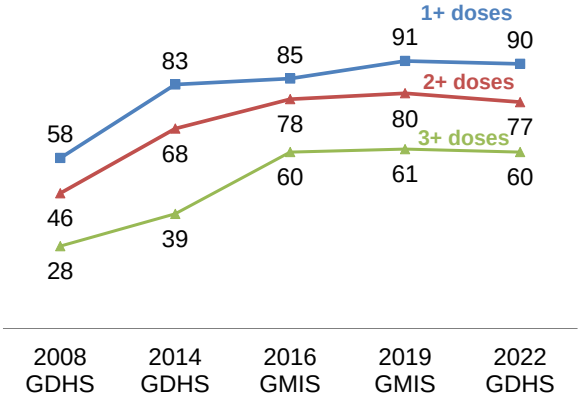
Malaria infection during pregnancy is a major public health problem in Ghana, with substantial risks for the mother, her foetus, and the neonate. Intermittent preventive treatment of malaria in pregnancy (IPTp) is a full therapeutic course of antimalarial medicine given to pregnant women at routine antenatal care visits to prevent malaria. IPTp helps prevent maternal malaria episodes, maternal and foetal anaemia, placental parasitaemia, low birth weight, and neonatal mortality.

The 2022 GDHS measured coverage of IPTp among women age 15–49 with a live birth or a stillbirth in the 2 years before the survey. Ninety percent of women with a live birth in the 2 years before the survey reported receiving one or more doses of SP/Fansidar during the pregnancy of their most recent live birth, while 78% received two or more doses. Sixty percent of women received three or more doses of SP/Fansidar in accordance with the recommendations of the National Malaria Control Strategy (**Table 12.9**).

Trends: The percentage of women receiving one or more doses of SP/Fansidar increased from 58% in 2008 to 90% in 2022, while the percentage receiving two or more doses increased from 46% to 78%. Over the same period, the percentage of women receiving three or more doses of SP/Fansidar increased from 28% to 60% (**Figure 12.5**).

Figure 12.5 **Trends in IPTp use by pregnant women**

Percentage of women with a live birth in the 2 years before the survey who received at least 1, 2, or 3 doses of SP/Fansidar



12.6 CASE MANAGEMENT OF MALARIA IN CHILDREN

Care seeking for children under age 5 with a fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey for whom advice or treatment was sought from a health provider, a health facility, or a pharmacy.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Diagnosis of malaria in children under age 5 with a fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey who had blood taken from a finger or heel for testing. This is a proxy measure of diagnostic testing for malaria.

Sample: Children under age 5 with a fever in the 2 weeks before the survey

Artemisinin-based combination therapy (ACT) for children under age 5 with a fever

Percentage of children under age 5 with a fever in the 2 weeks before the survey who received artemisinin-based combination therapy (ACT).

Sample: Children under age 5 with a fever in the 2 weeks before the survey who took any antimalarial drug

One of the key case management objectives of the NMEP is to ensure that all patients with suspected malaria cases have access to confirmatory diagnosis and receive effective treatment.

Fever is a key symptom of malaria and other acute infections in children. Malaria fevers require prompt and effective treatment to prevent malaria morbidity and mortality. Fifteen percent of children under age 5 had a fever in the 2 weeks preceding the survey. Advice or treatment was sought for 57% of these children, and 33% received timely care (the same or next day following fever onset) (**Table 12.10**).

Forty percent of children with a fever in the 2 weeks before the survey had blood taken from a finger or heel for malaria testing (**Table 12.10**).

Among children with recent fever, 39% received advice or treatment from the public health sector and 4% from the private health sector. Fifteen percent received advice from "other" private sector sources such as shops/markets (7%) and drug peddlers (7%). Among children receiving care from public health facilities, the most common sources were government health hospitals (13%), government centres (9%), and government health posts (9%) (**Table 12.11**).

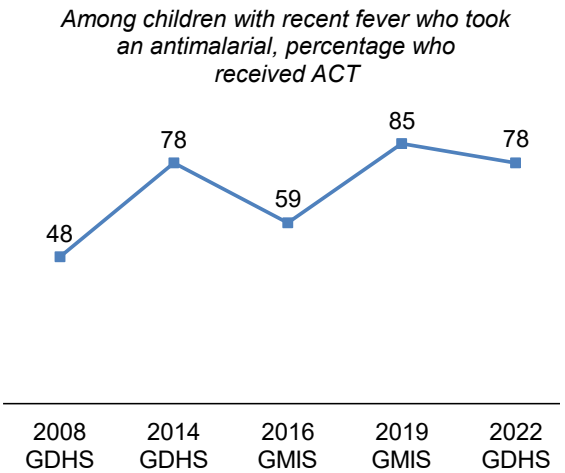
The 2022 GDHS results show that 78% of children under age 5 with recent fever received ACT. Seven percent were given an artesunate injection, 6% received amodiaquine, and 4% received SP/Fansidar (**Table 12.12**).

Trends: The percentage of children with recent fever who were taken for advice or treatment increased from 70% in 2008 to 78% in 2014 before decreasing to 72% in 2016, 69% in 2019, and 57% in 2022.

The percentage of children with a fever in the 2 weeks preceding the survey who had blood taken from a finger or heel for testing decreased from 34% in 2014 to 30% in 2016 before increasing to 34% in 2019 and 40% in 2022. Although modest, the positive trend from 2016 to 2022 shows improved adherence to the NMEP policy of testing before treatment.

Among children under age 5 with recent fever who took an antimalarial, the percentage who received ACT increased from 48% in 2008 to 85% in 2019 and then declined to 78% in 2022 (**Figure 12.6**).

Figure 12.6 **Trends in ACT use by children with fever**



12.7 Prevalence of Low Haemoglobin Levels in Children

Prevalence of low haemoglobin in children

Percentage of children age 6–59 months who had a haemoglobin measurement of less than 8 grams per decilitre (g/dl) of blood. The cutoff of 8 g/dl is often used to classify malaria-related anaemia. This is a different cutoff than was used to classify severe anaemia in the chapter on nutrition (7 g/dl).

Sample: Children age 6–59 months

Anaemia, defined as a low level of haemoglobin in the blood, decreases the amount of oxygen reaching the tissues and organs of the body and reduces their capacity to function. Anaemia in children is associated with impaired motor and cognitive development. The main causes of anaemia in children are malaria and inadequate intake of iron, folate, vitamin B12, and other nutrients. Other causes of anaemia include intestinal worms, haemoglobinopathy, and sickle cell disease. Although anaemia is not specific to malaria, trends in anaemia prevalence can reflect malaria morbidity, and they respond to changes in the coverage of malaria interventions (Korenromp et al. 2004).

Haemoglobin testing was carried out for 97% of eligible children age 6–59 months (**Table 12.13**), and 2% of these children had haemoglobin levels lower than 8 g/dl (**Table 12.14**).

Trends: The percentage of children age 6–59 months with low haemoglobin levels has decreased steadily over time, from 19% in 2008 to 2% in 2022.

12.8 Prevalence of Malaria in Children

Malaria prevalence in children

Percentage of children age 6–59 months classified as infected with malaria according to rapid diagnostic test (RDT) results.

Sample: Children age 6–59 months

All children age 6–59 months from the interviewed households were eligible for malaria testing. Testing with rapid diagnostic tests (RDTs) and microscopy was successfully carried out among 97% of eligible children. For details on malaria testing procedures, see Chapter 1, section 1.4.

Nine percent of children age 6–59 months tested positive for malaria according to microscopy results (**Table 12.15**). The percentage of children testing positive for malaria by microscopy ranges from 2% in the Greater Accra region to 15% in the Oti region (**Map 12.2**). Rapid diagnostic tests were done in conjunction with microscopy to facilitate treatment of infected children during the survey fieldwork. Results from these RDTs are also presented in **Table 12.15**. Seventeen percent of children tested positive for malaria according to RDT results.

The 2022 GDHS was conducted between October 2022 and January 2023 at the peak of malaria season. Normally, a spike in malaria cases occurs during these months. Previous surveys that incorporated malaria testing included the 2014 GDHS, 2016 GMIS, and 2019 GMIS. These surveys were conducted during a similar period when malaria transmission was at its peak. The 2014 GDHS was conducted between September and December 2014, the 2016 GMIS was conducted from October through December 2016, and the 2019 GMIS was conducted between September and November 2019.

Trends: The percentage of children under age 5 testing positive for malaria according to microscopy has decreased consistently over time, from 27% in 2014 and 21% in 2016 to 14% in 2019 and 9% in 2022 (**Figure 12.7**).

Map 12.2 Prevalence of malaria in children by region

Percentage of children age 6–59 months who tested positive for malaria by microscopy

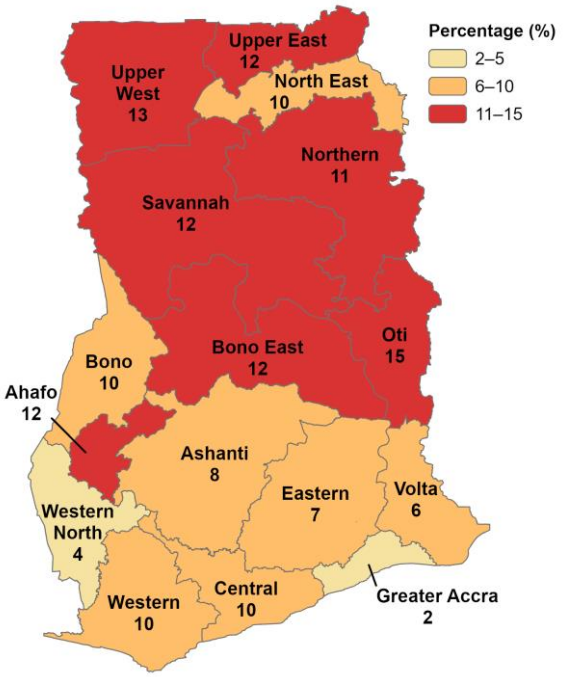
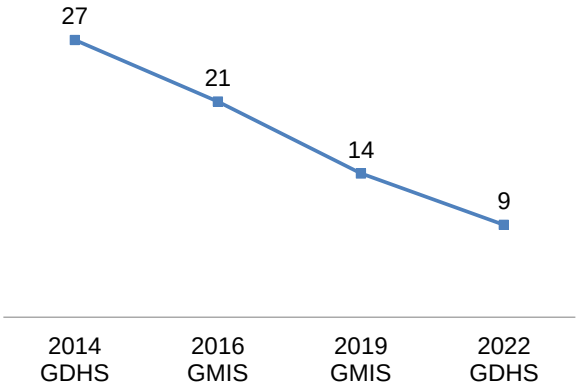


Figure 12.7 Trends in malaria prevalence among children

Percentage of children age 6–59 months who tested positive for malaria by microscopy



LIST OF TABLES

For more information on malaria, see the following tables:

Table 12.1 Household possession of mosquito nets

Percentage of households with at least one mosquito net (treated or untreated) and insecticide-treated net (ITN), average number of nets and ITNs per household, and percentage of households with at least one net and ITN per two persons who stayed in the household last night, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of households with at least one mosquito net		Average number of nets per household		Number of households	Percentage of households with at least one net for every two persons who stayed in the household last night[1]		Number of households with at least one person who stayed in the household last night
	Any mosquito net	Insecticide-treated mosquito net (ITN)[2]	Any mosquito net	Insecticide-treated mosquito net (ITN)[2]		Any mosquito net	Insecticide-treated mosquito net (ITN)[2]	
Residence								
Urban	58.3	58.2	1.3	1.3	10,320	41.6	41.5	10,256
Rural	78.3	78.1	2.0	2.0	7,613	55.6	55.4	7,562
Region								
Western	64.0	64.0	1.5	1.5	1,282	49.5	49.4	1,265
Central	67.3	67.3	1.7	1.7	1,950	49.0	49.0	1,929
Greater Accra	48.8	48.8	1.0	1.0	3,183	34.1	34.1	3,168
Volta	82.4	81.8	2.0	2.0	888	65.2	64.6	885
Eastern	70.3	70.2	1.6	1.6	1,701	53.4	53.3	1,698
Ashanti	66.2	66.0	1.6	1.6	3,469	48.8	48.7	3,429
Western North	77.2	77.0	1.9	1.9	521	58.9	58.6	517
Ahafo	79.8	79.8	2.1	2.1	388	61.5	61.5	384
Bono	72.7	72.6	1.7	1.7	668	52.4	52.2	666
Bono East	75.4	75.2	1.8	1.8	693	50.9	50.7	691
Oti	85.4	85.1	2.3	2.3	444	60.3	60.1	441
Northern	67.7	67.6	1.6	1.6	1,064	37.2	37.1	1,061
Savannah	79.1	79.1	2.2	2.2	316	51.0	51.0	315
North East	62.8	62.6	1.3	1.3	287	26.3	26.2	287
Upper East	79.6	79.5	2.0	2.0	654	54.2	54.2	653
Upper West	69.8	69.5	1.4	1.4	427	38.2	37.9	427
Wealth quintile								
Lowest	81.2	81.0	2.1	2.1	2,797	54.5	54.3	2,790
Second	79.0	78.9	2.0	2.0	3,151	55.4	55.2	3,130
Middle	68.7	68.6	1.6	1.6	3,762	49.4	49.3	3,739
Fourth	59.0	59.0	1.3	1.3	4,204	44.0	44.0	4,166
Highest	53.5	53.3	1.2	1.2	4,020	38.4	38.2	3,992
Total	66.8	66.7	1.6	1.6	17,933	47.5	47.4	17,818

[1] De facto household members
[2] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.2 Source of mosquito nets

Percent distribution of insecticide treated nets (ITNs), non-ITNs, and all mosquito nets by source of net, according to background characteristics, Ghana DHS 2022

Background characteristic	2021 mass distri-bution campaign	ANC visit	Immu-nisation visit	Private health facility	Pharmacy	Shop/ market	Com-munity health worker	Religious institution	School	NGO	Petrol station/ mobile market	Prior mass distri-bution campaign	Other	Don't know/ missing	Total	Number of mosquito nets
								ITNS[1]								
Residence																
Urban	68.1	8.0	2.5	0.3	1.0	1.3	0.6	0.1	6.9	0.3	0.0	7.7	2.9	0.1	100.0	13,525
Rural	74.3	6.0	2.4	0.2	0.3	0.9	1.1	0.1	4.4	0.4	0.0	7.8	2.1	0.1	100.0	15,010
Region																
Western	77.1	5.6	1.9	0.3	0.3	0.5	0.4	0.0	4.6	0.1	0.0	6.5	2.6	0.0	100.0	1,897
Central	68.7	6.6	2.3	0.3	0.2	0.4	0.0	0.3	6.7	0.2	0.1	11.6	2.6	0.1	100.0	3,326
Greater Accra	67.6	9.1	2.4	0.4	1.9	2.2	0.4	0.0	7.1	0.2	0.0	4.8	3.4	0.5	100.0	3,249
Volta	83.6	3.7	1.2	0.0	0.3	0.6	0.0	0.0	2.9	0.0	0.0	6.4	1.0	0.1	100.0	1,759
Eastern	76.7	4.7	2.3	0.0	0.2	0.3	0.2	0.1	7.2	0.0	0.0	6.6	1.5	0.0	100.0	2,766
Ashanti	73.8	5.8	1.0	0.3	1.1	1.4	0.4	0.1	5.3	0.1	0.0	8.5	2.2	0.0	100.0	5,638
Western North	76.0	4.0	1.4	0.1	0.1	0.7	0.8	0.2	5.4	1.1	0.0	9.6	0.7	0.0	100.0	975
Ahafo	80.7	3.7	0.6	0.3	0.2	0.1	0.1	0.1	2.9	0.9	0.0	9.1	1.2	0.1	100.0	810
Bono	62.1	5.4	5.3	0.1	0.3	1.2	6.5	0.1	4.4	0.5	0.1	10.4	3.8	0.0	100.0	1,126
Bono East	73.7	5.9	2.4	0.2	0.1	1.1	0.7	0.0	5.8	0.0	0.0	8.5	1.6	0.0	100.0	1,274
Oti	78.9	5.0	1.9	0.0	0.1	0.7	0.3	0.0	4.0	0.1	0.1	8.2	0.7	0.0	100.0	1,008
Northern	75.3	10.3	4.0	0.2	0.0	0.4	0.6	0.0	4.3	0.9	0.0	2.0	2.0	0.0	100.0	1,744
Savannah	81.2	5.5	2.0	0.1	0.1	0.9	0.5	0.0	2.9	0.4	0.0	2.6	3.7	0.1	100.0	681
North East	31.3	26.9	9.4	0.0	0.8	5.3	6.3	0.1	2.1	1.4	0.1	12.1	3.5	0.7	100.0	378
Upper East	56.2	9.5	4.4	0.2	0.6	1.2	4.1	0.2	11.1	0.9	0.0	8.8	2.4	0.4	100.0	1,307
Upper West	18.8	24.4	11.1	1.1	2.0	4.8	2.4	0.2	2.8	2.4	0.2	14.4	15.3	0.2	100.0	597
Wealth quintile																
Lowest	70.7	7.6	3.0	0.2	0.1	1.3	1.5	0.1	4.0	0.3	0.0	8.3	2.8	0.1	100.0	5,775
Second	76.0	6.2	2.4	0.2	0.3	0.7	0.9	0.0	4.2	0.5	0.0	6.8	1.7	0.0	100.0	6,221
Middle	74.6	5.1	2.2	0.3	0.3	0.7	0.8	0.1	5.8	0.2	0.0	7.5	2.3	0.1	100.0	6,054
Fourth	71.2	7.5	2.2	0.1	0.5	0.5	0.6	0.2	6.9	0.3	0.0	7.4	2.4	0.2	100.0	5,504
Highest	62.4	8.8	2.7	0.6	2.2	2.4	0.4	0.1	7.3	0.2	0.0	9.0	3.7	0.2	100.0	4,980
Total	71.3	7.0	2.5	0.2	0.6	1.1	0.9	0.1	5.6	0.3	0.0	7.8	2.5	0.1	100.0	28,535
								NON-ITNS								
Total	na	na	na	0.0	0.0	50.1	0.0	4.0	0.0	0.0	0.0	23.2	19.3	3.4	100.0	76
								ALL MOSQUITO NETS								
Total	71.2	6.9	2.5	0.2	0.6	1.2	0.9	0.1	5.6	0.3	0.0	7.8	2.6	0.1	100.0	28,611

na = not applicable
ANC = antenatal care
NGO = nongovernmental organisation
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.3 Access to an insecticide-treated net (ITN)

Percentage of the de facto population with access to an ITN in the household, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of the de facto population with access to an ITN[1,2]	Number of persons
Residence		
Urban	54.0	33,106
Rural	68.9	30,141
Region		
Western	60.8	3,933
Central	62.1	6,868
Greater Accra	47.2	9,198
Volta	77.2	2,919
Eastern	66.3	5,287
Ashanti	62.4	11,685
Western North	69.6	1,748
Ahafo	73.5	1,392
Bono	68.1	2,274
Bono East	66.9	2,836
Oti	73.2	1,901
Northern	52.7	5,430
Savannah	66.8	1,574
North East	43.7	1,546
Upper East	67.7	2,891
Upper West	55.3	1,764
Wealth quintile		
Lowest	66.8	12,651
Second	68.7	12,626
Middle	63.3	12,654
Fourth	56.0	12,622
Highest	50.8	12,694
Total	61.1	63,247

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
[2] Percentage of the de facto household population that could sleep under an ITN if each ITN in the household were used by up to two people

Table 12.4 Use of mosquito nets by persons in the household

Percentage of the de facto household population that slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN) the night before the survey, and among the de facto household population in households with at least one ITN, percentage that slept under an ITN the night before the survey, according to background characteristics, Ghana DHS 2022

	Household population			Household population in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of persons	Percentage who slept under an ITN[1] last night	Number of persons
Age					
<5	49.1	49.0	8,580	62.1	6,773
5–14	40.8	40.7	16,909	52.8	13,038
15–34	33.5	33.4	18,512	49.1	12,614
35–49	39.6	39.4	9,207	54.5	6,659
50+	41.8	41.6	10,009	56.8	7,344
Don't know/missing	25.4	25.4	31	(36.8)	21
Sex					
Male	38.1	38.0	29,948	52.9	21,511
Female	41.2	41.1	33,299	54.9	24,938
Residence					
Urban	26.7	26.6	33,106	40.7	21,614
Rural	54.2	54.0	30,141	65.6	24,835
Region					
Western	37.0	36.9	3,933	52.2	2,781
Central	39.1	39.1	6,868	52.3	5,130
Greater Accra	19.9	19.9	9,198	35.2	5,192
Volta	56.3	55.8	2,919	64.5	2,529
Eastern	39.0	38.9	5,287	50.2	4,094
Ashanti	34.2	34.0	11,685	46.5	8,548
Western North	54.6	54.6	1,748	67.3	1,418
Ahafo	60.3	60.3	1,392	71.6	1,172
Bono	45.7	45.6	2,274	56.5	1,835
Bono East	57.3	57.1	2,836	69.7	2,325
Oti	59.2	59.0	1,901	67.3	1,667
Northern	36.9	36.9	5,430	52.2	3,834
Savannah	59.6	59.6	1,574	72.3	1,297
North East	39.3	38.9	1,546	61.6	978
Upper East	55.8	55.6	2,891	68.6	2,344
Upper West	41.8	41.6	1,764	56.1	1,306
Wealth quintile					
Lowest	60.4	60.2	12,651	73.5	10,355
Second	52.9	52.8	12,626	64.1	10,407
Middle	40.9	40.8	12,654	53.9	9,596
Fourth	27.0	26.9	12,622	40.6	8,372
Highest	17.8	17.6	12,694	28.9	7,720
Total	39.8	39.7	63,247	54.0	46,449

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.5 Use of existing ITNs

Percentage of insecticide-treated nets (ITNs) that were used by anyone the night before the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of existing ITNs[1] used last night	Number of ITNs[1]
Residence		
Urban	37.6	13,525
Rural	59.2	15,010
Region		
Western	42.0	1,897
Central	44.8	3,326
Greater Accra	33.2	3,249
Volta	55.6	1,759
Eastern	42.9	2,766
Ashanti	38.9	5,638
Western North	53.7	975
Ahafo	55.9	810
Bono	53.4	1,126
Bono East	65.3	1,274
Oti	61.0	1,008
Northern	62.6	1,744
Savannah	75.3	681
North East	79.8	378
Upper East	70.4	1,307
Upper West	68.3	597
Wealth quintile		
Lowest	70.1	5,775
Second	58.8	6,221
Middle	48.3	6,054
Fourth	35.8	5,504
Highest	27.7	4,980
Total	49.0	28,535

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.6 Use of mosquito nets by children

Percentage of children under age 5 who slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN) the night before the survey, and among children under age 5 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Ghana DHS 2022

	Children under age 5 in all households			Children under age 5 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of children	Percentage who slept under an ITN[1] last night	Number of children
Age in months					
<12	52.8	52.6	1,689	65.5	1,357
12–23	50.5	50.1	1,821	63.4	1,437
24–35	47.8	47.8	1,599	60.0	1,273
36–47	48.5	48.5	1,752	61.7	1,377
48–59	46.0	45.9	1,718	59.3	1,330
Sex					
Male	49.7	49.5	4,350	62.2	3,458
Female	48.5	48.5	4,230	61.8	3,316
Residence					
Urban	36.1	36.0	4,141	50.3	2,964
Rural	61.3	61.1	4,439	71.2	3,809
Region					
Western	46.0	46.0	533	58.2	422
Central	49.2	49.0	901	61.5	719
Greater Accra	30.6	30.6	1,068	47.0	697
Volta	58.3	57.8	325	65.7	286
Eastern	44.7	44.7	639	53.3	536
Ashanti	44.8	44.5	1,523	55.5	1,221
Western North	58.4	58.4	228	69.1	193
Ahafo	68.3	68.3	188	78.2	164
Bono	59.9	59.5	282	68.2	246
Bono East	63.3	62.9	429	74.7	361
Oti	70.1	70.1	279	76.0	257
Northern	43.9	43.9	955	60.2	697
Savannah	63.5	63.5	257	76.8	213
North East	50.8	50.7	297	75.4	200
Upper East	63.3	63.0	423	74.5	358
Upper West	56.3	56.1	254	69.2	205
Wealth quintile					
Lowest	67.0	66.8	2,055	78.9	1,738
Second	57.5	57.5	1,764	68.0	1,491
Middle	49.2	49.2	1,674	61.4	1,340
Fourth	36.9	36.7	1,591	50.7	1,152
Highest	27.8	27.4	1,496	39.0	1,051
Total	49.1	49.0	8,580	62.1	6,773

Note: Table is based on children who stayed in the household the night before the interview.
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.7 Use of mosquito nets by pregnant women

Percentage of pregnant women age 15–49 who slept under a mosquito net (treated or untreated) and under an insecticide-treated net (ITN) the night before the survey, and among pregnant women age 15–49 in households with at least one ITN, percentage who slept under an ITN the night before the survey, according to background characteristics, Ghana DHS 2022

	Pregnant women age 15–49 in all households			Pregnant women age 15–49 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any mosquito net last night	Percentage who slept under an ITN[1] last night	Number of pregnant women	Percentage who slept under an ITN[1] last night	Number of pregnant women
Residence					
Urban	32.8	32.8	505	44.6	371
Rural	63.3	63.3	479	72.7	418
Region					
Western	47.3	47.3	66	(56.2)	55
Central	48.2	48.2	101	(59.4)	82
Greater Accra	23.5	23.5	136	(34.6)	92
Volta	56.7	56.7	43	(69.1)	35
Eastern	47.6	47.6	91	52.0	84
Ashanti	36.9	36.9	163	47.3	127
Western North	54.4	54.4	26	(66.5)	21
Ahafo	71.7	71.7	20	80.9	17
Bono	56.1	56.1	37	61.8	33
Bono East	63.4	63.4	40	75.0	34
Oti	65.9	65.9	33	75.4	28
Northern	53.3	53.3	106	72.3	78
Savannah	69.4	69.4	30	81.3	26
North East	56.3	56.3	28	82.3	19
Upper East	66.4	66.4	41	75.9	36
Upper West	55.8	55.8	25	65.5	21
Education					
No education	58.1	58.1	183	75.5	141
Primary	53.7	53.7	143	64.3	119
Secondary	45.7	45.7	573	57.0	459
More than secondary	28.8	28.8	86	35.2	70
Wealth quintile					
Lowest	70.2	70.2	193	83.5	162
Second	71.7	71.7	179	82.0	157
Middle	51.7	51.7	185	62.7	152
Fourth	32.1	32.1	241	42.2	183
Highest	17.4	17.4	186	24.2	134
Total	47.7	47.7	984	59.5	789

Note: Table is based on women who stayed in the household the night before the interview. Figures in parentheses are based on 25–49 unweighted cases.
[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table 12.8 Main reason mosquito net was not used the night before the survey

Among ITNs, non-ITNs, and all mosquito nets, percentage that were not used by anyone the night before the survey, and among mosquito nets that were not used by anyone the night before the survey, percent distribution by the main reason each net was not used, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of nets not used the night before the survey	Total number of mosquito nets	Main reason each net was not used the night before the survey													Number of mosquito nets not used the night before the survey
			Too hot	No mosqui-toes/no malaria	Prefer other methods	Net too old/torn	Chemicals in net are unsafe	Don't like smell, size, shape, and/or texture	Usual user did not sleep here last night	Extra net/saving for later	Net was being washed/ dried/aired	Slept outside	Net brought bugs	Other	Total	
								ITNS[1]								
Residence																
Urban	62.3	13,525	31.8	8.9	14.9	1.9	3.3	1.6	1.2	31.6	1.4	0.4	0.0	3.0	100.0	8,431
Rural	40.7	15,010	16.9	10.1	7.9	2.4	2.5	1.0	2.5	51.6	2.3	0.5	0.2	2.2	100.0	6,110
Region																
Western	58.0	1,897	25.7	8.2	17.2	2.5	4.0	1.0	1.8	35.0	2.2	0.4	0.0	2.0	100.0	1,100
Central	55.2	3,326	20.1	4.8	10.8	2.4	3.6	0.9	1.4	50.4	2.5	0.5	0.1	2.4	100.0	1,834
Greater Accra	66.8	3,249	36.3	7.5	16.2	1.1	3.2	0.7	0.8	28.3	0.7	0.2	0.0	5.0	100.0	2,171
Volta	44.4	1,759	14.9	9.7	17.9	1.3	2.3	3.1	1.4	44.1	3.0	0.3	0.0	2.0	100.0	780
Eastern	57.1	2,766	30.7	11.6	14.3	3.2	2.1	1.3	1.6	32.1	1.2	0.1	0.0	1.7	100.0	1,578
Ashanti	61.1	5,638	29.1	8.4	9.4	0.6	3.7	1.4	1.9	40.3	1.6	0.3	0.2	3.2	100.0	3,445
Western North	46.2	975	17.0	6.3	2.1	1.0	2.9	2.1	2.0	63.2	2.0	0.4	0.1	0.9	100.0	450
Ahafo	44.1	810	10.3	8.4	3.4	0.8	1.6	1.9	2.2	68.4	1.0	0.3	0.0	1.8	100.0	357
Bono	46.5	1,126	15.3	16.7	14.4	2.0	2.5	2.6	2.5	38.2	1.6	1.6	0.4	2.2	100.0	524
Bono East	34.7	1,274	12.4	14.2	8.7	6.3	1.2	1.7	2.2	48.7	3.5	0.3	0.1	0.7	100.0	442
Oti	38.9	1,008	20.4	6.4	5.4	4.6	0.7	1.4	5.6	51.5	2.5	0.4	0.0	1.1	100.0	392
Northern	37.4	1,744	26.9	18.8	8.9	1.2	2.6	2.0	0.4	34.7	2.3	0.3	0.0	1.9	100.0	652
Savannah	24.5	681	21.4	12.0	6.6	4.9	0.6	0.9	4.1	42.1	2.6	2.2	0.0	2.6	100.0	167
North East	20.1	378	29.0	20.6	12.7	9.6	2.1	1.5	1.7	17.1	1.4	4.1	0.0	0.3	100.0	76
Upper East	29.3	1,307	17.1	13.3	16.7	3.7	1.8	1.3	2.3	37.7	2.0	1.6	0.0	2.5	100.0	383
Upper West	31.4	597	21.6	17.9	5.6	13.7	1.2	0.9	3.8	29.0	4.0	0.6	0.1	1.6	100.0	188
Wealth quintile																
Lowest	29.8	5,775	8.8	9.2	2.9	3.7	1.5	0.8	3.0	63.6	2.2	1.1	0.0	3.1	100.0	1,722
Second	41.1	6,221	18.0	9.9	6.3	2.5	2.3	1.0	2.7	52.9	2.5	0.4	0.3	1.2	100.0	2,557
Middle	51.7	6,054	25.5	8.2	10.0	2.3	2.7	1.2	1.6	43.7	2.1	0.5	0.0	2.4	100.0	3,129
Fourth	64.2	5,504	33.3	8.1	13.6	1.4	3.6	1.1	1.4	32.3	1.8	0.4	0.1	3.0	100.0	3,533
Highest	72.3	4,980	31.3	11.5	20.4	1.6	3.7	2.2	0.9	24.0	0.9	0.1	0.0	3.4	100.0	3,600
Total	51.0	28,535	25.5	9.4	11.9	2.1	2.9	1.4	1.7	40.0	1.8	0.4	0.1	2.7	100.0	14,541
								NON-ITNS								
Total	39.0	76	(13.8)	(15.7)	(20.7)	(5.1)	(0.0)	(12.2)	(8.8)	(21.8)	(1.9)	(0.0)	(0.0)	(0.0)	100.0	30
								ALL MOSQUITO NETS								
Total	50.9	28,611	25.5	9.4	12.0	2.1	2.9	1.4	1.8	40.0	1.8	0.4	0.1	2.7	100.0	14,570

[1] An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN). Figures in parentheses are based on 25–49 unweighted cases.

Table 12.9 Use of intermittent preventive treatment (IPTp) by women during pregnancy

Percentage of women age 15–49 with a live birth and/or a stillbirth in the 2 years preceding the survey who, during the pregnancy that resulted in the last live birth or stillbirth, received one or more doses of SP/Fansidar, received two or more doses of SP/Fansidar, and received three or more doses of SP/Fansidar, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who received one or more doses of SP/Fansidar	Percentage who received two or more doses of SP/Fansidar	Percentage who received three or more doses of SP/Fansidar	Number of women with a live birth and/or a stillbirth in the 2 years preceding the survey
Birth order[1]				
1	89.7	77.5	58.7	1,016
2–3	90.3	79.1	62.3	1,287
4–5	90.8	78.6	63.1	760
6+	88.3	70.7	52.6	428
Residence				
Urban	90.0	78.7	62.8	1,623
Rural	90.0	76.4	58.0	1,868
Region				
Western	90.0	82.2	61.9	208
Central	92.6	80.2	65.6	357
Greater Accra	87.7	79.8	64.8	410
Volta	92.6	88.5	70.7	130
Eastern	92.5	82.9	73.1	246
Ashanti	90.6	72.9	49.9	631
Western North	89.9	74.8	51.8	96
Ahafo	85.5	74.3	58.3	77
Bono	89.9	81.0	66.6	113
Bono East	91.1	77.2	65.1	191
Oti	91.0	72.0	51.9	123
Northern	84.4	64.3	44.4	395
Savannah	83.9	68.2	51.7	105
North East	90.5	79.1	59.9	112
Upper East	95.3	91.7	78.8	191
Upper West	95.4	90.7	77.9	105
Education				
No education	88.7	71.5	52.4	728
Primary	87.1	74.3	57.7	542
Secondary	91.4	79.7	63.2	1,898
More than secondary	89.7	83.1	64.9	323
Wealth quintile				
Lowest	88.0	73.7	54.3	853
Second	89.7	76.5	55.7	723
Middle	90.5	75.9	61.0	705
Fourth	91.3	78.8	65.2	631
Highest	91.2	84.8	68.3	579
Total	90.0	77.5	60.2	3,491
STILLBIRTHS				
Total	(81.2)	(59.5)	(41.1)	43
LIVE BIRTHS AND STILLBIRTHS[2]				
Total	89.9	77.3	60.0	3,534

Note: Stillbirths are foetal deaths in pregnancies lasting 28 or more weeks. When pregnancy duration is reported in months, stillbirths are foetal deaths in pregnancies lasting 7 or more months. Figures in parentheses are based on 25–49 unweighted cases.
SP = sulfadoxine-pyrimethamine
[1] Birth order refers to the order of the birth among the respondent's live births.
[2] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data are tabulated for the most recent birth only.

Table 12.10 Children with fever and care seeking, prompt treatment, and diagnosis

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey, and among children under age 5 with fever, percentage for whom advice or treatment was sought, percentage for whom advice or treatment was sought the same or next day following the onset of fever, percentage who had blood taken from a finger or heel for testing, and percentage who were diagnosed with malaria by a health care provider, according to background characteristics, Ghana DHS 2022

	Children under age 5		Children under age 5 with fever				
Background characteristic	Percentage with a fever in the 2 weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom advice or treatment was sought the same or next day	Percentage who had blood taken from a finger or heel for testing	Percentage who were diagnosed with malaria by a health care provider	Number of children
Age in months							
<12	10.4	1,718	51.2	29.5	32.0	29.0	178
12–23	17.9	1,823	55.9	29.9	37.9	30.0	327
24–35	16.8	1,546	62.7	33.2	43.2	47.2	260
36–47	16.1	1,632	49.9	28.2	42.6	43.1	263
48–59	14.0	1,596	65.8	43.5	42.7	49.6	224
Sex							
Male	14.8	4,240	60.4	32.1	41.2	39.6	627
Female	15.3	4,075	53.9	33.1	38.8	39.8	625
Residence							
Urban	12.1	4,048	49.7	29.2	33.9	32.9	490
Rural	17.9	4,267	61.9	34.8	43.9	44.1	762
Region							
Western	12.3	515	67.0	43.1	37.3	29.3	63
Central	18.0	841	34.9	17.6	33.7	36.5	151
Greater Accra	8.7	1,057	(27.0)	(11.9)	(12.0)	(8.4)	92
Volta	14.6	313	71.5	49.2	54.6	37.5	46
Eastern	6.3	611	(79.6)	(46.7)	(64.2)	(51.9)	38
Ashanti	17.1	1,495	56.3	39.5	33.9	39.8	255
Western North	14.3	222	51.4	26.7	40.1	35.6	32
Ahafo	12.1	186	62.5	43.1	53.6	43.6	22
Bono	9.3	277	(59.7)	(20.3)	(57.2)	(55.1)	26
Bono East	13.6	437	56.3	20.2	53.4	49.6	59
Oti	27.2	276	76.1	49.5	35.9	35.1	75
Northern	21.6	923	61.1	34.5	33.0	41.1	199
Savannah	17.2	247	58.9	33.8	34.6	40.8	43
North East	22.1	267	70.8	36.8	63.2	61.5	59
Upper East	17.3	406	70.9	26.4	72.8	59.2	70
Upper West	8.5	242	65.6	29.6	57.1	40.3	21
Mother's education							
No education	19.1	1,922	56.9	33.2	37.6	39.9	366
Primary	17.0	1,250	54.7	28.1	39.5	46.8	213
Secondary	13.7	4,348	56.4	32.0	40.6	38.9	596
More than secondary	9.7	794	70.7	46.8	48.6	25.3	77
Wealth quintile							
Lowest	20.6	1,966	59.3	28.4	43.1	43.2	404
Second	15.7	1,690	62.6	41.6	44.7	49.4	265
Middle	14.2	1,614	55.7	29.4	40.3	38.6	230
Fourth	13.2	1,584	46.1	29.9	30.6	28.9	209
Highest	9.8	1,460	59.3	36.7	35.8	29.5	144
Total	15.1	8,315	57.1	32.6	40.0	39.7	1,252

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] Includes advice or treatment from the following sources: public sector, private medical sector, NGO medical sector, shop/market, drug peddler. Excludes advice or treatment from a traditional practitioner.

Table 12.11 Source of advice or treatment for children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Ghana DHS 2022

	Percentage for whom advice or treatment was sought from each source:	
Source	Among children with fever	Among children with fever for whom advice or treatment was sought
Public sector	38.6	58.2
Government hospital	13.1	19.7
Government polyclinic	2.1	3.2
Government health centre	8.5	12.9
Government clinic	5.8	8.7
CHPS centre/government health post	8.6	13.0
Community health service (outreach)	0.6	0.9
Private sector	4.3	6.5
Private hospital	1.9	2.9
Private clinic	2.0	3.1
Maternity home	0.1	0.2
Community health service (mobile clinic)	0.3	0.4
Other private sector	14.8	22.4
Shop/market	7.4	11.2
Traditional practitioner	0.3	0.4
Drug peddler	7.2	10.9
Other	0.9	1.4
Number of children	1,252	830

Note: Advice or treatment for children with fever may have been sought from more than one source.
CHPS = community-based health planning and services

Table 12.12 Type of antimalarial drugs used

Among children under age 5 with a fever in the 2 weeks preceding the survey who took any antimalarial medication, percentage who took specific antimalarial drugs, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of children who took:									Number of children with fever who took anti-malarial drug
	Any ACT	SP/ Fansidar	Chloroquine	Amodia-quine	Quinine pills	Quinine injection	Artesunate rectal	Artesunate injection	Other anti-malarial	
Age in months										
<6	*	*	*	*	*	*	*	*	*	10
6–11	82.8	0.7	2.3	10.9	1.5	3.0	0.7	2.4	1.1	41
12–23	73.4	5.1	0.7	10.4	3.0	1.2	2.8	8.2	2.3	119
24–35	82.0	5.3	2.6	4.2	2.6	0.9	3.3	6.5	0.0	127
36–47	78.0	3.7	0.8	5.2	3.0	1.1	0.9	9.1	5.9	136
48–59	77.8	3.9	2.5	4.5	0.3	2.1	10.0	5.5	0.2	128
Sex										
Male	74.3	4.3	2.6	8.9	3.7	0.8	4.3	6.4	2.0	305
Female	83.0	3.9	0.9	3.2	0.4	2.1	3.4	7.7	2.1	255
Residence										
Urban	74.9	4.5	1.2	9.2	1.6	1.2	6.1	4.4	3.6	190
Rural	80.0	3.9	2.1	4.8	2.5	1.5	2.7	8.3	1.3	370
Region										
Western	*	*	*	*	*	*	*	*	*	25
Central	(88.7)	(0.0)	(0.0)	(2.6)	(0.0)	(3.2)	(2.4)	(0.0)	(3.1)	54
Greater Accra	*	*	*	*	*	*	*	*	*	21
Volta	(75.9)	(13.5)	(0.0)	(7.6)	(0.0)	(0.0)	(0.0)	(10.6)	(0.0)	25
Eastern	*	*	*	*	*	*	*	*	*	22
Ashanti	(75.0)	(0.0)	(0.0)	(4.1)	(4.5)	(0.0)	(10.6)	(2.8)	(6.9)	117
Western North	*	*	*	*	*	*	*	*	*	11
Ahafo	(71.3)	(0.0)	(7.5)	(10.7)	(0.0)	(4.2)	(3.3)	(3.0)	(0.0)	11
Bono	(80.2)	(5.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(24.9)	(0.0)	17
Bono East	(86.9)	(13.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(11.2)	(0.0)	32
Oti	73.0	0.0	2.8	14.3	3.6	3.0	0.0	11.3	1.2	40
Northern	77.5	10.1	3.9	11.8	0.0	1.6	1.3	1.3	0.0	76
Savannah	82.1	3.2	0.9	0.4	3.7	0.8	2.4	8.7	0.0	22
North East	67.5	3.1	8.6	4.9	1.6	0.0	12.3	3.8	1.5	39
Upper East	63.7	10.3	3.4	3.7	4.2	7.7	2.8	36.4	1.9	41
Upper West	*	*	*	*	*	*	*	*	*	7
Mother's education										
No education	73.7	5.4	2.7	5.6	2.7	0.9	4.0	13.0	1.7	162
Primary	77.4	2.2	2.5	10.2	3.3	1.5	3.6	6.7	0.4	106
Secondary	80.7	3.9	1.2	5.1	1.6	1.8	3.6	4.0	3.1	267
More than secondary	*	*	*	*	*	*	*	*	*	25
Wealth quintile										
Lowest	76.4	5.9	2.9	4.9	1.8	0.7	2.5	13.1	0.5	185
Second	75.3	3.4	2.2	3.5	3.3	1.8	7.2	5.2	6.1	138
Middle	75.9	3.2	1.9	13.7	1.9	1.8	1.2	5.5	2.1	101
Fourth	83.1	2.1	0.0	3.8	3.2	2.7	7.1	1.1	0.0	80
Highest	(89.0)	(4.3)	(0.0)	(7.7)	(0.0)	(0.0)	(0.8)	(2.4)	(0.0)	56
Total	78.3	4.1	1.8	6.3	2.2	1.4	3.9	7.0	2.1	560

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
ACT = artemisinin-based combination therapy
SP = sulfadoxine pyrimethamine

Table 12.13 Coverage of testing for anaemia and malaria in children

Percentage of eligible children age 6–59 months who were tested for anaemia and for malaria, according to background characteristics (unweighted), Ghana DHS 2022

Background characteristic	Percentage tested for: Anaemia	Malaria with RDT	Malaria by microscopy	Number of children
Age in months				
6–8	96.1	96.1	96.1	254
9–11	97.6	97.6	97.6	250
12–17	98.7	98.7	98.7	526
18–23	98.7	98.7	98.7	540
24–35	96.9	97.0	97.0	977
36–47	97.0	97.0	97.0	1,011
48–59	96.6	96.7	96.7	960
Sex				
Male	97.2	97.3	97.3	2,304
Female	97.3	97.4	97.4	2,214
Mother's interview status				
Interviewed	98.1	98.2	98.2	3,943
Not interviewed but in household	73.6	73.6	73.6	140
Not interviewed and not in the household[1]	97.2	97.2	97.2	435
Residence				
Urban	96.7	96.7	96.7	1,881
Rural	97.7	97.8	97.8	2,637
Region				
Western	97.2	97.2	97.2	218
Central	97.9	97.9	97.9	243
Greater Accra	96.2	96.2	96.2	210
Volta	99.5	99.5	99.5	193
Eastern	99.1	99.1	99.1	212
Ashanti	96.9	96.9	96.9	294
Western North	95.3	95.8	95.8	191
Ahafo	96.7	96.7	96.7	245
Bono	99.5	99.5	99.5	194
Bono East	97.6	97.6	97.6	294
Oti	97.0	97.0	97.0	271
Northern	97.0	97.0	97.0	466
Savannah	96.4	96.6	96.6	388
North East	96.9	96.9	96.9	477
Upper East	96.8	96.8	96.8	309
Upper West	98.1	98.1	98.1	313
Mother's education[2]				
No education	97.3	97.4	97.4	1,349
Primary	97.8	97.8	97.8	625
Secondary	97.9	98.0	98.0	1,806
More than secondary	92.4	92.4	92.4	303
Wealth quintile				
Lowest	97.5	97.5	97.5	1,469
Second	98.1	98.1	98.1	1,103
Middle	97.7	97.8	97.8	815
Fourth	97.6	97.6	97.6	622
Highest	93.9	93.9	93.9	509
Total	97.3	97.3	97.3	4,518

RDT = rapid diagnostic test (Abbott Bioline)
[1] Includes children whose mothers are deceased
[2] For women who are not interviewed, information on education is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 12.14 Haemoglobin <8.0 g/dl in children

Percentage of children age 6–59 months with haemoglobin lower than 8.0 g/dl, by background characteristics, Ghana DHS 2022

Background characteristic	Haemoglobin <8.0 g/dl	Number of children
Age in months		
6–8	0.2	209
9–11	1.1	213
12–17	5.2	451
18–23	3.5	468
24–35	2.5	811
36–47	1.5	860
48–59	1.4	826
Sex		
Male	2.4	1,947
Female	2.2	1,889
Mother's interview status		
Interviewed	2.4	3,424
Not interviewed but in household	1.2	67
Not interviewed and not in the household[1]	1.1	346
Residence		
Urban	1.3	1,881
Rural	3.2	1,956
Region		
Western	1.9	241
Central	1.5	397
Greater Accra	1.1	462
Volta	2.0	154
Eastern	2.5	294
Ashanti	0.6	705
Western North	0.9	90
Ahafo	1.1	87
Bono	1.7	124
Bono East	3.1	185
Oti	1.8	119
Northern	5.8	430
Savannah	3.3	113
North East	5.2	130
Upper East	3.4	184
Upper West	2.8	122
Mother's education[2]		
No education	4.4	858
Primary	3.3	517
Secondary	1.6	1,815
More than secondary	0.3	300
Wealth quintile		
Lowest	4.0	900
Second	3.4	789
Middle	1.6	742
Fourth	1.2	730
Highest	0.6	676
Total	2.3	3,837

Note: Table is based on children who stayed in the household the night before the interview and who were tested for anaemia. Haemoglobin levels are adjusted for altitude using CDC formulas (CDC 1998). Haemoglobin is measured in grams per decilitre (g/dl) using the HemoCue 201+ device.

[1] Includes children whose mothers are deceased

[2] For women who are not interviewed, information on education is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Table 12.15 Prevalence of malaria in children

Percentage of children age 6–59 months classified in two tests as having malaria, according to background characteristics, Ghana DHS 2022

Background characteristic	Malaria prevalence according to RDT		Malaria prevalence according to microscopy	
	RDT positive	Number of children	Microscopy positive	Number of children
Age in months				
6–8	9.2	209	7.4	209
9–11	10.1	213	5.0	213
12–17	13.5	451	5.5	451
18–23	12.4	468	5.9	468
24–35	17.4	812	7.3	812
36–47	18.4	860	10.6	860
48–59	21.1	827	12.4	827
Sex				
Male	16.5	1,948	8.8	1,948
Female	16.5	1,890	8.4	1,890
Mother's interview status				
Interviewed	15.9	3,425	8.3	3,425
Not interviewed but in household	23.1	67	14.2	67
Not interviewed and not in the household[1]	21.6	346	11.3	346
Residence				
Urban	7.5	1,881	4.3	1,881
Rural	25.2	1,957	12.8	1,957
Region				
Western	22.5	241	9.7	241
Central	16.1	397	9.6	397
Greater Accra	3.4	462	2.0	462
Volta	11.5	154	6.4	154
Eastern	14.8	294	6.7	294
Ashanti	11.1	705	7.5	705
Western North	11.4	91	4.4	91
Ahafo	21.4	87	11.8	87
Bono	15.1	124	9.9	124
Bono East	22.1	185	12.1	185
Oti	22.6	119	15.0	119
Northern	18.8	430	10.6	430
Savannah	26.6	113	12.1	113
North East	26.9	130	10.3	130
Upper East	33.6	184	12.2	184
Upper West	30.2	122	13.4	122
Mother's education[2]				
No education	24.2	859	13.3	859
Primary	24.0	517	14.2	517
Secondary	12.0	1,816	5.6	1,816
More than secondary	2.9	300	0.9	300
Wealth quintile				
Lowest	31.5	901	16.0	901
Second	21.2	789	11.1	789
Middle	14.8	743	7.7	743
Fourth	8.0	730	5.0	730
Highest	2.1	676	0.8	676
Total	16.5	3,838	8.6	3,838

RDT = rapid diagnostic test (Abbott Bioline)
[1] Includes children whose mothers are deceased
[2] For women who are not interviewed, information on education is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

KNOWLEDGE, ATTITUDES, AND BEHAVIOUR RELATED TO HIV AND AIDS

13

Key Findings

- ***Knowledge and attitudes about mother-to-child transmission of HIV:*** 70% of women and 65% of men age 15–49 know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs.
- ***Discriminatory attitudes towards people living with HIV:*** 78% of women and 72% of men who have heard of HIV or AIDS expressed discriminatory attitudes towards people living with HIV.
- ***Multiple sexual partners:*** 23% of women had sexual intercourse in the last 12 months with a person who neither was their husband nor lived with them, and 11% of these women reported using a condom during the last sexual intercourse with such a partner. Among men, 35% had intercourse in the past year with a person who neither was their wife nor lived with them, and 28% used a condom during the last sexual intercourse with such a partner.
- ***HIV testing:*** 54% of women and 24% of men have ever been tested for HIV and received the results.
- ***Knowledge and coverage of self-testing for HIV:*** 18% of women and 24% of men have ever heard of HIV self-test kits.
- ***Self-reported prevalence of STIs:*** 27% of women and 17% of men who had ever had sexual intercourse reported having had a sexually transmitted infection (STI) and/or STI symptoms in the 12 months preceding the survey.
- ***Knowledge about HIV prevention among young people:*** 36% of young women and 37% of young men age 15–24 are knowledgeable about HIV prevention.

This chapter presents information on the current status of HIV knowledge, attitudes, and testing coverage in the general population and the young population. The prevalence of HIV is very low among the general population in Ghana, estimated at 1.66% in the adult population age 15–49, with an incidence of 0.08% (National and Sub-National HIV and AIDS Estimates and Projections 2022 Report). The country has slowly but steadily made good progress in its response to HIV and AIDS (Ghana National HIV & AIDS Strategic Plan 2021–2025). The national HIV response in Ghana will benefit from the data derived from this survey in terms of HIV policy and programming.

13.1 Knowledge and Attitudes about Medicines to Treat or Prevent HIV

Antiretroviral medicines, or ARVs, are a powerful tool in the fight against HIV. ARVs are taken by people living with HIV to keep them healthy by preventing the virus from progressing to AIDS. By taking ARVs, individuals living with HIV also greatly reduce the risk of passing the virus on to others. Women living with HIV who take ARVs during pregnancy and breastfeeding reduce the chances of passing the virus on to their children. In addition, people who are HIV negative can take ARVs to reduce their chances of acquiring HIV. This is called preexposure prophylaxis, or PrEP. Knowledge about and positive attitudes towards these treatment and prevention measures help to promote their use.

More women (65%) than men (62%) age 15–49 have heard of ARVs for treating HIV. Similarly, more women (70%) than men (65%) know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs (**Table 13.1**).

Seventeen percent of women and 19% of men know about PrEP as a means through which HIV can be prevented (**Table 13.1** and **Figure 13.1**).

Trends: The percentage of women age 15–49 who know that the risk of MTCT of HIV can be reduced by the mother taking special drugs increased from 50% in 2008 to 64% in 2014 and 70% in 2022. Among men, the proportion increased from 44% in 2008 to 61% in 2014 and 65% in 2022 (**Figure 13.2**).

Figure 13.1 **Knowledge of medicines to treat HIV or prevent HIV transmission**

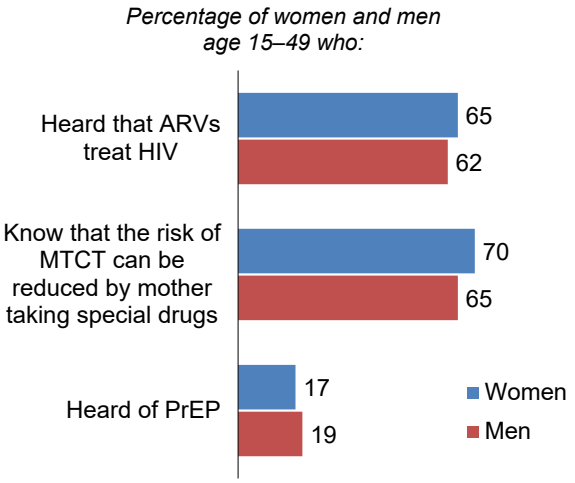
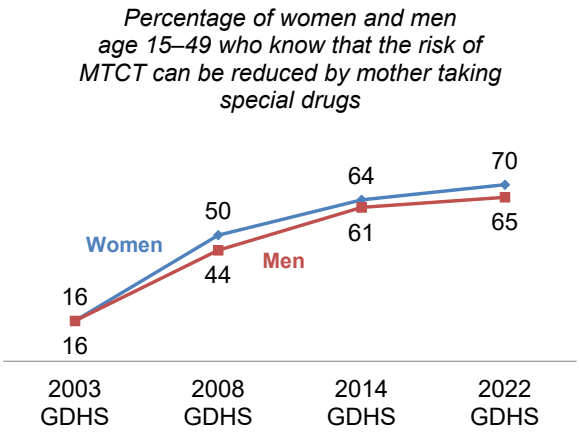


Figure 13.2 **Trends in knowledge of mother-to-child transmission (MTCT)**



13.2 Discriminatory Attitudes towards People Living with HIV

Widespread stigma and discrimination in a population can adversely affect people's willingness to be tested and adherence to antiretroviral therapy (ART). Thus, reduction of stigma and discrimination in a population is an important indicator of the success of programmes targeting HIV prevention and control.

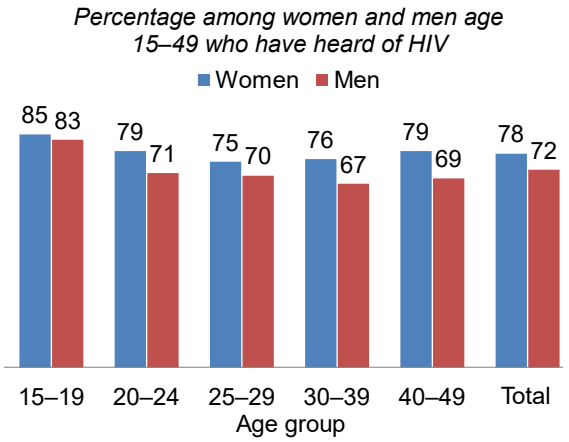
Discriminatory attitudes towards people living with HIV

Women and men were asked two questions to assess discriminatory attitudes towards people living with HIV. Respondents with discriminatory attitudes towards people living with HIV are those who say that they would not buy fresh vegetables from a shopkeeper or vendor if they knew that person had HIV or who say that children living with HIV should not be allowed to attend school with children who do not have HIV.

Sample: Women and men age 15–49 who have heard of HIV or AIDS

Seventy-eight percent of women and 72% of men who have heard of HIV or AIDS expressed discriminatory attitudes towards people living with HIV (**Table 13.2** and **Figure 13.3**).

Figure 13.3 Discriminatory attitudes towards people living with HIV by age



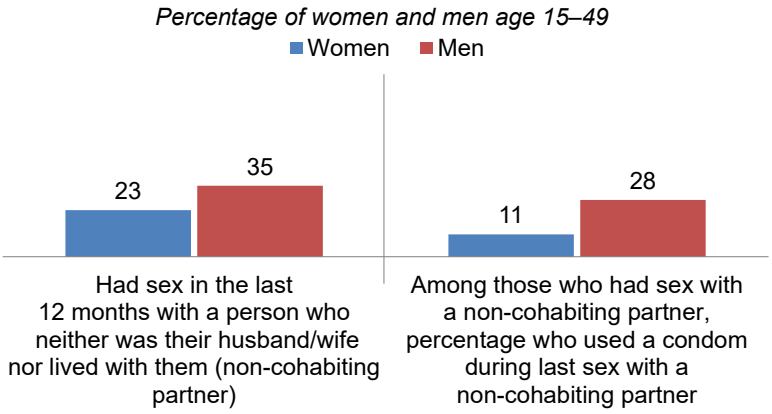
Note: Respondents have discriminatory attitudes if they do not think that children living with HIV should be able to attend school with children who are HIV negative or would not buy fresh vegetables from a shopkeeper who has HIV.

13.3 Multiple Sexual Partners

Two percent of women age 15–49 had two or more sexual partners in the last 12 months, and 12% used a condom during their last sexual intercourse (**Table 13.3.1**). Twenty-three percent of women had sexual intercourse in the last 12 months with a person who neither was their husband nor lived with them (noncohabiting partner). Among these women, 11% used a condom during the last sexual intercourse with such a partner.

Fifteen percent of men age 15–49 had two or more sexual partners in the last 12 months, and 35% had sexual intercourse in the last 12 months with a person who neither was their wife nor lived with them (**Table 13.3.2**). Among men with two or more sexual partners, 18% reported using a condom during their last sexual intercourse. Twenty-eight percent of men who had intercourse in the last 12 months with a person who neither was their wife nor lived with them used a condom during the last sexual intercourse with such a partner (**Figure 13.4**).

Figure 13.4 Sex and condom use with noncohabiting partners



13.4 Coverage of HIV Testing Services

HIV testing programmes diagnose people living with HIV so that they can be linked to care and access antiretroviral therapy (ART). Knowledge of HIV status helps HIV-negative individuals reduce their risk and remain negative.

13.4.1 HIV Testing of Pregnant Women

Sixty-seven percent of women who gave birth in the 2 years preceding the survey had an HIV test during antenatal care (ANC) and received the test results (**Table 13.4**). Almost three quarters (72%) of women were tested for HIV and received results during either ANC or labour (**Figure 13.5**).

13.4.2 Experience with Prior HIV Testing

Fifty-four percent of women and 24% of men age 15–49 have ever been tested for HIV and received results. However, only 15% of women and 7% of men had been tested for HIV in the past 12 months and received the results of the last test (**Table 13.5.1**, **Table 13.5.2**, and **Figure 13.6**).

Seventeen percent of women and 12% of men had been tested for HIV only once in their lifetime (**Table 13.6**). On the other hand, 6% of women and 2% of men have been tested for HIV six or more times.

Trends: The percentage of men who have ever been tested for HIV and received the results increased from 8% in 2003 to 20% in 2014 and 24% in 2022. Similarly, the percentage among women increased from 7% in 2003 to 54% in 2022 (**Figure 13.7**).

Knowledge and Coverage of Self-testing

Eighteen percent of women and 24% of men have ever heard of HIV self-test kits. However, only 2% of both men and women have used an HIV self-test kit (**Table 13.7**).

Figure 13.5 **Trends in HIV testing during pregnancy**

Percentage of women age 15–49 who gave birth in the 2 years before the survey who were tested during ANC or labour and received the results

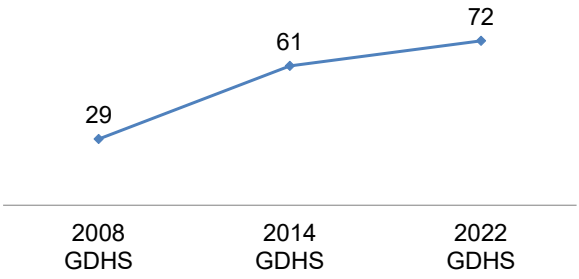


Figure 13.6 **HIV testing**

Percentage of women and men age 15–49

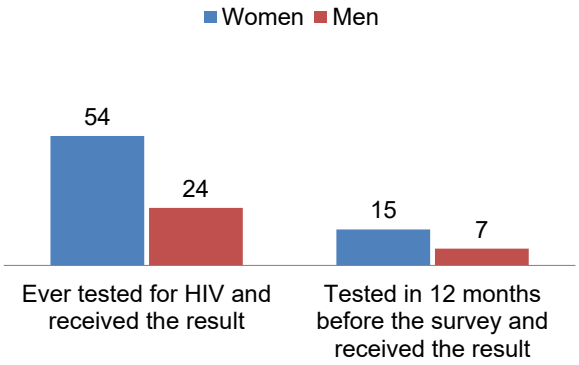
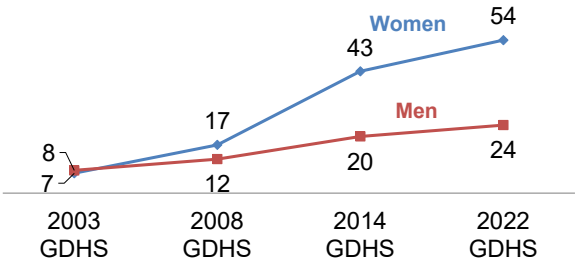


Figure 13.7 **Trends in HIV testing**

Percentage of women and men age 15–49 who have ever been tested for HIV and received the results



13.5 Male Circumcision

Traditional circumcision

A cut, partial removal, or complete removal of the foreskin by a traditional practitioner, family member, or friend for religious, health, or cultural reasons. Can be performed at any age.

Medical circumcision

Complete removal of the foreskin by a health care worker. Can be performed at any age.

Sample: Men age 15–49

All men were asked whether they were circumcised. If they said they were circumcised, they were asked both whether they had been traditionally circumcised and whether they had been medically circumcised, as well as the age at which each procedure had occurred. In some settings, traditional circumcision may leave enough of the foreskin intact that it is possible to perform a medical circumcision afterward, making it possible for a man to have been circumcised both traditionally and medically.

Ninety-five percent of men age 15–49 are traditionally or medically circumcised, with 55% traditionally circumcised only, 37% medically circumcised only, and 1% both traditionally and medically circumcised (**Table 13.8**).

13.6 Self-Reporting of Sexually Transmitted Infections

Sexually transmitted infections (STIs) and symptoms

Respondents who have ever had sex were asked whether they had an STI or symptoms of an STI (a bad-smelling, abnormal discharge from the vagina/penis or a genital sore or ulcer) in the 12 months before the survey.

Sample: Women and men age 15–49 who have ever had sex

Twenty-seven percent of women and 17% of men who had ever had sexual intercourse reported having had a sexually transmitted infection (STI) and/or STI symptoms in the 12 months preceding the survey (**Table 13.9**).

13.7 Knowledge and Behaviour Related to HIV and AIDS among Young People

This section addresses HIV-related knowledge among young people age 15–24 and also assesses the extent to which young people engage in behaviours that may place them at risk of acquiring HIV.

13.7.1 Knowledge about HIV Prevention

Knowledge about HIV prevention

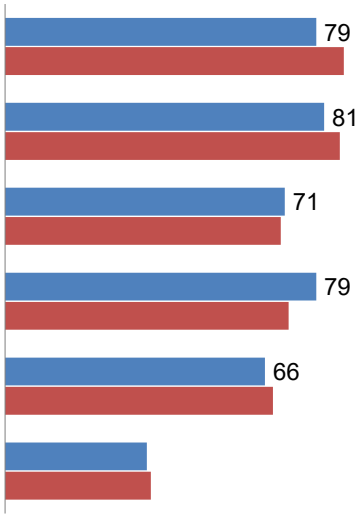
Knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting two major misconceptions about HIV transmission: HIV can be transmitted by mosquito bites and a person can become infected by sharing food with a person who has HIV.

Sample: Women and men age 15–24

Knowledge of how HIV is transmitted is crucial in enabling people to avoid HIV infection, and this is especially true for young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviours.

Only 36% of young women and 37% of young men age 15–24 are knowledgeable about HIV prevention (**Table 13.10.1**, **Table 13.10.2**, and **Figure 13.8**).

Figure 13.8 **Knowledge about HIV prevention among young people**



13.7.2 First Sex

Young people who initiate sex at an early age are typically at higher risk of becoming pregnant or contracting an STI than young people who initiate sex later. Consistent condom use can reduce such risks.

Ten percent of young women age 15–24 reported having sex before age 15, as compared with 8% of young men. Forty-eight percent of women and 34% of men age 18–24 had sex before age 18 (**Table 13.11**).

Trends: The proportion of women age 15–24 who had sexual intercourse before age 15 increased from 8% in 2008 to 11% in 2014 and then remained relatively unchanged at 10% in 2022. Similarly, the proportion among young men increased from 4% in 2008 to 9% in 2014 and remained relatively unchanged in 2022 (8%) (**Figure 13.9**).

Figure 13.9 **Trends in age at first sex**

13.7.3 Premarital Sex

Fifty percent of never-married women and 53% of never-married men age 15–24 have never had sexual intercourse (**Table 13.12**).

Trends: The proportion of never-married young women who have never had sexual intercourse decreased from 55% in 2008 to 47% in 2014 and then increased slightly to 50% in 2022, while the proportion among never-married young men decreased from 60% in 2008 to 56% in 2014 and 53% in 2022.

13.7.4 Multiple Sexual Partners

Three percent of women age 15–24 had two or more partners in the last 12 months, and 34% had sex with a person who neither was their husband nor lived with them. Among young women who had sex with a person who neither was their husband nor lived with them, 14% used a condom during their last sexual intercourse with such a partner (**Table 13.13.1**).

Ten percent of men age 15–24 had two or more partners in the last 12 months, and 35% had sex with a person who neither was their wife nor lived with them. Among young men who had sex with a person who neither was their husband nor lived with them, 28% used a condom during their last sexual intercourse with such a partner (**Table 13.13.2**).

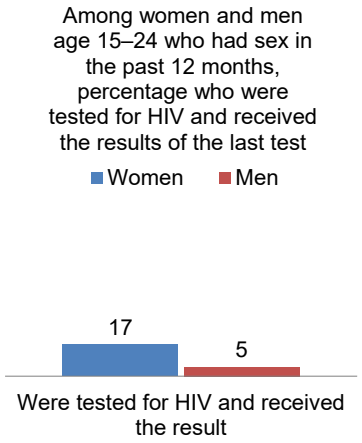
13.7.5 Recent HIV Testing

Seeking an HIV test may be more difficult for young people than adults because many young people lack experience in accessing health services for themselves and because there are often barriers to young people obtaining services. Seventeen percent of women and 5% of men age 15–24 who had sex in the 12 months preceding the survey were tested for HIV and received the results of the last test (**Table 13.14** and **Figure 13.10**).

Trends: Among young women age 15–24 who had sex in the past 12 months, the percentage who were tested for HIV and received the results of the last test during that same period increased from 2% in 2003 to 16% in 2014 and 17% in 2022.

Among young men age 15–24 who had sex in the past 12 months, the percentage who were tested for HIV and received the results of the last test increased from 2% in 2003 to 3% in 2014 and 5% in 2022.

Figure 13.10 **Recent HIV testing among young people**



List of Tables

For more information on knowledge, attitudes, and behaviour related to HIV and AIDS, see the following tables:

- **Table 13.1 Knowledge of and attitudes about medicines to treat HIV or prevent HIV transmission**
- **Table 13.2 Discriminatory attitudes towards people living with HIV**
- **Table 13.3.1 Multiple sexual partners and higher-risk sexual intercourse in the last 12 months: Women**
- **Table 13.3.2 Multiple sexual partners and higher-risk sexual intercourse in the last 12 months: Men**
- **Table 13.4 Pregnant women tested for HIV**
- **Table 13.5.1 Coverage of prior HIV testing: Women**
- **Table 13.5.2 Coverage of prior HIV testing: Men**
- **Table 13.6 Number of times tested for HIV in lifetime**
- **Table 13.7 Knowledge and coverage of self-testing for HIV**
- **Table 13.8 Male circumcision**
- **Table 13.9 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms**
- **Table 13.10.1 Knowledge about HIV prevention among young people: Women**
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- **Table 13.11 Age at first sexual intercourse among young people**
- **Table 13.12 Premarital sexual intercourse among young people**
- **Table 13.13.1 Multiple sexual partners and higher-risk sexual intercourse in the last 12 months among young people: Women**
- **Table 13.13.2 Multiple sexual partners and higher-risk sexual intercourse in the last 12 months among young people: Men**
- **Table 13.14 Recent HIV tests among young people**

Table 13.1 Knowledge of and attitudes about medicines to treat HIV or prevent HIV transmission

Percentage of women and men age 15–49 who have heard of antiretroviral medicines (ARVs) that treat HIV, percentage who know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs, and percentage who have heard of preexposure prophylaxis (PrEP), and among women and men age 15–49 who have heard of PrEP, percentage who approve of people who take PrEP to prevent getting HIV, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who have heard of ARVs that treat HIV	Percentage who know that the risk of MTCT can be reduced by mother taking special drugs	Percentage who have heard of PrEP	Number of respond-ents	Percentage who approve of people who take PrEP to prevent getting HIV	Number of respondents who have heard of PrEP
			WOMEN			
Age						
15–24	53.0	61.5	13.2	5,376	65.9	708
15–19	45.8	52.7	10.2	2,682	66.9	274
20–24	60.2	70.3	16.1	2,695	65.2	434
25–29	74.5	74.6	21.0	2,340	72.4	491
30–39	73.2	75.8	18.6	4,311	73.1	803
40–49	68.8	72.0	16.0	2,987	68.0	477
Marital status						
Never married	60.2	65.3	15.3	5,268	67.5	803
Ever had sex	67.3	72.4	16.8	3,134	69.2	527
Never had sex	49.8	54.8	13.0	2,134	64.4	277
Married/living together	67.5	71.6	17.4	8,205	71.4	1,426
Divorced/separated/widowed	71.0	75.5	16.2	1,542	69.1	249
Residence						
Urban	71.6	76.1	18.5	8,557	68.6	1,581
Rural	57.0	61.4	13.9	6,457	72.3	898
Education						
No education	48.8	48.3	11.6	2,411	71.5	279
Primary	57.5	61.6	12.7	2,071	67.9	262
Secondary	66.9	73.5	15.5	8,999	71.9	1,397
More than secondary	92.7	92.5	35.3	1,533	64.9	541
Total 15–49	65.3	69.8	16.5	15,014	69.9	2,479
			MEN			
Age						
15–24	45.0	56.5	14.6	2,458	72.4	359
15–19	35.6	49.4	11.5	1,424	71.3	164
20–24	57.9	66.4	18.9	1,033	73.3	196
25–29	70.7	67.3	21.9	888	65.2	195
30–39	74.8	71.9	22.4	1,662	71.5	373
40–49	73.5	71.7	22.7	1,270	68.7	288
Marital status						
Never married	52.9	60.5	15.7	3,208	67.8	503
Ever had sex	62.8	68.4	17.5	1,922	69.0	337
Never had sex	38.1	48.7	12.9	1,286	65.4	166
Married/living together	72.4	70.6	23.1	2,828	72.5	653
Divorced/separated/widowed	68.9	64.6	24.4	242	63.2	59
Residence						
Urban	68.3	68.7	18.5	3,442	70.3	636
Rural	55.0	61.0	20.4	2,835	70.0	579
Education						
No education	48.4	45.6	15.4	628	66.0	97
Primary	49.1	50.3	16.1	725	74.1	117
Secondary	60.4	66.2	18.2	3,990	72.0	726
More than secondary	89.9	85.8	29.4	935	64.8	275
Total 15–49	62.3	65.2	19.4	6,277	70.1	1,215
50–59	70.9	66.1	24.3	767	73.0	186
Total 15–59	63.2	65.3	19.9	7,044	70.5	1,401

Table 13.2 Discriminatory attitudes towards people living with HIV

Among women and men age 15–49 who have heard of HIV or AIDS, percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative, percentage who would not buy fresh vegetables from a shopkeeper who has HIV, and percentage with discriminatory attitudes towards people living with HIV, according to background characteristics Ghana DHS 2022

	Women				Men			
Background characteristic	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV[1]	Number of women who have heard of HIV or AIDS	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV[1]	Number of men who have heard of HIV or AIDS
Age								
15–24	63.7	77.1	81.7	5,076	61.8	71.2	77.8	2,333
15–19	66.3	79.6	84.5	2,495	66.8	76.5	82.7	1,326
20–24	61.1	74.6	79.0	2,581	55.4	64.1	71.4	1,007
25–29	60.2	70.5	74.5	2,254	54.3	60.1	69.7	871
30–39	58.5	70.9	76.4	4,114	51.2	59.8	67.4	1,639
40–49	59.3	75.1	78.5	2,836	52.3	64.4	69.2	1,251
Marital status								
Never married	57.4	71.4	76.2	5,066	56.8	66.3	72.9	3,077
Ever had sex	58.1	71.4	76.1	3,062	53.0	62.7	69.8	1,886
Never had sex	56.4	71.3	76.4	2,004	62.7	72.0	77.6	1,191
Married/living together	63.2	75.7	79.9	7,695	55.3	63.9	71.6	2,778
Divorced/separated/widowed	59.6	72.9	78.1	1,519	52.4	65.2	68.2	238
Residence								
Urban	54.6	68.7	73.4	8,383	51.0	59.4	67.3	3,393
Rural	69.6	81.2	85.5	5,898	62.2	72.4	78.1	2,700
Region								
Western	63.6	74.2	79.2	940	65.6	67.1	76.9	411
Central	64.2	73.7	79.5	1,675	58.7	68.4	73.3	657
Greater Accra	51.4	66.5	70.5	2,308	54.8	59.7	69.7	1,071
Volta	56.0	72.3	76.9	707	45.1	55.2	61.9	234
Eastern	57.8	70.8	79.1	1,208	48.6	59.8	68.0	461
Ashanti	59.9	75.4	79.6	2,891	50.9	62.4	70.2	1,168
Western North	64.6	79.2	83.4	400	54.4	64.4	70.7	179
Ahafo	69.7	82.8	87.0	306	53.8	64.9	72.0	132
Bono	50.5	66.5	70.5	549	46.5	61.0	67.0	217
Bono East	55.6	67.4	72.4	613	57.9	68.1	75.4	299
Oti	68.9	82.6	86.4	379	71.0	73.8	81.5	183
Northern	76.4	83.2	85.7	803	70.4	80.1	83.1	437
Savannah	76.6	83.7	86.8	265	60.6	75.0	77.9	125
North East	67.0	83.0	85.9	241	80.2	82.3	85.2	111
Upper East	67.4	77.2	80.1	614	44.3	57.9	61.4	259
Upper West	65.6	80.4	83.8	383	55.1	75.9	77.8	151

Continued…

Table 13.2—*Continued*

Background characteristic	Women				Men			
	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV[1]	Number of women who have heard of HIV or AIDS	Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV[1]	Number of men who have heard of HIV or AIDS
Education								
No education	78.2	88.8	91.5	1,961	79.0	87.7	90.0	561
Primary	76.6	86.0	89.3	1,943	73.2	82.2	86.8	667
Secondary	60.2	73.6	78.9	8,848	56.9	66.2	73.8	3,936
More than secondary	21.7	40.7	44.8	1,528	25.4	35.0	43.4	929
Wealth quintile								
Lowest	79.8	88.6	91.3	2,028	71.3	81.5	84.9	985
Second	72.8	84.3	88.1	2,514	63.0	73.0	79.5	1,095
Middle	65.0	77.9	83.3	3,060	57.4	67.3	73.8	1,120
Fourth	54.2	68.4	73.5	3,343	55.3	62.5	71.3	1,454
Highest	42.8	58.8	63.7	3,335	39.6	49.0	57.2	1,439
Total 15–49	60.8	73.8	78.4	14,280	55.9	65.2	72.1	6,093
50–59	na	na	na	na	50.5	63.2	70.0	745
Total 15–59	na	na	na	na	55.3	64.9	71.9	6,838

na = not applicable
[1] Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative and/or would not buy fresh vegetables from a shopkeeper who has HIV

Table 13.3.1 Multiple sexual partners and higher-risk sexual intercourse in the last 12 months: Women

Among all women age 15–49, percentage who had sexual intercourse with more than one sexual partner in the last 12 months and percentage who had intercourse in the last 12 months with a person who neither was their husband nor lived with them; among women having more than one partner in the last 12 months, percentage reporting that a condom was used during last intercourse; among women who had sexual intercourse in the last 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among women who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Ghana DHS 2022

	All women			Women who had 2+ partners in the last 12 months		Women who had intercourse in the last 12 months with a person who neither was their husband nor lived with them		Women who ever had sexual intercourse[1]	
Background characteristic	Percentage who had 2+ partners in the last 12 months	Percentage who had intercourse in the last 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual inter-course with such a partner	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women	Mean number of sexual partners in lifetime	Number of women
Age									
15–24	3.0	34.2	5,376	17.1	161	13.7	1,841	2.2	3,363
15–19	2.6	26.8	2,682	17.3	70	17.2	719	1.9	1,047
20–24	3.4	41.6	2,695	16.9	91	11.5	1,122	2.3	2,317
25–29	3.3	28.0	2,340	8.7	77	10.5	656	2.6	2,244
30–39	1.5	14.4	4,311	6.5	64	6.6	621	2.8	4,268
40–49	0.8	11.4	2,987	*	24	0.9	341	2.8	2,972
Marital status									
Never married	3.5	46.1	5,268	15.7	186	12.6	2,427	2.6	3,131
Married or living together	0.9	3.8	8,205	6.7	78	9.8	312	2.4	8,178
Divorced/separated/widowed	4.0	46.6	1,542	6.3	62	4.2	719	3.7	1,538
Residence									
Urban	2.2	25.2	8,557	14.3	185	11.7	2,159	2.8	7,179
Rural	2.2	20.1	6,457	8.4	141	8.7	1,300	2.4	5,669
Region									
Western	3.5	25.5	955	(10.7)	33	9.1	244	3.2	818
Central	4.8	28.3	1,703	(13.3)	82	11.4	482	3.3	1,445
Greater Accra	1.3	24.0	2,327	*	31	9.7	559	3.1	1,922
Volta	2.1	22.5	713	*	15	17.5	160	2.6	591
Eastern	1.2	25.5	1,220	*	15	10.0	311	2.9	1,034
Ashanti	1.7	27.3	2,928	*	48	8.1	800	2.7	2,539
Western North	2.0	26.4	411	*	8	10.7	108	2.7	366
Ahafo	3.1	22.4	317	(10.0)	10	8.8	71	2.6	278
Bono	2.8	28.1	567	(5.3)	16	8.8	159	2.6	476
Bono East	2.1	23.1	676	*	14	10.4	156	2.1	597
Oti	1.1	20.8	403	*	4	5.8	84	2.2	355
Northern	2.1	10.8	1,149	*	24	15.6	124	1.7	1,016
Savannah	0.9	12.8	319	*	3	10.0	41	1.7	279
North East	1.7	8.6	290	*	5	26.0	25	1.5	256
Upper East	1.6	13.2	640	*	10	26.6	84	1.7	544
Upper West	1.7	12.2	398	*	7	10.5	48	1.9	332

Continued...

Table 13.3.1—*Continued*

Background characteristic	All women			Women who had 2+ partners in the last 12 months		Women who had intercourse in the last 12 months with a person who neither was their husband nor lived with them		Women who ever had sexual intercourse[1]	
	Percentage who had 2+ partners in the last 12 months	Percentage who had intercourse in the last 12 months with a person who neither was their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women	Mean number of sexual partners in lifetime	Number of women
Education									
No education	1.0	6.9	2,411	(5.8)	25	6.4	165	1.9	2,356
Primary	2.8	21.5	2,071	3.5	58	4.2	446	2.8	1,833
Secondary	2.4	27.3	8,999	14.1	220	10.7	2,460	2.8	7,331
More than secondary	1.5	25.2	1,533	*	23	19.1	387	2.6	1,328
Wealth quintile									
Lowest	1.8	14.3	2,447	5.9	45	9.3	350	1.8	2,166
Second	2.1	23.1	2,712	8.7	58	5.8	625	2.5	2,357
Middle	2.5	27.8	3,121	8.4	78	11.1	866	2.8	2,704
Fourth	2.1	27.2	3,379	11.7	73	10.9	920	2.9	2,892
Highest	2.2	20.7	3,355	21.5	72	14.4	696	3.0	2,730
Total	2.2	23.0	15,014	11.8	326	10.6	3,458	2.6	12,848

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Means are calculated excluding respondents who gave non-numeric responses.

Table 13.3.2 Multiple sexual partners and higher-risk sexual intercourse in the last 12 months: Men

Among all men age 15–49, percentage who had sexual intercourse with more than one sexual partner in the last 12 months and percentage who had intercourse in the last 12 months with a person who neither was their wife nor lived with them; among men having more than one partner in the last 12 months, percentage reporting that a condom was used during last intercourse; among men who had sexual intercourse in the last 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among men who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, Ghana DHS 2022

	All men			Men who had 2+ partners in the last 12 months		Men who had intercourse in the last 12 months with a person who neither was their wife nor lived with them		Men who ever had sexual intercourse[1]	
Background characteristic	Percentage who had 2+ partners in the last 12 months	Percentage who had intercourse in the last 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual inter-course	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men	Mean number of sexual partners in lifetime	Number of men
Age									
15–24	9.9	35.2	2,458	24.7	242	28.2	866	4.0	1,244
15–19	5.0	20.7	1,424	12.2	72	21.7	295	2.8	438
20–24	16.5	55.2	1,033	30.0	171	31.6	570	4.6	806
25–29	23.6	55.6	888	23.4	210	31.8	493	6.0	845
30–39	18.8	33.6	1,662	15.9	312	27.1	558	8.8	1,618
40–49	14.3	19.4	1,270	7.3	182	22.1	247	8.3	1,241
Marital status									
Never married	12.7	46.0	3,208	31.4	406	30.2	1,476	5.5	1,913
Married or living together	17.5	18.4	2,828	6.8	494	25.3	519	7.6	2,795
Divorced/separated/widowed	18.7	69.9	242	(23.3)	45	18.3	169	10.6	240
Type of union									
In polygynous union	46.9	15.1	242	5.3	114	(32.4)	37	7.7	240
In nonpolygynous union	14.7	18.7	2,585	7.3	381	24.7	482	7.6	2,555
Not currently in union	13.1	47.7	3,449	30.5	452	28.9	1,645	6.1	2,153
Residence									
Urban	16.2	37.4	3,442	22.3	556	33.2	1,286	7.8	2,754
Rural	13.7	31.0	2,835	12.3	390	20.6	878	5.9	2,194

Continued…

Table 13.3.2—*Continued*

Background characteristic	All men			Men who had 2+ partners in the last 12 months		Men who had intercourse in the last 12 months with a person who neither was their wife nor lived with them		Men who ever had sexual intercourse[1]	
	Percentage who had 2+ partners in the last 12 months	Percentage who had intercourse in the last 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual inter-course	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men	Mean number of sexual partners in lifetime	Number of men
Region									
Western	19.2	41.2	414	23.1	79	30.5	171	8.0	331
Central	14.0	39.7	686	20.3	96	29.3	273	7.7	525
Greater Accra	20.5	38.5	1,076	23.9	221	39.9	414	10.3	895
Volta	19.4	41.6	235	24.1	46	38.0	98	6.8	187
Eastern	14.7	33.9	466	(15.6)	68	26.0	158	6.9	378
Ashanti	10.1	36.4	1,179	(14.0)	120	13.6	429	6.0	906
Western North	21.5	42.1	181	11.1	39	20.2	76	8.9	145
Ahafo	14.5	31.3	133	22.4	19	29.7	42	8.6	106
Bono	16.5	39.2	222	12.6	37	26.0	87	6.9	176
Bono East	13.6	33.7	316	21.1	43	26.0	106	4.4	262
Oti	10.8	35.1	187	4.3	20	16.4	65	6.1	152
Northern	13.6	19.1	484	8.6	66	22.8	93	4.5	374
Savannah	10.7	20.3	155	12.1	17	31.4	31	3.8	114
North East	19.3	19.2	119	9.7	23	38.8	23	3.2	89
Upper East	13.8	27.6	267	22.3	37	47.8	74	4.5	199
Upper West	10.0	15.5	155	(8.9)	15	38.3	24	3.5	110
Education									
No education	14.5	18.6	628	2.8	91	8.6	117	5.1	561
Primary	14.9	29.9	725	14.8	108	20.8	216	6.8	546
Secondary	15.1	36.1	3,990	17.6	604	25.6	1,440	7.3	2,993
More than secondary	15.4	41.8	935	32.7	144	47.1	391	7.1	849
Wealth quintile									
Lowest	13.7	23.0	1,089	11.6	149	19.8	250	5.3	800
Second	10.4	28.9	1,133	13.5	118	17.9	327	5.9	833
Middle	16.3	40.1	1,137	19.1	186	26.4	456	6.4	908
Fourth	18.8	40.1	1,466	16.4	276	27.0	588	7.8	1,232
Highest	15.0	37.4	1,453	26.6	218	40.6	543	8.5	1,175
Total 15–49	15.1	34.5	6,277	18.2	946	28.1	2,164	7.0	4,948
50–59	13.5	16.5	767	8.6	104	16.2	127	10.1	751
Total 15–59	14.9	32.5	7,044	17.2	1,050	27.4	2,291	7.4	5,699

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] Means are calculated excluding respondents who gave non-numeric responses.

Table 13.4 Pregnant women tested for HIV

Among all women age 15–49 who gave birth in the 2 years preceding the survey, percentage who received an HIV test during antenatal care (ANC) for their most recent birth by whether they received their results and percentage who received an HIV test during ANC or labour for their most recent birth by whether they received their results, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who were tested for HIV during antenatal care and who:		Percentage who had an HIV test during ANC or labour and who:[1]		Number of women who gave birth in the last 2 years[2]
	Received results	Did not receive results	Received results	Did not receive results	
Age					
15–24	61.1	4.9	65.7	4.9	1,005
15–19	55.8	5.5	58.1	7.8	239
20–24	62.7	4.7	68.0	4.0	767
25–29	68.7	4.8	74.9	5.1	851
30–39	70.4	4.0	76.9	3.6	1,381
40–49	63.4	7.3	66.3	7.0	254
Marital status					
Never married	70.3	5.8	73.8	5.5	454
Married or living together	65.9	4.6	72.1	4.4	2,879
Divorced/separated/widowed	73.1	3.6	75.2	5.8	158
Residence					
Urban	73.9	4.3	81.2	3.7	1,623
Rural	60.6	5.1	64.8	5.4	1,868
Region					
Western	84.2	0.7	85.4	1.2	208
Central	60.7	3.6	76.7	4.5	357
Greater Accra	84.9	1.3	88.4	1.3	410
Volta	88.3	6.4	88.9	6.4	130
Eastern	69.9	3.1	78.8	1.8	246
Ashanti	67.3	3.4	76.0	3.9	631
Western North	84.7	1.8	87.9	2.2	96
Ahafo	67.3	14.1	71.3	12.9	77
Bono	76.7	3.5	80.8	2.3	113
Bono East	60.5	12.0	62.5	11.6	191
Oti	71.2	3.8	72.5	3.4	123
Northern	43.5	9.7	46.9	8.3	395
Savannah	31.0	5.8	32.8	6.8	105
North East	50.4	7.9	52.3	7.6	112
Upper East	64.5	1.7	70.3	1.7	191
Upper West	69.0	7.0	70.0	6.8	105
Education					
No education	45.7	8.0	48.9	7.5	728
Primary	62.9	5.3	67.6	4.7	542
Secondary	71.9	3.9	78.6	4.1	1,898
More than secondary	90.8	1.5	97.7	1.1	323
Wealth quintile					
Lowest	49.3	6.1	51.7	6.2	853
Second	61.1	7.6	65.5	7.3	723
Middle	71.1	3.5	77.6	3.5	705
Fourth	75.0	3.8	84.3	3.7	631
Highest	85.4	1.6	92.3	1.3	579
Total	66.8	4.7	72.4	4.6	3,491

[1] Women were asked whether they received an HIV test during labour only if they gave birth in a health facility.
[2] Denominator for percentages includes women who did not receive antenatal care for their most recent birth in the last 2 years.

Table 13.5.1 Coverage of prior HIV testing: Women

Percent distribution of women age 15–49 by HIV testing status and by whether they received the results of the last test, percentage of women ever tested, and percentage of women who were tested in the last 12 months and received the results of the last test, according to background characteristics, Ghana DHS 2022

Background characteristic	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
	Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age							
15–24	27.8	2.4	69.8	100.0	30.2	10.5	5,376
15–19	10.7	1.6	87.7	100.0	12.3	4.2	2,682
20–24	44.7	3.2	52.0	100.0	48.0	16.8	2,695
25–29	67.7	4.7	27.5	100.0	72.5	25.6	2,340
30–39	73.2	4.1	22.7	100.0	77.3	19.1	4,311
40–49	61.7	4.0	34.3	100.0	65.7	9.1	2,987
Marital status							
Never married	27.7	1.9	70.4	100.0	29.6	9.7	5,268
Ever had sex	42.4	2.7	54.9	100.0	45.1	14.5	3,134
Never had sex	6.1	0.6	93.3	100.0	6.7	2.7	2,134
Married/living together	68.1	4.5	27.4	100.0	72.6	18.9	8,205
Divorced/separated/widowed	66.8	4.3	28.9	100.0	71.1	12.6	1,542
Residence							
Urban	57.9	2.7	39.4	100.0	60.6	15.7	8,557
Rural	48.3	4.7	47.0	100.0	53.0	14.2	6,457
Region							
Western	58.8	2.3	38.9	100.0	61.1	16.4	955
Central	53.1	4.3	42.6	100.0	57.4	16.0	1,703
Greater Accra	61.4	0.7	37.9	100.0	62.1	16.8	2,327
Volta	55.4	6.0	38.6	100.0	61.4	15.1	713
Eastern	64.3	1.9	33.8	100.0	66.2	17.6	1,220
Ashanti	59.7	3.2	37.1	100.0	62.9	16.4	2,928
Western North	56.1	2.4	41.5	100.0	58.5	14.3	411
Ahafo	44.4	13.0	42.6	100.0	57.4	13.3	317
Bono	52.3	2.2	45.5	100.0	54.5	15.8	567
Bono East	45.6	7.5	46.9	100.0	53.1	12.2	676
Oti	52.8	4.7	42.5	100.0	57.5	16.4	403
Northern	32.5	7.2	60.4	100.0	39.6	7.9	1,149
Savannah	26.6	4.6	68.7	100.0	31.3	6.0	319
North East	34.2	4.6	61.1	100.0	38.9	12.2	290
Upper East	49.9	1.5	48.5	100.0	51.5	15.7	640
Upper West	46.9	2.6	50.4	100.0	49.6	13.1	398
Education							
No education	41.9	5.3	52.8	100.0	47.2	7.9	2,411
Primary	53.6	4.0	42.4	100.0	57.6	14.3	2,071
Secondary	52.9	3.3	43.8	100.0	56.2	14.5	8,999
More than secondary	77.8	1.5	20.6	100.0	79.4	30.4	1,533
Wealth quintile							
Lowest	36.5	5.1	58.4	100.0	41.6	9.6	2,447
Second	47.2	5.4	47.3	100.0	52.7	11.4	2,712
Middle	53.1	3.8	43.1	100.0	56.9	13.5	3,121
Fourth	60.1	3.0	36.8	100.0	63.2	17.9	3,379
Highest	65.9	1.2	32.9	100.0	67.1	20.4	3,355
Total	53.8	3.6	42.6	100.0	57.4	15.0	15,014

[1] Includes respondents who have not heard of HIV or who refused to answer questions on testing

Table 13.5.2 Coverage of prior HIV testing: Men

Percent distribution of men age 15–49 by HIV testing status and by whether they received the results of the last test, percentage of men ever tested, and percentage of men who were tested in the last 12 months and received the results of the last test, according to background characteristics, Ghana DHS 2022

Background characteristic	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
	Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age							
15–24	8.3	1.3	90.5	100.0	9.5	2.8	2,458
15–19	3.0	0.7	96.3	100.0	3.7	1.1	1,424
20–24	15.5	2.1	82.4	100.0	17.6	5.0	1,033
25–29	29.5	1.3	69.2	100.0	30.8	10.6	888
30–39	36.4	2.8	60.8	100.0	39.2	9.7	1,662
40–49	35.8	2.1	62.1	100.0	37.9	7.9	1,270
Marital status							
Never married	16.0	1.2	82.8	100.0	17.2	5.2	3,208
Ever had sex	24.2	1.4	74.4	100.0	25.6	7.8	1,922
Never had sex	3.7	1.0	95.3	100.0	4.7	1.5	1,286
Married/living together	33.3	2.6	64.0	100.0	36.0	8.5	2,828
Divorced/separated/widowed	29.0	0.8	70.2	100.0	29.8	6.2	242
Residence							
Urban	30.4	1.9	67.7	100.0	32.3	8.5	3,442
Rural	16.9	1.8	81.3	100.0	18.7	4.6	2,835
Region							
Western	25.9	2.4	71.7	100.0	28.3	9.7	414
Central	19.4	1.5	79.1	100.0	20.9	4.6	686
Greater Accra	37.1	2.1	60.9	100.0	39.1	9.1	1,076
Volta	30.9	1.4	67.7	100.0	32.3	9.4	235
Eastern	27.8	0.2	72.0	100.0	28.0	7.7	466
Ashanti	21.2	2.5	76.3	100.0	23.7	4.5	1,179
Western North	20.6	1.4	78.0	100.0	22.0	5.6	181
Ahafo	23.5	2.5	74.0	100.0	26.0	6.8	133
Bono	23.5	1.8	74.7	100.0	25.3	10.5	222
Bono East	19.8	1.0	79.2	100.0	20.8	9.2	316
Oti	20.3	0.8	78.9	100.0	21.1	5.8	187
Northern	13.4	2.0	84.7	100.0	15.3	3.1	484
Savannah	12.9	1.4	85.6	100.0	14.4	3.1	155
North East	12.6	1.0	86.5	100.0	13.5	5.0	119
Upper East	29.2	3.2	67.6	100.0	32.4	9.3	267
Upper West	22.0	2.6	75.4	100.0	24.6	5.3	155
Education							
No education	8.0	1.3	90.7	100.0	9.3	1.6	628
Primary	13.4	1.0	85.6	100.0	14.4	3.6	725
Secondary	20.9	2.0	77.0	100.0	23.0	5.3	3,990
More than secondary	58.1	2.1	39.8	100.0	60.2	18.7	935
Wealth quintile							
Lowest	10.2	1.4	88.4	100.0	11.6	2.0	1,089
Second	14.3	1.5	84.2	100.0	15.8	3.9	1,133
Middle	18.2	1.8	80.0	100.0	20.0	5.5	1,137
Fourth	26.2	2.7	71.1	100.0	28.9	7.3	1,466
Highest	45.5	1.7	52.9	100.0	47.1	12.9	1,453
Total 15–49	24.3	1.9	73.8	100.0	26.2	6.7	6,277
50–59	31.4	1.8	66.8	100.0	33.2	7.2	767
Total 15–59	25.1	1.9	73.1	100.0	26.9	6.8	7,044

[1] Includes respondents who have not heard of HIV or who refused to answer questions on testing

Table 13.6 Number of times tested for HIV in lifetime

Percent distribution of women and men age 15–49 by number of times they have been tested for HIV in their lifetime, according to age, Ghana DHS 2022

Age	Number of times tested for HIV in lifetime						Never tested	Total	Number of respondents
	1	2	3	4	5	6+			
					WOMEN				
15–24	17.2	8.5	2.6	0.9	0.4	0.5	69.8	100.0	5,376
15–19	9.2	2.2	0.8	0.0	0.0	0.1	87.7	100.0	2,682
20–24	25.2	14.8	4.3	1.8	0.8	1.0	52.0	100.0	2,695
25–29	25.1	19.3	15.1	6.7	2.3	3.9	27.5	100.0	2,340
30–39	15.0	15.5	15.9	13.5	8.3	9.1	22.7	100.0	4,311
40–49	12.0	10.5	11.5	11.5	7.8	12.4	34.3	100.0	2,987
Total 15–49	16.8	12.6	10.1	7.5	4.5	5.9	42.6	100.0	15,014
					MEN				
15–24	5.8	1.8	1.1	0.0	0.4	0.5	90.5	100.0	2,458
15–19	2.1	1.2	0.0	0.0	0.1	0.2	96.3	100.0	1,424
20–24	10.8	2.6	2.7	0.0	0.7	0.8	82.4	100.0	1,033
25–29	14.4	7.5	3.6	1.3	2.4	1.5	69.2	100.0	888
30–39	17.3	9.5	5.3	2.3	1.6	3.1	60.8	100.0	1,662
40–49	17.6	8.2	4.4	2.2	2.1	3.5	62.1	100.0	1,270
Total 15–49	12.4	6.0	3.2	1.3	1.3	1.9	73.8	100.0	6,277
50–59	12.6	8.8	5.2	1.4	1.9	3.3	66.8	100.0	767
Total 15–59	12.4	6.3	3.4	1.3	1.4	2.1	73.1	100.0	7,044

Table 13.7 Knowledge and coverage of self-testing for HIV

Percentage of women and men age 15–49 who have ever heard of HIV self-test kits, and percentage who have ever used an HIV self-test kit, according to background characteristics, Ghana DHS 2022

Background characteristic	Women			Men		
	Ever heard of HIV self-test kits	Ever used an HIV self-test kit	Number of women	Ever heard of HIV self-test kits	Ever used an HIV self-test kit	Number of men
Age						
15–19	12.2	0.3	2,682	15.3	0.1	1,424
20–24	21.2	2.4	2,695	25.4	1.2	1,033
25–29	23.4	4.2	2,340	25.5	3.3	888
30–34	20.9	3.9	2,252	30.5	2.9	853
35–39	20.2	3.4	2,059	27.1	3.2	809
40–44	14.5	1.3	1,675	23.4	2.5	713
45–49	11.7	0.9	1,312	22.7	1.2	557
Residence						
Urban	22.3	3.3	8,557	27.2	2.3	3,442
Rural	12.7	1.3	6,457	19.2	1.3	2,835
Education						
No education	6.4	0.3	2,411	8.2	0.3	628
Primary	10.2	0.3	2,071	10.0	0.1	725
Secondary	17.2	1.0	8,999	21.4	1.0	3,990
More than secondary	53.5	16.9	1,533	53.7	8.1	935
Wealth quintile						
Lowest	9.6	0.4	2,447	13.3	0.4	1,089
Second	10.9	0.5	2,712	17.2	0.5	1,133
Middle	13.8	1.1	3,121	22.2	1.3	1,137
Fourth	20.0	2.4	3,379	23.2	1.7	1,466
Highest	32.7	6.6	3,355	37.6	4.7	1,453
Total 15–49	18.2	2.4	15,014	23.6	1.9	6,277
50–59	na	na	na	18.2	1.2	767
Total 15–59	na	na	na	23.0	1.8	7,044

na = not applicable

Table 13.8 Male circumcision

Percent distribution of men age 15–49 by circumcision status, and percentage traditionally or medically circumcised, according to background characteristics, Ghana DHS 2022

Background characteristic	Circumcision status					Total	Percentage traditionally or medically circumcised[1]	Number of men
	Percentage traditionally circumcised only	Percentage medically circumcised only	Percentage both traditionally and medically circumcised	Percentage circumcised but don't know type	Percentage not circumcised or don't know circumcision status			
Age								
15–19	48.9	40.7	0.5	3.3	6.5	100.0	93.5	1,424
20–24	47.0	45.5	0.7	2.0	4.9	100.0	95.1	1,033
25–29	52.0	40.8	0.5	3.3	3.4	100.0	96.6	888
30–34	59.6	33.2	0.4	1.7	5.2	100.0	94.8	853
35–39	59.0	34.2	0.9	1.9	4.1	100.0	95.9	809
40–44	60.7	32.0	1.0	2.1	4.2	100.0	95.8	713
45–49	73.1	19.7	0.9	2.2	4.1	100.0	95.9	557
Ethnic group								
Akan	46.4	48.7	0.1	3.1	1.7	100.0	98.3	2,887
Ga/Dangme	65.6	33.1	0.0	1.0	0.3	100.0	99.7	456
Ewe	65.8	30.6	0.0	2.9	0.7	100.0	99.3	687
Guan	62.6	31.1	0.0	2.8	3.5	100.0	96.5	223
Mole-Dagbani	64.9	21.7	2.7	1.3	9.4	100.0	90.6	1,155
Grusi	62.5	27.9	0.3	2.2	7.1	100.0	92.9	209
Gurma	49.7	22.3	0.9	2.1	25.0	100.0	75.0	422
Mande	69.2	22.2	2.7	3.1	2.8	100.0	97.2	161
Other	48.7	44.3	0.0	0.8	6.1	100.0	93.9	77
Religion								
Catholic	42.6	44.5	0.0	1.6	11.3	100.0	88.7	508
Anglican	(62.0)	(33.2)	(0.0)	(0.0)	(4.8)	(100.0)	(95.2)	52
Methodist	45.9	50.4	0.0	3.0	0.6	100.0	99.4	346
Presbyterian	52.7	43.4	0.1	2.0	1.8	100.0	98.2	347
Pentecostal/Charismatic	53.0	40.9	0.0	2.7	3.4	100.0	96.6	2,199
Other Christian	46.6	46.3	0.0	2.6	4.4	100.0	95.6	965
Islam	74.7	18.3	3.1	2.1	1.8	100.0	98.2	1,322
Traditional/spiritualist	49.3	19.0	0.0	2.4	29.3	100.0	70.7	235
No religion	52.5	35.6	0.0	3.7	8.2	100.0	91.8	300
Other	*	*	*	*	*	*	*	4
Residence								
Urban	52.4	42.8	0.6	2.0	2.2	100.0	97.8	3,442
Rural	58.8	29.5	0.8	2.9	8.0	100.0	92.0	2,835
Region								
Western	69.6	25.8	0.3	2.8	1.4	100.0	98.6	414
Central	57.3	40.0	0.0	1.0	1.7	100.0	98.3	686
Greater Accra	56.1	40.6	0.0	1.8	1.4	100.0	98.6	1,076
Volta	68.9	30.8	0.0	0.3	0.0	100.0	100.0	235
Eastern	63.5	34.8	0.0	0.9	0.8	100.0	99.2	466
Ashanti	42.0	52.3	0.0	3.4	2.3	100.0	97.7	1,179
Western North	40.6	32.4	0.0	23.1	3.9	100.0	96.1	181
Ahafo	36.8	52.5	0.3	8.8	1.7	100.0	98.3	133
Bono	35.1	53.5	0.0	2.1	9.4	100.0	90.6	222
Bono East	55.2	38.6	0.0	0.6	5.6	100.0	94.4	316
Oti	60.4	29.7	0.2	0.6	9.1	100.0	90.9	187
Northern	61.5	10.7	7.9	0.6	19.4	100.0	80.6	484
Savannah	71.3	19.2	0.8	1.5	7.3	100.0	92.7	155
North East	84.3	10.3	0.0	0.9	4.5	100.0	95.5	119
Upper East	57.6	30.9	0.0	0.3	11.3	100.0	88.7	267
Upper West	51.7	25.3	0.0	1.3	21.7	100.0	78.3	155
Education								
No education	64.0	13.3	3.1	1.4	18.2	100.0	81.8	628
Primary	66.3	25.0	0.7	1.5	6.4	100.0	93.6	725
Secondary	53.6	40.0	0.4	2.9	3.0	100.0	97.0	3,990
More than secondary	47.8	47.9	0.2	1.9	2.3	100.0	97.7	935
Wealth quintile								
Lowest	58.3	22.1	1.5	1.8	16.4	100.0	83.6	1,089
Second	63.2	29.3	0.6	2.8	4.1	100.0	95.9	1,133
Middle	58.2	34.6	0.7	4.2	2.3	100.0	97.7	1,137
Fourth	51.8	44.4	0.5	2.2	1.1	100.0	98.9	1,466
Highest	48.1	47.7	0.2	1.5	2.5	100.0	97.5	1,453
Total 15–49	55.3	36.8	0.7	2.4	4.8	100.0	95.2	6,277
50–59	74.2	19.0	0.8	1.9	4.0	100.0	96.0	767
Total 15–59	57.3	34.9	0.7	2.4	4.7	100.0	95.3	7,044

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes all men who report they are circumcised

Table 13.9 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15–49 who ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the last 12 months, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
	STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad-smelling/ abnormal discharge from penis	Genital sore or ulcer	STI/abnormal discharge from penis/ sore or ulcer	Number of men who ever had sexual intercourse
Age										
15–24	7.7	29.8	11.4	34.8	3,366	15.1	15.9	11.3	23.1	1,246
15–19	7.1	31.9	12.1	37.6	1,048	12.5	13.9	11.4	22.2	438
20–24	8.1	28.8	11.1	33.6	2,318	16.5	17.0	11.3	23.6	808
25–29	8.1	24.3	10.4	29.3	2,251	12.6	13.2	8.1	18.5	850
30–39	6.0	19.5	8.5	24.3	4,281	11.0	9.4	6.4	15.8	1,636
40–49	4.1	14.9	6.5	19.0	2,982	5.2	5.4	5.1	9.8	1,259
Marital status										
Never married	8.3	30.6	10.5	35.2	3,134	13.6	14.3	8.6	20.2	1,922
Married or living together	5.9	19.8	9.0	24.5	8,204	8.7	7.9	6.8	13.9	2,828
Divorced/separated/widowed	5.3	15.9	7.1	21.2	1,542	14.1	14.2	7.9	18.5	242
Circumcision status										
Traditionally or medically circumcised[1]	na	na	na	na	na	11.0	10.7	7.2	16.2	4,776
Traditionally circumcised only	na	na	na	na	na	11.1	10.9	7.4	16.2	2,838
Medically circumcised only	na	na	na	na	na	10.4	9.9	6.0	15.2	1,792
Both traditionally and medically circumcised	na	na	na	na	na	(5.9)	(23.9)	(17.4)	(32.2)	36
Other[2]	na	na	na	na	na	18.8	12.7	16.3	27.6	110
Not circumcised or don't know	na	na	na	na	na	7.6	10.2	17.1	24.6	215
Residence										
Urban	7.1	22.1	8.5	27.1	7,202	10.8	9.2	5.8	14.9	2,777
Rural	5.5	21.8	9.9	26.2	5,678	10.9	12.5	9.8	18.6	2,213
Region										
Western	6.4	24.7	9.4	28.1	818	17.5	19.9	16.1	25.0	332
Central	6.0	21.0	8.0	26.2	1,445	15.7	18.4	10.4	23.3	532
Greater Accra	5.8	18.5	2.3	22.3	1,925	6.9	2.9	1.7	8.0	903
Volta	4.8	17.2	6.5	21.4	592	10.0	7.5	2.4	10.0	187
Eastern	5.2	26.2	9.8	29.7	1,044	13.7	12.8	5.4	17.9	378
Ashanti	7.6	22.4	9.6	28.0	2,542	10.5	9.8	8.1	16.4	915
Western North	7.4	23.4	7.4	27.6	368	20.1	20.4	9.1	24.1	149
Ahafo	10.0	32.5	15.3	37.8	278	16.1	17.4	5.1	20.7	106
Bono	7.1	19.3	7.7	23.3	479	9.1	9.1	6.6	11.6	177
Bono East	5.4	18.2	10.3	23.4	601	13.9	11.7	10.1	21.6	262
Oti	5.3	15.7	8.5	22.5	357	10.2	11.2	5.1	14.5	152
Northern	7.3	32.5	23.9	38.9	1,018	8.9	13.0	19.3	28.6	379
Savannah	3.7	25.4	15.6	30.2	279	5.6	10.3	4.9	16.0	117
North East	9.6	18.4	7.2	24.0	258	6.5	6.5	6.1	9.2	89
Upper East	5.4	12.4	5.5	16.8	544	3.7	4.3	2.0	6.4	203
Upper West	5.3	20.8	6.4	24.4	332	2.3	2.7	1.6	5.1	111

Continued...

Table 13.9—*Continued*

Background characteristic	Percentage of women who reported having in the past 12 months: STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	Percentage of men who reported having in the past 12 months: STI	Bad-smelling/ abnormal discharge from penis	Genital sore or ulcer	STI/abnormal discharge from penis/ sore or ulcer	Number of men who ever had sexual intercourse
Education										
No education	4.4	21.2	11.3	25.8	2,361	5.3	8.2	8.7	15.7	565
Primary	5.3	19.2	8.1	24.0	1,836	9.4	11.2	8.0	17.5	549
Secondary	7.2	22.8	9.0	27.5	7,346	12.3	11.7	8.0	17.4	3,015
More than secondary	6.9	22.3	7.4	27.6	1,336	10.4	8.3	5.1	13.5	862
Wealth quintile										
Lowest	4.5	22.7	11.3	27.0	2,170	8.5	9.0	10.9	18.2	810
Second	5.8	21.9	11.3	26.4	2,362	9.6	13.0	7.8	17.5	834
Middle	6.7	20.3	8.1	25.3	2,705	13.3	13.5	7.6	19.2	913
Fourth	7.2	22.3	8.8	27.2	2,902	14.0	11.8	8.2	18.2	1,245
Highest	7.3	22.7	6.9	27.5	2,740	8.0	6.8	4.5	11.1	1,189
Total 15–49	6.4	21.9	9.1	26.7	12,880	10.8	10.7	7.6	16.6	4,991
50–59	na	na	na	na	na	4.8	4.1	3.4	8.4	764
Total 15–59	na	na	na	na	na	10.0	9.8	7.0	15.5	5,755

Note: Figures in parentheses are based on 25–49 unweighted cases.
na = not applicable
[1] Includes all men who report they are circumcised
[2] Includes men who report they are (1) medically circumcised but don't know whether they are traditionally circumcised, (2) traditionally circumcised but don't know whether they are medically circumcised, or (3) circumcised but don't know the type of circumcision

Table 13.10.1 Knowledge about HIV prevention among young people: Women

Percentages of young women age 15–24 who, in response to prompted questions, say that people can reduce their risk of getting HIV by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, that a healthy-looking person can have HIV, that HIV cannot be transmitted by mosquito bites, and that a person cannot get HIV by sharing food with a person who has HIV, and percentage with knowledge about HIV prevention, according to background characteristics, Ghana DHS 2022

	Percentage who know:						
	People can reduce their risk of getting HIV by:						
Background characteristic	Using a condom every time they have sex	Having sex with only one uninfected partner who has no other partners	A healthy-looking person can have HIV	HIV cannot be transmitted by mosquito bites	A person cannot get HIV by sharing food with a person who has HIV	Percentage with knowledge about HIV prevention[1]	Number of women
Age							
15–19	74.6	78.5	65.5	77.0	63.0	30.4	2,682
15–17	72.3	75.1	62.6	76.3	61.5	28.6	1,729
18–19	78.9	84.7	70.7	78.2	65.6	33.5	953
20–24	82.4	84.1	75.4	81.2	68.7	42.0	2,695
20–22	81.4	84.3	76.0	81.3	68.3	41.2	1,624
23–24	84.0	83.8	74.5	81.1	69.3	43.3	1,071
Marital status							
Never married	79.0	82.3	71.5	81.3	68.2	37.4	4,033
Ever had sex	83.0	86.0	74.9	83.7	68.1	40.4	2,024
Never had sex	75.0	78.5	68.1	78.8	68.2	34.4	2,010
Ever married	77.1	78.5	67.3	72.6	59.0	32.7	1,343
Residence							
Urban	82.0	84.1	75.4	84.8	73.0	41.1	3,009
Rural	74.1	77.8	64.1	71.9	56.7	30.0	2,367
Region							
Western	86.8	88.7	75.9	85.6	77.4	48.6	351
Central	85.5	82.9	72.9	86.4	68.5	38.1	675
Greater Accra	82.3	79.2	74.0	89.6	83.5	41.0	752
Volta	79.4	86.3	68.2	75.3	72.9	35.4	257
Eastern	76.0	83.6	84.8	83.2	78.7	46.7	398
Ashanti	84.8	92.9	78.7	88.8	64.1	44.2	1,039
Western North	86.4	92.9	68.2	78.4	59.6	31.6	141
Ahafo	87.2	88.1	54.4	76.9	64.7	29.2	118
Bono	77.0	82.0	76.4	76.6	61.7	34.0	214
Bono East	72.2	75.9	69.7	73.5	54.3	32.7	246
Oti	75.3	82.3	68.1	56.8	46.0	20.5	153
Northern	52.5	55.8	39.6	49.6	38.1	13.0	385
Savannah	52.7	63.6	50.9	51.4	37.2	15.6	124
North East	55.3	59.3	41.7	53.5	44.1	12.8	112
Upper East	81.4	72.2	75.7	75.2	72.5	35.5	251
Upper West	74.1	75.7	56.2	69.5	56.5	23.5	158
Education							
No education	41.0	44.6	35.2	36.7	26.9	5.9	293
Primary	64.2	71.1	58.4	63.1	43.2	17.9	653
Secondary	83.0	84.9	73.4	83.5	70.4	39.4	4,118
More than secondary	85.1	89.5	89.2	94.5	89.3	60.3	313
Wealth quintile							
Lowest	61.6	65.8	52.4	58.7	44.8	17.8	910
Second	74.6	80.4	60.5	73.7	54.6	27.5	1,059
Middle	83.9	84.4	74.6	82.7	67.5	37.6	1,227
Fourth	84.7	85.8	79.4	87.0	77.0	45.4	1,181
Highest	84.3	87.5	81.8	89.7	81.7	49.7	998
Total	78.5	81.3	70.5	79.1	65.9	36.2	5,376

[1] Knowledge about HIV prevention means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting two major misconceptions about HIV transmission: HIV can be transmitted by mosquito bites and a person can become infected by sharing food with a person who has HIV.

Table 13.10.2 Knowledge about HIV prevention among young people: Men

Percentages of young men age 15–24 who, in response to prompted questions, say that people can reduce their risk of getting HIV by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, that a healthy-looking person can have HIV, that HIV cannot be transmitted by mosquito bites, and that a person cannot get HIV by sharing food with a person who has HIV, and percentage with knowledge about HIV prevention, according to background characteristics, Ghana DHS 2022

	Percentage who know:						
	People can reduce their risk of getting HIV by:						
Background characteristic	Using a condom every time they have sex	Having sex with only one uninfected partner who has no other partners	A healthy-looking person can have HIV	HIV cannot be transmitted by mosquito bites	A person cannot get HIV by sharing food with a person who has HIV	Percentage with knowledge about HIV prevention[1]	Number of men
Age							
15–19	82.1	80.3	63.5	70.8	63.4	31.2	1,424
15–17	80.0	75.9	59.5	68.5	61.8	28.5	915
18–19	85.9	88.1	70.8	74.8	66.2	36.2	510
20–24	90.1	90.9	79.6	74.7	73.7	45.1	1,033
20–22	89.6	90.0	77.4	73.3	74.0	43.8	640
23–24	91.0	92.5	83.1	76.9	73.1	47.2	394
Marital status							
Never married	85.5	84.7	69.8	72.9	68.3	37.2	2,295
Ever had sex	89.7	89.9	77.3	75.9	70.8	41.9	1,083
Never had sex	81.8	80.1	63.1	70.1	66.0	33.0	1,212
Ever married	85.3	85.7	76.9	66.1	60.2	35.3	163
Residence							
Urban	89.2	89.1	74.6	77.8	75.9	43.8	1,286
Rural	81.4	80.0	65.5	66.5	58.8	29.7	1,172
Region							
Western	81.3	90.6	67.9	52.9	67.9	25.4	172
Central	80.3	75.6	70.1	77.1	64.8	31.7	316
Greater Accra	94.1	91.6	91.5	72.2	76.4	48.9	318
Volta	90.3	88.8	61.7	88.7	88.2	44.4	91
Eastern	94.4	98.5	63.7	86.7	70.6	38.3	189
Ashanti	94.7	93.5	78.3	80.7	73.5	48.4	524
Western North	80.0	79.6	79.1	71.6	68.8	37.7	73
Ahafo	87.6	92.6	80.2	77.7	72.2	39.3	47
Bono	83.0	83.1	61.1	70.4	65.0	32.1	85
Bono East	80.2	78.9	64.5	83.1	74.6	48.5	110
Oti	89.6	92.2	59.4	68.3	49.8	20.8	81
Northern	61.2	61.0	50.5	47.1	49.0	15.2	175
Savannah	62.7	63.1	39.7	40.3	46.3	18.7	62
North East	79.0	76.7	53.5	58.5	29.4	10.9	47
Upper East	84.5	77.2	66.5	81.4	72.5	41.7	109
Upper West	76.7	69.4	58.3	49.7	55.3	21.0	58
Education							
No education	49.5	54.1	44.2	38.3	31.9	11.1	111
Primary	72.5	67.4	53.2	59.3	49.7	19.1	319
Secondary	89.1	89.0	72.3	76.1	71.2	39.3	1,835
More than secondary	93.3	90.9	94.1	78.2	84.9	60.0	194
Wealth quintile							
Lowest	71.3	69.2	58.5	59.6	50.6	26.9	475
Second	84.9	82.9	66.2	68.2	63.2	29.0	501
Middle	90.2	89.0	69.6	77.0	71.6	37.3	515
Fourth	88.3	89.5	75.1	78.5	74.9	39.6	521
Highest	92.4	93.1	82.5	78.3	78.3	53.7	446
Total	85.5	84.8	70.3	72.4	67.7	37.1	2,458

[1] Knowledge about HIV prevention means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting two major misconceptions about HIV transmission: HIV can be transmitted by mosquito bites and a person can become infected by sharing food with a person who has HIV.

Table 13.11 Age at first sexual intercourse among young people

Percentage of young women and young men age 15–24 who had sexual intercourse before age 15 and percentage of young women and young men age 18–24 who had sexual intercourse before age 18, according to background characteristics, Ghana DHS 2022

Background characteristic	Women age 15–24		Women age 18–24		Men age 15–24		Men age 18–24	
	Percentage who had sexual intercourse before age 15	Number of women	Percentage who had sexual intercourse before age 18	Number of women	Percentage who had sexual intercourse before age 15	Number of men	Percentage who had sexual intercourse before age 18	Number of men
Age								
15–19	10.2	2,682	na	na	8.9	1,424	na	na
15–17	10.4	1,729	na	na	8.7	915	na	na
18–19	9.9	953	51.9	953	9.3	510	39.5	510
20–24	10.5	2,695	46.5	2,695	6.2	1,033	31.8	1,033
20–22	9.2	1,624	44.4	1,624	6.8	640	30.0	640
23–24	12.4	1,071	49.8	1,071	5.3	394	34.7	394
Residence								
Urban	8.8	3,009	42.1	2,079	8.0	1,286	31.8	838
Rural	12.3	2,367	55.6	1,569	7.6	1,172	37.4	705
Education								
No education	13.9	293	61.0	236	4.2	111	32.5	77
Primary	21.4	653	70.2	347	9.3	319	36.7	154
Secondary	9.0	4,118	47.6	2,759	7.8	1,835	36.1	1,118
More than secondary	2.0	313	15.1	305	7.1	194	23.1	194
Total	10.3	5,376	47.9	3,647	7.8	2,458	34.3	1,543

na = not applicable

Table 13.12 Premarital sexual intercourse among young people

Among never-married women and men age 15–24, percentage who have never had sexual intercourse, according to background characteristics, Ghana DHS 2022

Background characteristic	Women age 15–24		Men age 15–24	
	Percentage who have never had sexual intercourse	Number of never-married women	Percentage who have never had sexual intercourse	Number of never-married men
Age				
15–19	66.1	2,469	70.0	1,410
15–17	75.1	1,668	80.3	915
18–19	47.5	801	51.0	495
20–24	24.1	1,564	25.4	885
20–22	29.2	1,092	31.9	588
23–24	12.2	472	12.6	297
Residence				
Urban	50.7	2,461	50.2	1,227
Rural	48.5	1,572	55.8	1,068
Education				
No education	48.8	92	55.3	87
Primary	52.7	429	59.2	289
Secondary	50.3	3,218	54.2	1,726
More than secondary	40.8	294	29.2	193
Total	49.8	4,033	52.8	2,295

Table 13.13.1 Multiple sexual partners and higher-risk sexual intercourse in the last 12 months among young people: Women

Among all young women age 15–24, percentage who had sexual intercourse with more than one sexual partner in the last 12 months and percentage who had intercourse in the last 12 months with a person who neither was their husband nor lived with them; among young women having more than one partner in the last 12 months, percentage reporting that a condom was used during last intercourse; and among young women who had sexual intercourse in the last 12 months with a person who neither was their husband nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Ghana DHS 2022

	Women age 15–24			Women age 15–24 who had 2+ partners in the last 12 months		Women age 15–24 who had intercourse in the last 12 months with a person who neither was their husband nor lived with them	
Background characteristic	Percentage who had 2+ partners in the last 12 months	Percentage who had intercourse in the last 12 months with a person who was neither their husband nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women
Age							
15–19	2.6	26.8	2,682	17.3	70	17.2	719
15–17	1.6	19.2	1,729	(22.7)	27	21.6	333
18–19	4.5	40.5	953	(14.0)	43	13.5	386
20–24	3.4	41.6	2,695	16.9	91	11.5	1,122
20–22	3.8	42.8	1,624	21.2	62	11.6	695
23–24	2.6	39.9	1,071	(7.2)	28	11.3	427
Marital status							
Never married	3.0	40.5	4,033	19.0	121	14.1	1,633
Ever married	3.0	15.4	1,343	(11.2)	40	10.9	207
Residence							
Urban	2.9	36.6	3,009	19.9	88	15.0	1,102
Rural	3.1	31.2	2,367	13.6	73	11.8	739
Education							
No education	2.3	14.6	293	*	7	8.4	43
Primary	3.9	28.8	653	(8.1)	25	7.5	188
Secondary	3.0	35.6	4,118	17.1	122	13.8	1,466
More than secondary	2.2	45.9	313	*	7	22.9	144
Total	3.0	34.2	5,376	17.1	161	13.7	1,841

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.13.2 Multiple sexual partners and higher-risk sexual intercourse in the last 12 months among young people: Men

Among all young men age 15–24, percentage who had sexual intercourse with more than one sexual partner in the last 12 months and percentage who had intercourse in the last 12 months with a person who neither was their wife nor lived with them; among young men having more than one partner in the last 12 months, percentage reporting that a condom was used during last intercourse; and among young men who had sexual intercourse in the last 12 months with a person who neither was their wife nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, Ghana DHS 2022

	Men age 15–24			Men age 15–24 who had 2+ partners in the last 12 months		Men age 15–24 who had intercourse in the last 12 months with a person who neither was their wife nor lived with them	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their wife nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men
Age							
15–19	5.0	20.7	1,424	12.2	72	21.7	295
15–17	2.7	12.6	915	*	25	20.4	115
18–19	9.2	35.3	510	(13.7)	47	22.5	180
20–24	16.5	55.2	1,033	30.0	171	31.6	570
20–22	13.7	52.0	640	32.1	87	30.7	332
23–24	21.1	60.5	394	27.7	83	32.8	238
Marital status							
Never married	8.5	34.7	2,295	27.1	195	29.0	796
Ever married	29.0	42.9	163	(14.6)	47	19.9	70
Residence							
Urban	10.0	36.0	1,286	30.3	129	33.7	463
Rural	9.7	34.4	1,172	18.3	113	22.0	403
Education							
No education	8.1	31.9	111	*	9	9.4	35
Primary	9.3	32.0	319	(12.7)	30	16.4	102
Secondary	9.8	34.1	1,835	23.5	180	27.4	625
More than secondary	12.3	53.6	194	*	24	51.4	104
Total	9.9	35.2	2,458	24.7	242	28.2	866

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.14 Recent HIV tests among young people

Among young women and young men age 15–24 who have had sexual intercourse in the last 12 months, percentage who were tested for HIV in the last 12 months and received the results of the last test, according to background characteristics, Ghana DHS 2022

	Women age 15–24 who have had sexual intercourse in the last 12 months:		Men age 15–24 who have had sexual intercourse in the last 12 months:	
Background characteristic	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age				
15–19	10.6	871	3.2	299
15–17	9.1	373	0.8	115
18–19	11.7	499	4.7	184
20–24	20.1	1,988	5.7	654
20–22	18.1	1,113	3.4	358
23–24	22.6	875	8.5	296
Marital status				
Never married	13.0	1,635	5.2	796
Ever married	22.8	1,225	3.4	157
Total	17.2	2,860	4.9	953

HEALTH INSURANCE COVERAGE 14

Key Findings

- ***Health insurance coverage:*** Women age 15–49 (90%) are more likely than men (73%) to have health insurance coverage. Coverage among men and women increases with increasing wealth.
- ***National Health Insurance Scheme (NHIS) coverage:*** The NHIS is the most common type of health insurance among both women and men, accounting for nearly all coverage.
- ***Health care utilisation:*** The percentage of respondents who saw a health care practitioner in the 6 months before the survey and had an NHIS card is higher among women (24%) than among men (9%).
- ***Out-of-pocket payments:*** Insured men and women made out-of-pocket payments for all services. For both women and men, out-of-pocket payments were most common for diagnosis services (53% and 64%, respectively).

The National Health Insurance Scheme (NHIS), now in its 20th year of operation, remains the single largest payer of health care services and a contributor to achieving universal health coverage in Ghana. The mandate of the NHIS is to provide financial risk protection against health care expenses to its beneficiaries by providing annual coverage at a set premium.

Membership in the NHIS is required by law (Act 652); nevertheless, an individual must first register, which entails paying an annual premium that secures coverage of health care services based on a defined benefits package that is open to all. At the time of registration, an individual is classified in one of the following membership categories: Social Security and National Insurance Trust (SSNIT) contributors (i.e., formal sector workers), SSNIT pensioners, people over age 70, children under age 18, indigents, pregnant women, and people in the informal sector, including self-employed individuals. The premium amount is determined by the membership category. The premium payment ensures membership validity and is renewed annually to ensure that health care benefits are provided. Those with valid memberships can access both private and public health care facilities that are credentialed by the National Health Insurance Authority (NHIA) to provide services.

As a social intervention programme, the NHIS operates through more than 160 district offices around the country.

The NHIA oversees NHIS operations and licenses, supervises, and regulates the activities of private health insurance schemes in the country. The NHIS had 54.5% population coverage and over 5,000 credentialed facilities nationwide at the end of 2022 (unpublished 2022 NHIS annual report).

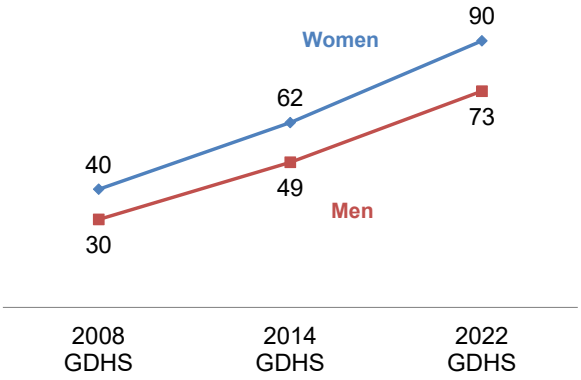
14.1 Health Insurance Coverage and National Health Insurance Scheme

Table 14.1.1 and **Table 14.1.2** show health insurance coverage among women and men age 15–49 according to insurance coverage type and background characteristics. Ninety percent of women and 73% of men have health insurance coverage.

The NHIS covers almost all women (more than 99%) and men (99%) with health insurance. This represents a significant increase over time among both women (40% in 2008 and 62% in 2014) and men (30% in 2008 and 49% in 2014) (**Figure 14.1**). Other types of health insurance, such as private health insurance, cover less than 1% of women and 2% of men.

Figure 14.1 **Trends in NHIS coverage**

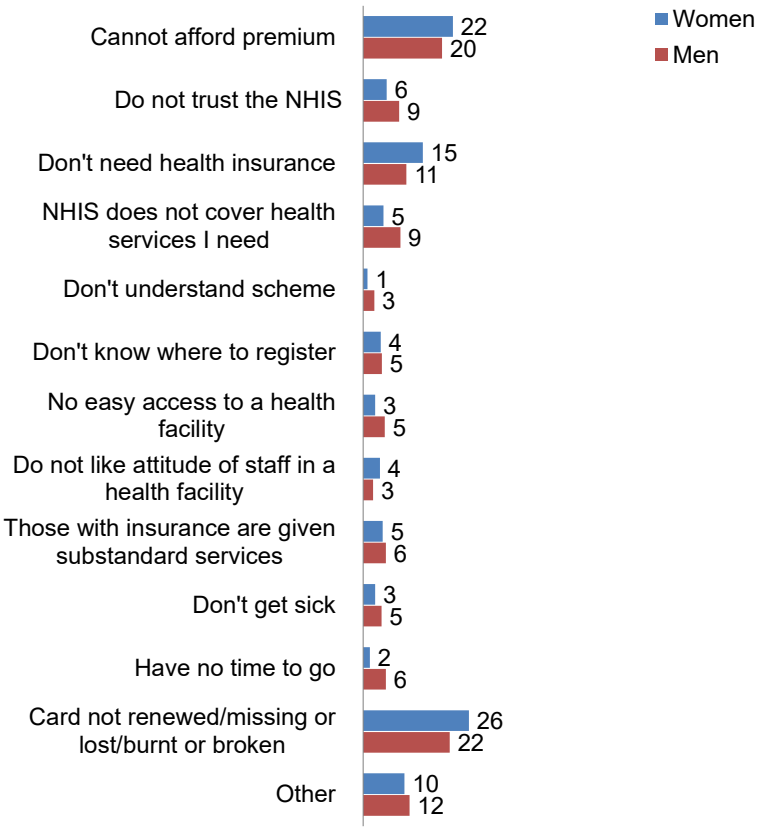
Percentage of women and men with health insurance currently covered under NHIS



Four percent of women and 5% of men do not have health insurance but have registered with the NHIS (**Tables 14.1.1** and **14.1.2**). This indicates that their NHIS membership was invalid at the time of the interview. Individuals in this category are generally referred to as previously enrolled, and they represent an important indicator for the NHIS in that their reasons for leaving can be used to build targeted reenrolment interventions into the scheme in order to boost membership coverage. The two main reasons reported for dropping out of the NHIS were nonrenewal of lost or damaged NHIS cards (26% of women and 22% of men) and inability to pay the premium (22% of women and 20% of men) (**Table 14.2** and **Figure 14.2**). Other reasons included not needing health insurance (15% of women and 11% of men), the NHIS not covering all needed services (5% of women and 9% of men), and the perception that NHIS cardholders receive subpar services (5% of women and 6% of men).

Figure 14.2 **Reasons for dropping NHIS coverage**

Percentage of women age 15–49 and men age 15–59 who dropped NHIS coverage for various reasons



Six percent of women and 21% of men do not have health insurance and are not enrolled in the NHIS (**Tables 14.1.1** and **14.1.2**). This is a considerable decline from the corresponding percentages in 2014 (38% and 51%).

14.2 Possession of a Valid NHIS Card

Respondents who reported that they were covered by the NHIS were also asked whether they held a valid membership card and, if so, whether they could show it to the interviewer. Possession of a valid NHIS card enables the insured client to access health care services.

Tables 14.3.1 and **14.3.2** present information on possession of a valid NHIS card and whether or not the interviewer saw the card. Seventy-three percent of women and 61% of men who said they were covered by the NHIS possessed a valid card (seen or unseen by the interviewer). However, at the time of the interview, 16% of women and 23% of men were unable to show their NHIS cards.

Twenty-seven percent of women and 39% of men with NHIS coverage did not have a valid card.

14.3 Access to and Use of Health Services

Health care utilisation

Use of health care services.

Sample: Women and men age 15–49

Out-of-pocket payments

Among those with health insurance coverage, out-of-pocket (OOP) payments are payments made with people's own money for either services already covered by their insurance or services not covered under their insurance. These payments are not reimbursable.

Sample: Women and men age 15–49

14.3.1 Health Care Service Utilisation

Tables 14.4.1 and **14.4.2** reveal that about a third of women (32%) and a fifth of men (20%) saw a health care practitioner in the last 6 months. However, among all women and men, 24% and 9% respectively saw a health care practitioner and had an NHIS card.

14.3.2 Out-of-pocket Payments

Tables 14.4.1a and **14.4.2a** show that both men and women made out-of-pocket payments for all of the services provided in health facilities. The majority of men (64%) and women (53%) paid in full for their diagnostic services.

The majority of women also paid in full for surgery (53%) and other services (56%). Most men paid in full for medicines (54%) and consultations (58%) in addition to diagnosis.

List of Tables

For more information on health insurance coverage, see the following tables:

- **Table 14.1.1 Health insurance coverage: Women**
- **Table 14.1.2 Health insurance coverage: Men**
- **Table 14.2 Reasons for dropping NHIS coverage**
- **Table 14.3.1 National Health Insurance Scheme: Women**
- **Table 14.3.2 National Health Insurance Scheme: Men**
- **Table 14.4.1 Access to and utilization of health services: Women**
- **Table 14.4.1a Utilisation of health services and type of payment: Women**
- **Table 14.4.2 Access to and utilisation of health services: Men**
- **Table 14.4.2a Utilisation of health services and type of payment: Men**

Table 14.1.1 Health insurance coverage: Women

Percent distribution of women age 15–49 who have health insurance coverage and are registered with the National Health Insurance Scheme (NHIS), and among women with health insurance coverage, percentage covered by specific types of insurance, according to background characteristics, Ghana DHS 2022

	Percent distribution by health insurance coverage					Among women with health insurance coverage, type of coverage			
Background characteristic	Covered by insurance	Not covered by insurance but have ever been registered with NHIS	Not covered by insurance and have never been registered with NHIS	Total	Number of women	National/ district health insurance (NHIS)	Mutual health organisation/ community-based health insurance	Private/com-mercially purchased	Number of women
Age									
15–19	85.9	3.9	10.2	100.0	2,682	100.0	0.1	0.1	2,303
20–24	90.6	3.6	5.8	100.0	2,695	100.0	0.0	0.2	2,442
25–29	91.8	4.0	4.2	100.0	2,340	99.4	0.6	0.4	2,147
30–34	92.3	4.0	3.7	100.0	2,252	99.6	0.4	0.8	2,078
35–39	92.1	3.4	4.4	100.0	2,059	99.1	0.2	0.6	1,897
40–44	91.1	3.9	5.0	100.0	1,675	99.3	0.3	0.4	1,527
45–49	86.8	4.9	8.3	100.0	1,312	99.7	0.2	0.5	1,139
Residence									
Urban	90.8	3.9	5.2	100.0	8,557	99.4	0.4	0.6	7,772
Rural	89.2	3.8	6.9	100.0	6,457	99.9	0.1	0.2	5,761
Region									
Western	88.4	2.8	8.9	100.0	955	99.8	0.4	0.3	844
Central	83.5	7.8	8.7	100.0	1,703	99.8	0.1	0.3	1,422
Greater Accra	86.6	5.5	7.9	100.0	2,327	98.5	0.7	0.3	2,014
Volta	93.2	2.8	4.0	100.0	713	100.0	0.6	0.3	664
Eastern	93.3	2.0	4.7	100.0	1,220	99.8	0.5	0.6	1,138
Ashanti	92.5	3.2	4.2	100.0	2,928	99.8	0.1	0.8	2,709
Western North	91.3	3.0	5.7	100.0	411	99.9	0.0	0.6	375
Ahafo	95.3	2.4	2.2	100.0	317	99.5	0.0	0.7	302
Bono	98.5	0.1	1.3	100.0	567	100.0	0.0	0.9	559
Bono East	93.2	3.9	2.9	100.0	676	100.0	0.3	0.0	630
Oti	84.1	6.2	9.7	100.0	403	100.0	0.0	0.1	339
Northern	87.3	2.0	10.7	100.0	1,149	99.2	0.2	0.3	1,003
Savannah	85.8	6.5	7.7	100.0	319	100.0	0.0	0.0	274
North East	92.7	3.8	3.4	100.0	290	100.0	0.0	0.0	269
Upper East	96.8	2.3	0.9	100.0	640	100.0	0.0	0.1	619
Upper West	93.3	4.3	2.4	100.0	398	99.9	0.1	0.4	372
Wealth quintile									
Lowest	87.2	3.8	9.1	100.0	2,447	99.9	0.0	0.1	2,133
Second	89.1	4.2	6.6	100.0	2,712	100.0	0.0	0.0	2,418
Middle	89.6	4.2	6.2	100.0	3,121	99.7	0.0	0.1	2,795
Fourth	90.6	4.2	5.2	100.0	3,379	99.7	0.2	0.4	3,062
Highest	93.1	3.1	3.8	100.0	3,355	98.9	0.9	1.4	3,124
Total	90.1	3.9	6.0	100.0	15,014	99.6	0.3	0.4	13,532

Table 14.1.2 Health insurance coverage: Men

Percent distribution of men age 15–49 who have health insurance coverage and are registered with the National Health Insurance Scheme (NHIS), and among men with health insurance coverage, percentage covered by specific types of insurance, according to background characteristics, Ghana DHS 2022

	Percent distribution by health insurance coverage					Among men with health insurance coverage, type of coverage			
Background characteristic	Covered by insurance	Not covered by insurance but have ever been registered with NHIS	Not covered by insurance and had never been registered with NHIS	Total	Number of men	National/ district health insurance (NHIS)	Mutual health organisation/ community-based health insurance	Private/ commercially purchased	Number of men
Age									
15–19	84.5	3.0	12.5	100.0	1,424	100.0	0.0	0.2	1,204
20–24	79.5	8.3	12.2	100.0	1,033	99.7	0.2	0.3	821
25–29	67.7	7.2	25.1	100.0	888	99.5	0.2	1.7	601
30–34	67.5	7.5	25.0	100.0	853	98.7	0.5	1.3	575
35–39	67.0	4.6	28.4	100.0	809	95.3	0.1	3.0	542
40–44	62.6	6.0	31.4	100.0	713	98.4	0.6	2.9	447
45–49	74.7	3.1	22.2	100.0	557	98.5	0.0	1.5	416
Residence									
Urban	77.2	5.0	17.9	100.0	3,442	98.3	0.1	2.0	2,656
Rural	68.8	6.4	24.8	100.0	2,835	99.8	0.3	0.3	1,950
Region									
Western	75.2	1.9	22.9	100.0	414	99.9	0.0	0.4	312
Central	59.8	8.6	31.6	100.0	686	99.6	0.0	0.8	410
Greater Accra	67.8	4.6	27.6	100.0	1,076	95.9	0.3	5.4	730
Volta	80.1	3.4	16.4	100.0	235	100.0	0.0	0.0	188
Eastern	75.2	2.5	22.2	100.0	466	99.7	0.0	0.8	350
Ashanti	77.8	3.9	18.3	100.0	1,179	98.9	0.0	0.6	918
Western North	82.1	4.7	13.2	100.0	181	100.0	0.7	0.5	149
Ahafo	78.8	3.8	17.4	100.0	133	99.4	0.3	1.6	105
Bono	77.5	10.0	12.6	100.0	222	98.0	1.2	1.0	172
Bono East	81.8	3.1	15.0	100.0	316	99.7	0.0	0.3	259
Oti	64.0	2.7	33.3	100.0	187	100.0	0.0	0.0	120
Northern	71.1	12.3	16.6	100.0	484	99.8	0.4	0.2	344
Savannah	67.2	6.9	25.9	100.0	155	100.0	0.5	0.0	104
North East	87.7	1.9	10.4	100.0	119	100.0	0.0	0.0	104
Upper East	86.1	7.0	7.0	100.0	267	99.6	1.0	0.0	230
Upper West	71.5	19.5	8.9	100.0	155	99.7	0.0	0.3	111
Wealth quintile									
Lowest	64.9	8.7	26.4	100.0	1,089	99.9	0.4	0.0	707
Second	71.4	5.1	23.5	100.0	1,133	99.9	0.1	0.0	809
Middle	73.8	6.1	20.1	100.0	1,137	99.6	0.2	0.8	839
Fourth	74.2	5.3	20.5	100.0	1,466	99.5	0.1	0.4	1,087
Highest	80.1	3.7	16.2	100.0	1,453	96.5	0.3	4.1	1,164
Total	73.4	5.3	21.3	100.0	7,044	98.9	0.3	1.3	5,169

Table 14.2 Reasons for dropping NHIS coverage

Percentage of women age 15–49 and men age 15–59 who dropped NHIS coverage for various reasons

Reason	Percentage of women	Percentage of men
Cannot afford premium	22.4	19.7
Do not trust the NHIS	5.9	9.0
Don't need health insurance	14.9	10.8
NHIS does not cover health services I need	5.1	9.3
Don't understand scheme	1.1	2.8
Don't know where to register	4.4	4.7
No easy access to a health facility	3.0	5.4
Do not like attitude of staff in a health facility	4.2	2.5
Those with insurance are given substandard services	4.9	5.7
Don't get sick	3.0	4.6
Have no time to go	1.7	5.7
Card not renewed/missing or lost/ burnt or broken	26.4	21.6
Other	10.3	11.6
Number	612	395

Table 14.3.1 National Health Insurance Scheme: Women

Percent distribution of women age 15–49 who have a valid National Health Insurance Scheme (NHIS) card, according to background characteristics, Ghana DHS 2022

Background characteristic	Percent distribution by valid NHIS card				Number of women covered by NHIS
	No card	Card seen	Card not seen	Total	
Age					
15–19	29.2	53.1	17.7	100.0	2,302
20–24	27.8	54.5	17.7	100.0	2,442
25–29	24.3	58.7	17.0	100.0	2,133
30–34	23.5	61.8	14.6	100.0	2,070
35–39	28.6	57.0	14.4	100.0	1,880
40–44	28.8	57.3	13.9	100.0	1,515
45–49	30.7	53.9	15.4	100.0	1,136
Residence					
Urban	26.4	56.2	17.4	100.0	7,724
Rural	28.5	57.3	14.2	100.0	5,753
Region					
Western	30.9	53.0	16.1	100.0	842
Central	35.7	39.2	25.2	100.0	1,419
Greater Accra	27.0	58.9	14.1	100.0	1,983
Volta	25.9	66.8	7.3	100.0	664
Eastern	11.6	77.4	11.1	100.0	1,136
Ashanti	32.6	49.4	18.0	100.0	2,703
Western North	22.9	56.9	20.3	100.0	374
Ahafo	25.6	52.6	21.8	100.0	301
Bono	25.2	63.9	10.9	100.0	559
Bono East	23.5	51.3	25.2	100.0	630
Oti	28.7	61.3	10.0	100.0	339
Northern	25.3	58.8	15.8	100.0	995
Savannah	35.1	53.0	11.8	100.0	274
North East	23.2	63.0	13.7	100.0	269
Upper East	23.2	68.8	8.0	100.0	619
Upper West	24.3	60.2	15.5	100.0	371
Wealth quintile					
Lowest	33.5	53.6	12.9	100.0	2,132
Second	29.2	55.9	14.9	100.0	2,417
Middle	28.6	56.1	15.3	100.0	2,788
Fourth	26.3	54.3	19.4	100.0	3,052
Highest	21.4	62.2	16.4	100.0	3,090
Total	27.3	56.7	16.0	100.0	13,478

Table 14.3.2 National Health Insurance Scheme: Men

Percent distribution of men age 15–49 who have a valid National Health Insurance Scheme (NHIS) card, according to background characteristics, Ghana DHS 2022

Background characteristic	Percent distribution by valid NHIS card				Number of men covered by NHIS
	No card	Card seen	Card not seen	Total	
Age					
15–19	40.0	36.1	23.8	100.0	1,204
20–24	43.4	32.9	23.6	100.0	819
25–29	40.5	39.3	20.2	100.0	598
30–34	36.2	42.2	21.6	100.0	568
35–39	36.4	41.6	22.0	100.0	516
40–44	39.7	37.3	23.0	100.0	440
45–49	39.3	39.7	21.0	100.0	410
Residence					
Urban	35.7	38.6	25.7	100.0	2,609
Rural	45.1	36.7	18.2	100.0	1,945
Region					
Western	61.8	19.9	18.4	100.0	311
Central	19.4	49.5	31.1	100.0	409
Greater Accra	25.7	37.6	36.7	100.0	700
Volta	24.4	62.6	13.0	100.0	188
Eastern	45.0	24.7	30.3	100.0	349
Ashanti	55.9	28.0	16.1	100.0	907
Western North	35.2	40.8	24.0	100.0	149
Ahafo	46.2	29.6	24.2	100.0	104
Bono	30.0	47.0	23.0	100.0	168
Bono East	39.7	48.4	11.8	100.0	258
Oti	56.6	33.7	9.7	100.0	120
Northern	43.0	40.0	17.0	100.0	343
Savannah	39.7	32.5	27.7	100.0	104
North East	51.9	45.4	2.7	100.0	104
Upper East	25.2	55.3	19.5	100.0	229
Upper West	22.8	49.7	27.5	100.0	110
Wealth quintile					
Lowest	46.1	39.4	14.4	100.0	706
Second	49.1	30.2	20.6	100.0	808
Middle	44.0	37.4	18.5	100.0	836
Fourth	36.4	37.6	26.0	100.0	1,081
Highest	28.9	42.7	28.4	100.0	1,123
Total	39.0	38.1	22.9	100.0	5,110

Table 14.4.1 Access to and utilization of health services: Women

Among all women age 15–49, percentage who visited a health provider or health facility during the 6 months prior to the interview and percentage who visited a health provider or health facility during the 6 months prior to the interview and had a National Health Insurance Scheme (NHIS) card, and among women age 15–49 with any health insurance coverage, percentage who last used health insurance to access different services and made full payments or had co-payments, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of women who visited a health provider or health facility	Percentage of women who visited a health provider or health facility and had an NHIS card	Number of women	Consultation		Medicine		Diagnosis		Admission		Surgery		Other		Number of women with any insurance coverage
				Co-paid	Paid in full	Co-paid	Paid in full	Co-paid	Paid in full	Co-paid	Paid in full	Co-paid	Paid in full	Co-paid	Paid in full	
Age																
15–19	22.8	16.2	2,682	2.6	2.2	8.2	6.2	3.5	3.8	2.0	1.7	0.2	0.2	0.6	0.4	2,303
20–24	34.7	25.0	2,695	4.7	2.5	12.5	8.7	6.6	6.5	3.3	2.2	0.4	0.7	0.9	1.2	2,442
25–29	39.7	30.5	2,340	5.3	4.1	14.8	11.0	8.0	8.4	3.9	2.8	0.9	0.8	0.8	1.5	2,147
30–34	35.3	26.6	2,252	4.3	3.4	13.2	10.0	5.7	7.4	3.1	3.5	1.0	1.0	1.2	1.4	2,078
35–39	33.9	25.0	2,059	4.4	3.6	13.1	9.1	7.5	7.6	3.8	2.4	0.9	1.5	1.4	2.0	1,897
40–44	28.2	19.3	1,675	3.1	4.0	10.0	8.5	4.3	7.7	1.6	3.2	0.6	1.4	0.4	1.3	1,527
45–49	32.6	22.2	1,312	5.1	3.7	12.3	10.0	5.4	8.6	2.7	3.0	0.6	1.0	1.1	1.2	1,139
Residence																
Urban	33.4	24.2	8,557	4.6	3.4	11.9	10.1	6.2	7.9	2.9	2.9	0.8	1.1	0.9	1.2	7,772
Rural	31.0	22.8	6,457	3.7	3.1	12.2	7.5	5.5	5.6	3.0	2.3	0.5	0.6	1.0	1.3	5,761
Region																
Western	28.7	20.1	955	6.1	2.6	11.8	6.3	4.7	3.3	3.6	2.3	0.1	1.0	1.1	1.6	844
Central	33.4	21.9	1,703	6.4	3.0	14.4	7.6	8.3	9.3	2.6	2.0	0.6	0.8	0.0	1.3	1,422
Greater Accra	31.2	18.7	2,327	2.7	3.4	9.2	10.5	4.7	6.9	1.6	2.7	0.7	1.5	0.2	0.7	2,014
Volta	34.2	28.0	713	4.7	2.3	19.9	6.6	8.3	5.9	3.3	1.6	0.9	0.6	1.0	0.6	664
Eastern	35.4	30.1	1,220	6.5	6.8	14.1	13.1	10.0	14.8	4.1	6.1	0.6	2.5	3.1	5.0	1,138
Ashanti	34.4	24.9	2,928	5.7	3.9	13.4	7.8	8.1	7.4	4.3	2.9	0.8	0.3	1.3	0.9	2,709
Western North	36.7	27.8	411	5.3	5.1	13.7	8.8	5.1	4.6	2.9	4.2	0.6	0.6	0.5	0.4	375
Ahafo	34.0	28.0	317	1.7	3.0	12.9	7.7	3.8	6.8	3.6	2.8	0.6	1.1	0.2	0.1	302
Bono	32.5	27.2	567	0.9	0.9	9.7	8.5	4.9	4.9	2.9	1.0	0.5	0.4	0.8	0.7	559
Bono East	31.7	25.3	676	1.5	2.2	10.7	8.6	3.7	6.6	1.6	1.6	0.8	0.4	0.9	1.0	630
Oti	31.2	25.8	403	7.0	3.7	16.6	7.3	7.7	7.5	5.3	2.3	2.1	0.5	1.9	0.1	339
Northern	25.2	17.2	1,149	1.6	2.6	4.6	9.3	0.8	4.0	1.5	2.2	0.5	1.3	0.4	0.3	1,003
Savannah	29.6	19.4	319	2.3	2.6	5.9	11.3	4.1	5.0	2.3	1.7	0.1	0.4	0.7	0.5	274
North East	31.9	23.9	290	2.6	2.5	12.7	7.3	2.8	2.6	1.9	2.8	0.3	0.1	0.5	0.7	269
Upper East	39.0	31.9	640	3.0	1.2	16.2	10.6	3.2	2.4	3.3	1.2	0.6	0.1	0.9	2.1	619
Upper West	26.3	21.6	398	0.2	1.0	4.9	12.2	1.8	6.2	0.9	1.8	0.4	0.8	0.1	1.1	372
Wealth quintile																
Lowest	26.8	19.1	2,447	2.6	1.8	9.2	6.2	3.0	3.4	2.1	1.6	0.2	0.4	1.0	0.7	2,133
Second	27.1	20.6	2,712	3.1	2.8	10.1	6.8	4.2	5.1	2.9	2.8	0.8	0.8	1.2	1.3	2,418
Middle	29.9	22.9	3,121	4.8	2.5	11.8	8.7	6.1	6.7	2.4	2.0	0.5	0.5	0.7	1.1	2,795
Fourth	36.2	25.9	3,379	4.6	3.8	13.9	9.6	7.6	8.7	3.6	3.2	0.5	1.0	1.0	1.8	3,062
Highest	39.3	27.8	3,355	5.1	4.8	13.8	12.3	7.3	9.3	3.5	3.2	1.1	1.5	0.7	1.1	3,124
Total	32.4	23.6	15,014	4.2	3.3	12.0	9.0	5.9	6.9	3.0	2.6	0.7	0.9	0.9	1.2	13,532

Table 14.4.1a Utilisation of health services and type of payment: Women

Among women age 15–49 who visited a health provider or health facility during the 6 months prior to the interview and last used health insurance to access different services, percentage who made full payments or had co-payments by type of service, according to background characteristics, Ghana DHS 2022

Background characteristic	Consultation			Medicine			Diagnosis			Admission			Surgery			Other		
	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents
Age																		
15–19	51.7	43.6	117	55.1	41.5	343	46.3	50.9	172	51.0	43.0	91	*	*	13	(56.1)	(36.8)	25
20–24	65.0	34.7	178	58.4	40.7	523	49.9	49.4	322	59.0	39.8	138	(36.9)	(60.5)	30	(41.7)	(54.1)	53
25–29	55.7	42.9	205	56.6	42.0	562	48.9	50.9	353	58.4	41.6	143	(54.8)	(45.2)	36	33.2	62.9	51
30–34	56.2	43.8	159	56.2	42.6	488	42.3	54.9	280	44.9	51.2	144	(42.5)	(44.1)	48	46.4	51.3	56
35–39	55.2	44.2	153	59.0	41.0	423	49.6	50.2	286	61.3	38.4	117	(36.6)	(62.5)	46	40.6	57.4	65
40–44	40.9	54.1	114	52.2	44.2	292	33.9	61.2	192	31.1	63.1	77	(26.6)	(60.1)	35	(22.8)	(73.7)	26
45–49	56.7	40.7	103	53.8	43.5	260	37.1	59.4	165	46.1	52.5	66	*	*	18	*	*	27
Residence																		
Urban	56.7	41.6	627	53.1	45.0	1,748	43.0	54.7	1,127	48.7	47.8	469	37.0	52.9	158	41.3	56.4	165
Rural	53.1	45.0	402	61.3	37.6	1,143	49.0	50.1	643	56.6	42.7	307	44.5	54.4	69	40.3	54.8	138
Region																		
Western	70.2	29.8	73	65.2	34.8	153	58.4	41.6	67	(61.6)	(38.4)	50	*	*	10	*	*	23
Central	66.9	31.6	137	65.3	34.7	313	47.0	53.0	250	(56.9)	(43.1)	66	*	*	19	*	*	18
Greater Accra	(42.5)	(53.9)	126	44.6	51.1	414	37.6	55.3	252	(33.0)	(53.6)	100	*	*	58	*	*	19
Volta	66.9	33.1	47	74.2	24.7	178	57.1	41.1	96	(67.4)	(32.6)	33	*	*	10	*	*	11
Eastern	48.7	51.3	151	51.9	48.1	310	40.4	59.6	283	40.1	59.9	115	*	*	35	37.9	60.7	93
Ashanti	57.5	38.6	270	62.0	36.2	587	51.2	47.1	427	59.7	40.3	196	*	*	31	*	*	62
Western North	50.5	49.5	39	60.8	39.2	84	52.8	47.2	36	(40.8)	(59.2)	26	*	*	5	*	*	3
Ahafo	(36.6)	(63.4)	14	62.7	37.3	62	35.7	64.3	32	55.8	44.2	19	*	*	5	*	*	1
Bono	*	*	10	51.9	45.3	104	49.4	49.0	56	(73.8)	(26.2)	22	*	*	5	*	*	9
Bono East	(40.2)	(59.8)	23	54.9	44.4	123	35.2	63.3	66	(47.3)	(45.8)	22	*	*	8	*	*	13
Oti	65.3	34.7	36	69.4	30.6	81	50.2	49.1	52	68.9	29.7	26	*	*	9	*	*	7
Northern	(38.4)	(61.6)	42	32.7	65.2	143	(17.2)	(82.8)	48	(39.5)	(58.5)	37	*	*	20	*	*	7
Savannah	(45.9)	(52.2)	14	34.0	65.5	47	44.9	55.1	25	(55.1)	(41.4)	11	*	*	1	*	*	3
North East	48.8	48.1	14	62.5	36.0	55	(51.6)	(48.4)	14	(40.5)	(59.5)	13	*	*	2	*	*	3
Upper East	(69.5)	(28.4)	27	57.7	37.6	174	53.6	40.4	37	(68.2)	(24.5)	30	*	*	5	(21.7)	(49.8)	26
Upper West	*	*	4	28.5	70.9	64	22.3	77.7	30	(34.0)	(66.0)	10	*	*	5	*	*	4
Wealth quintile																		
Lowest	60.1	39.9	94	58.5	39.3	335	45.3	51.2	141	56.7	41.7	81	*	*	13	50.5	36.1	42
Second	52.3	47.2	145	59.3	39.9	410	45.5	54.5	226	50.1	48.7	140	49.5	48.6	39	47.8	51.3	62
Middle	63.6	32.8	211	56.9	41.7	582	47.5	52.1	360	54.6	44.8	124	(49.6)	(50.4)	27	37.6	57.0	55
Fourth	53.1	43.2	268	57.0	39.4	749	44.5	51.0	522	49.9	43.8	221	(24.8)	(51.4)	62	35.2	64.4	84
Highest	51.5	48.5	311	52.9	46.9	816	44.0	55.7	521	51.5	48.1	210	42.1	56.7	85	(37.6)	(60.8)	59
Total	55.3	42.9	1,028	56.3	42.0	2,891	45.2	53.1	1,770	51.8	45.8	776	39.3	53.3	226	40.8	55.7	303

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than unweighted cases and has been suppressed.

Table 14.4.2 Access to and utilisation of health services: Men

Among all men age 15–49, percentage who visited a health provider or health facility during the 6 months prior to the interview and percentage who visited a health provider or health facility during the 6 months prior to the interview and a National Health Insurance Scheme (NHIS) card, and among men age 15–49 with any health insurance coverage, percentage who last used health insurance to access different services who made full payments or had co-payments, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of men who visited a health provider or health facility	Percent of men who visited a health provider or health facility and had an NHIS card	Number of men	Consultation		Medicine		Diagnosis		Admission		Surgery		Other		Number of men
				Co-paid	Paid in full	Co-paid	Paid in full	Co-paid	Paid in full	Co-paid	Paid in full	Co-paid	Paid in full	Co-paid	Paid in full	
Age																
15–19	17.4	9.2	1,424	1.7	2.2	3.9	5.3	1.2	2.4	0.5	1.6	0.0	0.0	0.5	0.4	1,204
20–24	20.2	9.3	1,033	3.0	2.1	4.4	5.1	1.2	3.9	1.0	1.5	0.1	0.2	0.7	0.6	821
25–29	21.9	7.1	888	0.6	1.4	4.1	4.8	0.9	1.3	0.4	0.3	0.0	0.1	0.0	1.3	601
30–34	18.4	9.3	853	1.2	3.9	6.6	7.0	2.4	2.9	0.3	1.6	0.2	0.7	0.2	0.8	575
35–39	18.3	5.9	809	1.0	1.3	3.2	5.0	1.2	1.9	0.3	0.3	0.0	0.4	0.5	1.1	542
40–44	20.5	8.2	713	1.4	0.6	5.6	5.3	2.8	2.5	0.9	0.2	0.6	0.0	0.4	0.5	447
45–49	25.6	13.5	557	1.2	4.6	5.9	9.1	1.4	5.4	1.3	2.5	0.1	0.5	0.4	2.4	416
Residence																
Urban	21.0	9.4	3,442	1.8	3.0	4.7	6.5	1.7	4.0	0.7	1.6	0.2	0.3	0.5	0.8	2,656
Rural	18.4	8.0	2,835	1.2	1.2	4.5	4.7	1.2	1.2	0.5	0.7	0.0	0.2	0.3	0.9	1,950
Region																
Western	15.5	6.6	414	0.6	0.7	2.9	2.3	0.6	1.3	0.6	1.2	0.0	0.0	0.1	0.0	312
Central	20.9	9.9	686	2.9	4.4	6.8	8.1	1.8	5.1	0.7	1.8	0.0	0.0	2.0	1.6	410
Greater Accra	19.2	5.8	1,076	2.3	4.7	3.1	5.7	1.5	4.0	0.7	2.2	0.0	0.6	0.7	0.7	730
Volta	22.4	13.1	235	2.1	1.8	12.1	2.9	2.5	1.7	0.7	1.1	0.0	0.6	0.0	0.0	188
Eastern	29.2	14.1	466	2.5	0.8	6.1	7.6	2.5	2.4	1.1	0.9	0.0	0.0	0.0	0.0	350
Ashanti	20.9	8.0	1,179	1.2	1.5	2.8	6.3	1.1	3.2	0.4	1.3	0.3	0.0	0.0	0.6	918
Western North	16.4	8.3	181	0.9	1.7	5.6	5.6	1.7	3.2	0.0	0.3	0.0	0.0	0.0	0.0	149
Ahafo	20.2	9.6	133	0.7	1.7	4.6	7.5	3.2	5.4	1.1	0.3	0.0	0.0	0.3	1.6	105
Bono	19.2	12.1	222	0.5	1.7	6.3	5.3	0.9	2.8	0.0	0.8	0.0	0.0	1.0	2.6	172
Bono East	19.6	13.2	316	1.4	2.5	6.7	6.2	1.5	2.0	1.1	1.0	0.0	1.1	0.7	0.5	259
Oti	17.6	8.1	187	4.1	4.1	6.6	4.5	2.7	3.0	1.6	1.1	0.3	0.4	0.9	0.9	120
Northern	19.1	6.8	484	0.0	0.7	3.0	5.6	0.6	0.9	0.3	0.9	0.2	0.4	0.3	1.7	344
Savannah	13.2	6.2	155	1.2	2.0	3.4	3.3	0.4	3.4	0.0	0.5	0.0	0.0	0.0	1.4	104
North East	12.3	5.5	119	0.8	0.3	3.0	1.5	0.9	0.6	0.6	0.3	0.0	0.3	0.0	0.0	104
Upper East	14.0	8.1	267	0.5	1.6	2.9	5.6	1.5	1.7	0.5	0.3	0.2	0.3	0.4	1.6	230
Upper West	23.8	14.2	155	2.6	2.4	9.0	8.1	2.4	0.5	1.3	0.2	0.4	0.0	0.2	2.2	111
Wealth quintile																
Lowest	16.3	6.7	1,089	1.0	0.9	4.0	4.3	0.5	0.7	0.4	0.4	0.0	0.2	0.2	0.9	707
Second	16.0	6.6	1,133	1.7	1.4	3.9	2.7	1.2	1.0	0.5	0.3	0.0	0.2	0.5	0.5	809
Middle	18.3	7.8	1,137	2.1	1.9	5.2	5.3	2.1	2.4	1.1	1.1	0.4	0.7	0.7	0.6	839
Fourth	21.4	9.8	1,466	1.2	2.2	4.9	6.6	1.6	4.3	0.5	1.7	0.1	0.2	0.0	1.2	1,087
Highest	25.0	11.9	1,453	1.7	4.0	4.8	8.2	1.7	4.3	0.7	1.9	0.0	0.0	0.8	0.9	1,164
Total	20.4	9.2	7,044	1.7	2.4	4.9	5.9	1.6	2.9	0.8	1.1	0.1	0.2	0.5	1.0	5,169

Table 14.4.2a Utilisation of health services and type of payment: Men

Percentage of men age 15–49 who visited a health provider or health facility during the 6 months prior to the interview, and percentage of men who last used health insurance to access different services and made full payments or had co-payments, according to background characteristics, Ghana DHS 2022

Background characteristic	Consultation			Medicine			Diagnosis			Admission			Surgery			Other		
	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents	Co-paid	Paid in full	Number of respond-ents
Residence																		
Urban	37.4	62.2	129	42.0	57.4	299	29.6	69.6	152	0.9	2.0	2	na	na	0	(1.1)	(1.8)	1
Rural	49.7	48.1	48	48.6	51.0	180	47.7	50.1	48	(1.5)	(1.9)	1	na	na	0	(0.9)	(2.6)	1
Total	40.8	58.3	213	45.4	54.1	564	35.1	63.6	240	0.6	0.8	1	na	na	0	0.5	0.9	1

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = not applicable

WOMEN'S EMPOWERMENT 15

Key Findings

- ***Women's employment and earnings:*** 88% of currently married women age 15–49 were employed in the 12 months preceding the survey, as compared with 99% of currently married men.
- ***Control over women's earnings:*** 67% of currently married women decide mainly on their own how their cash earnings are used, while 27% decide jointly with their husband.
- ***Asset ownership:*** 3% of women own a house alone and 9% own a house jointly with their husband; among men, 16% own a house alone and 4% own a house jointly with their wife.
- ***Participation in decision making:*** 76% of women make decisions on their own health care either alone or jointly with their husband. Among men, 91% make decisions regarding their health care either alone or jointly with their wife.
- ***Negotiating sexual relations:*** 72% of currently married women can say no to their husband if they do not want to have sexual relations, and 70% can ask their husband to use a condom.

This chapter explores women's empowerment in terms of employment, earnings, control over earnings, and magnitude of earnings relative to those of their partners. The chapter also examines women's and men's ownership of assets including houses, land, and mobile phones as well as their use of bank accounts and mobile-money-service providers. In addition, responses to specific questions are used to define three different indicators of women's empowerment: women's participation in household decision making, women's attitudes towards wife beating, and women's participation in decision making regarding sexual and reproductive health.

15.1 MARRIED WOMEN'S AND MEN'S EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey.

Sample: Currently married women and men age 15–49

Earning cash for employment

Respondents are asked if they are paid for their labour in cash or in-kind. Only those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.

Sample: Currently married women and men age 15–49 employed in the 12 months before the survey

Eighty-eight percent of currently married women age 15–49 were employed in the 12 months before the survey, as compared with 99% of currently married men. Among employed respondents, only 58% of women and 78% of men received earnings in cash. Fourteen percent of employed women and 5% of employed men were not paid either in cash or in-kind (**Table 15.1**).

15.2 CONTROL OVER WOMEN'S EARNINGS

Control over one's own cash earnings

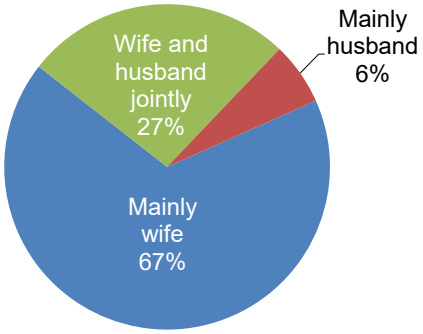
Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their spouse about how their own earnings will be used.

Sample: Currently married women and men age 15–49 who received cash earnings for employment during the 12 months before the survey

Overall, 67% of currently married women age 15–49 decide mainly on their own how their cash earnings are used, while 27% decide jointly with their husband (**Figure 15.1**). Only 6% reported that their husband mainly decides how their earnings are used. Ten percent of currently married women earn more than their husband, while 8% earn about the same as their husband and 79% earn less (**Table 15.2.1**).

Figure 15.1 **Control over women's earnings**

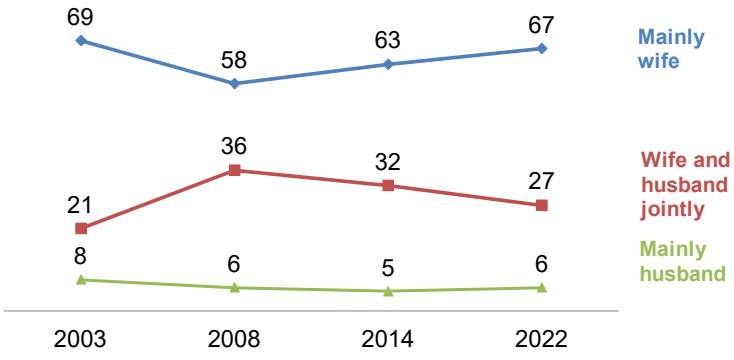
Percent distribution of currently married women with cash earnings in the 12 months before the survey



Trends: The percentage of currently married women age 15–49 who decide mainly on their own how their cash earnings are used declined from 69% in 2003 to 58% in 2008 before increasing to 67% in 2022. The percentage of women who decide jointly with their husband how their earnings are used decreased from 36% in 2008 and 32% in 2014 to 27% in 2022 (**Figure 15.2**). The percentage of women who earn less than their husband increased from 74% in 2008 to 79% in 2022.

Figure 15.2 **Trends in control over earnings**

Percent distribution of employed women who earn cash by who decides how wife's cash earnings are used



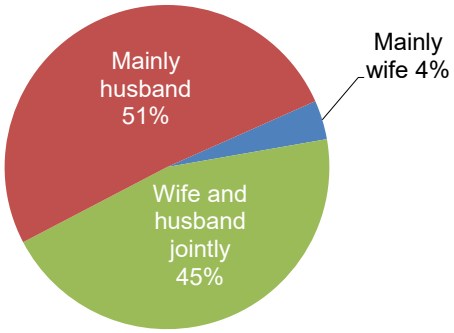
15.3 Control over Men's Earnings

Forty-five percent of currently married men aged 15–49 decide jointly with their wife how their cash earnings are used, while 51% decide alone (**Figure 15.3**).

Sixty-one percent of currently married women reported that their husband makes decisions alone on how his cash earnings are used, and 11% reported that they are the main decision maker about how their husband's cash earnings are used (**Table 15.2.2**).

Figure 15.3 **Control over men's earnings**

Percent distribution of currently married men with cash earnings in the 12 months before the survey



15.4 Women's and Men's Ownership of Assets

Ownership and control over assets such as land and housing provide direct and indirect benefits to individuals and households, including a secure place to live, the means of a livelihood, protection during emergencies, and collateral for credit that can be used for investment or consumption (Doss et al. 2008). The 2022 GDHS collected information on women's and men's ownership of two high-value assets: land and a house.

15.4.1 Ownership of a House or Land and Documentation of Ownership

Ownership of a house or land

Respondents who own a house or land, whether alone or jointly with their spouse, someone else, or both their spouse and someone else.

Documentation of ownership of a house or land

Respondents whose name is on the title/deed or other government-recognised document.

Sample: Women and men age 15–49

Overall, 3% of women own a house alone and 9% own a house jointly with their husband only. Among men, 16% own a house alone and 4% own a house jointly with their wife only. Five percent of women own land alone, while 6% own land jointly with their husband only. Among men, 18% own land alone and 3% own land jointly with their wife only. The percentages of respondents who do not own a house or land are higher among women than men (**Table 15.3.1** and **Table 15.3.2**).

Among respondents who own a house, 30% of women and 41% of men have their name on the title/deed or other government-recognised document, while 49% of women and 54% of men do not have a title/deed (**Table 15.4.1** and **Table 15.4.2**).

Overall, 32% of women who own land have their name on the title/deed, while 7% do not have their name on the title/deed and 59% do not have a title/deed.

Among men who own land, 35% have their name on the title/deed, 4% do not have their name on the title/deed, and 60% do not have a title/deed (**Table 15.5.1** and **Table 15.5.2**).

15.4.2 Ownership and Use of Mobile Phones and Bank Accounts

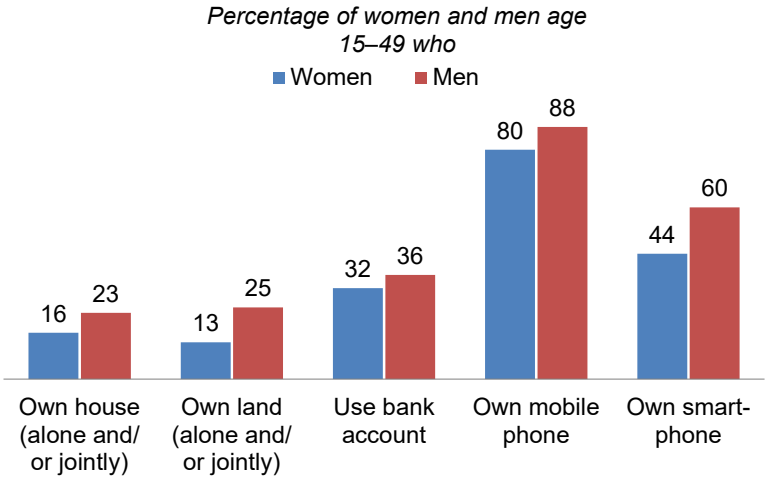
Use of bank accounts or mobile-money-service providers

Respondents who have and use a bank account or who used a mobile phone for financial transactions in the 12 months before the survey.

Sample: Women and men age 15–49

Eighty percent of women and 88% of men age 15–49 own a mobile phone, and 44% and 60%, respectively, own a smartphone. Seventy percent of women and 78% of men used a mobile phone for financial transactions in the last 12 months. Overall, 73% of women and 79% of men used a bank account or a mobile phone for financial transactions in the last 12 months (**Table 15.6.1**, **Table 15.6.2**, and **Figure 15.4**).

Figure 15.4 **Ownership of assets**



As with house and land ownership, use of bank accounts and ownership of mobile phones and smartphones are more common among men than women.

15.5 Participation in Decision Making

Participation in major household decisions

Women are considered to participate in household decisions if they make decisions alone or jointly with their husband in all three of the following areas: (1) their own health care, (2) major household purchases, and (3) visits to their family or relatives.

Sample: Currently married women age 15–49

Men are considered to participate in household decisions if they make decisions alone or jointly with their wife in both of the following areas: (1) their own health care and (2) major household purchases.

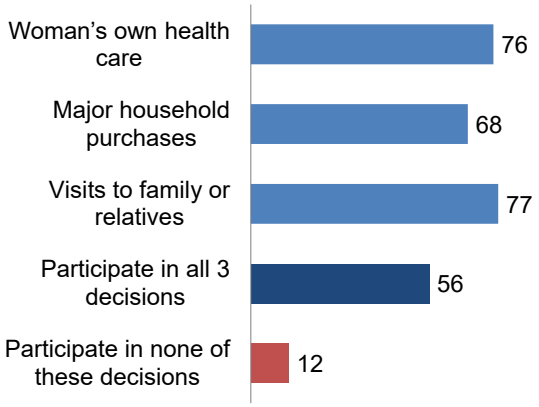
Sample: Currently married men age 15–49

Seventy-six percent of women participate in making decisions on their own health care either alone or jointly with their husband. Among men, 91% make decisions on their health care either alone or jointly with their wife. Only 8% of women mainly make decisions on their husband's health care, while 24% of men mainly decide on their wife's health care (**Table 15.7**).

Fifty-six percent of currently married women report taking part in all three decisions, while 12% do not participate in any of the decisions. Among men, 84% participate in both of the specified decisions, and 5% do not participate in either decision. Men (88%) are more likely to make major household purchases than women (68%) (**Table 15.8.1**, **Table 15.8.2**, and **Figure 15.5**).

Figure 15.5 **Women's participation in decision making**

Percentage of currently married women age 15–49 participating in specific decisions



15.6 Attitudes toward Wife Beating

Attitudes toward wife beating

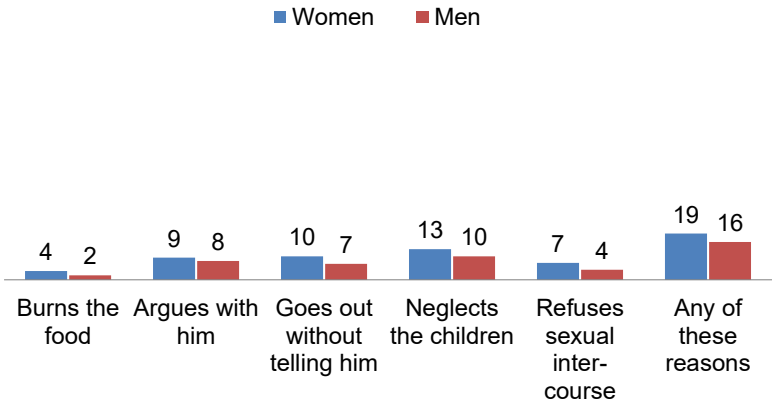
Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.

Sample: Women and men age 15–49

Nineteen percent of women and 16% of men agree with at least one of the specified reasons that a husband is justified in hitting or beating his wife. Significantly, 13% of women and 10% of men reported that a husband is justified in hitting or beating his wife if she neglects the children, indicating that issues of child neglect are of great concern to both men and women (**Table 15.9.1**, **Table 15.9.2**, and **Figure 15.6**).

Figure 15.6 **Attitudes towards wife beating**

Percentage of women and men age 15–49 who agree that a husband is justified in beating his wife for specific reasons



Trends: The percentage of women who agree with at least one reason justifying wife beating has declined steadily over time, from 49% in 2003 to 19% in 2022. Among men, the percentage declined from 33% in 2003 to 13% in 2014 before increasing slightly to 16% in 2022 (data not shown).

15.7 Negotiating Sexual Relations

To assess attitudes toward negotiating safer sexual relations with husbands, women and men were asked whether they thought that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women and asking that he use a condom if she knows he has a sexually transmitted infection (STI).

Seventy-one percent of women and men believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women, and 85% of women and 87% of men believe that a woman is justified in asking her husband to use a condom if she knows that he has an STI (**Table 15.10**).

To assess the ability of women to actually negotiate safer sexual relations with their husband, women were asked whether they could say no to their husband if they do not want to have sexual intercourse and whether they could ask their husband to use a condom.

Seventy-two percent of women can say no to their husband if they do not want to have sexual intercourse, and 70% can ask their husband to use a condom (**Table 15.11**).

15.8 Women's Participation in Decision Making regarding Sexual and Reproductive Health

Informed decision making on sexual relations, contraceptive use, and reproductive health

Women are considered to make their own informed decisions on sexual relations, contraceptive use, and reproductive health if (1) they can say no to their husband if they do not want to have sexual intercourse, (2) they make decisions about use of family planning alone or jointly with their husband, and (3) they make decisions about their own health care alone or jointly with their husband.

Sample: Currently married women age 15–49

Fifty-two percent of currently married women age 15–49 make their own informed decisions about sexual relations, contraceptive use, and reproductive health care (**Table 15.12**).

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For more information on women's empowerment, see the following tables:

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- **Table 15.9.2 Attitude toward wife beating: Men**
- **Table 15.10 Attitudes toward negotiating safer sexual relations with husband**
- **Table 15.11 Ability to negotiate sexual relations with husband**
- **Table 15.12 Women's participation in decision making regarding sexual and reproductive health**

Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15–49 who were employed at any time in the last 12 months and percent distribution of currently married women and men employed in the last 12 months by type of earnings, according to age, Ghana DHS 2022

	Among currently married respondents:		Percent distribution of currently married respondents employed in the last 12 months by type of earnings					
Age	Percentage employed in last 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Total	Number of respondents
				WOMEN				
15–19	61.7	194	30.1	22.3	10.4	37.1	100.0	120
20–24	73.8	1,013	45.2	20.1	8.7	26.0	100.0	747
25–29	83.9	1,457	58.5	19.9	6.0	15.5	100.0	1,222
30–34	91.3	1,719	63.5	19.0	3.9	13.6	100.0	1,569
35–39	92.1	1,641	61.6	23.8	4.5	10.1	100.0	1,511
40–44	94.0	1,239	58.0	25.2	4.4	12.3	100.0	1,165
45–49	93.9	941	58.5	28.1	3.8	9.5	100.0	883
Total 15–49	88.0	8,205	58.3	22.5	5.1	14.2	100.0	7,218
				MEN				
15–19	*	13	*	*	*	*	100.0	12
20–24	97.9	126	72.5	17.5	1.5	8.6	100.0	124
25–29	99.3	383	76.8	16.9	1.8	4.6	100.0	380
30–34	99.7	568	79.3	13.5	1.3	5.8	100.0	566
35–39	99.9	665	81.2	14.2	1.2	3.3	100.0	665
40–44	99.3	597	77.2	17.0	1.3	4.6	100.0	593
45–49	99.7	475	77.9	16.3	0.7	5.0	100.0	474
Total 15–49	99.5	2,828	78.3	15.6	1.3	4.8	100.0	2,813
50–59	98.8	658	72.4	20.7	1.6	5.3	100.0	650
Total 15–59	99.4	3,485	77.2	16.6	1.3	4.9	100.0	3,464

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15–49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Ghana DHS 2022

	Person who decides how the wife's cash earnings are used:					Wife's cash earnings compared with husband's cash earnings:						
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	More	Less	About the same	Husband has no earnings	Don't know	Total	Number of women
Age												
15–19	70.1	14.0	8.5	7.5	100.0	5.9	90.2	0.7	0.0	3.2	100.0	63
20–24	67.6	24.0	8.2	0.1	100.0	5.8	86.6	6.2	0.3	1.0	100.0	489
25–29	65.3	27.8	6.5	0.4	100.0	5.4	86.0	4.9	0.8	2.9	100.0	959
30–34	68.1	26.3	5.4	0.1	100.0	8.1	82.3	7.0	0.7	1.9	100.0	1,295
35–39	65.4	28.8	5.7	0.1	100.0	10.3	75.4	10.1	1.1	3.1	100.0	1,291
40–44	66.8	24.6	8.3	0.3	100.0	12.6	73.7	10.1	0.9	2.6	100.0	970
45–49	70.0	26.1	3.7	0.1	100.0	16.0	69.4	10.7	1.2	2.7	100.0	765
Number of living children												
0	67.6	25.3	6.2	0.9	100.0	9.1	76.4	12.5	0.2	1.7	100.0	345
1–2	68.1	26.1	5.5	0.2	100.0	9.3	80.3	7.6	0.5	2.2	100.0	2,023
3–4	68.0	25.6	6.1	0.3	100.0	9.5	79.4	6.9	1.1	3.1	100.0	2,132
5+	63.9	28.7	7.3	0.1	100.0	10.9	75.7	10.1	1.2	2.2	100.0	1,332
Residence												
Urban	70.9	23.8	5.1	0.3	100.0	10.4	78.1	7.7	0.9	2.9	100.0	3,224
Rural	62.4	29.8	7.6	0.3	100.0	8.9	79.5	8.9	0.7	2.0	100.0	2,607
Region												
Western	64.1	33.2	2.7	0.0	100.0	10.6	78.6	7.8	0.0	2.9	100.0	413
Central	71.2	27.5	1.1	0.3	100.0	13.4	80.4	5.0	0.0	1.2	100.0	699
Greater Accra	70.5	22.6	6.9	0.0	100.0	8.4	79.8	9.7	0.7	1.4	100.0	871
Volta	65.7	27.0	7.3	0.0	100.0	10.7	72.2	13.7	1.5	1.9	100.0	298
Eastern	61.0	22.1	16.6	0.2	100.0	10.3	80.4	5.1	0.4	3.7	100.0	518
Ashanti	63.2	32.1	4.4	0.4	100.0	11.7	75.2	10.1	1.3	1.7	100.0	1,075
Western North	71.1	23.3	5.6	0.0	100.0	11.3	80.0	7.0	0.6	1.0	100.0	181
Ahafo	63.3	21.3	15.3	0.0	100.0	6.2	84.5	6.2	0.6	2.4	100.0	110
Bono	70.1	27.9	1.9	0.0	100.0	7.4	73.7	11.9	0.3	6.8	100.0	174
Bono East	66.3	28.2	5.6	0.0	100.0	6.4	81.1	10.4	0.6	1.6	100.0	224
Oti	61.6	30.4	5.8	2.2	100.0	5.8	79.4	10.3	3.0	1.5	100.0	208
Northern	74.3	20.8	4.6	0.3	100.0	7.2	88.1	2.8	1.4	0.6	100.0	504
Savannah	75.1	16.8	7.4	0.7	100.0	8.1	77.1	11.8	0.7	2.2	100.0	120
North East	62.2	19.8	16.0	2.0	100.0	7.0	74.8	10.4	1.4	6.4	100.0	87
Upper East	63.5	30.2	6.1	0.2	100.0	9.0	72.8	6.0	1.8	10.4	100.0	205
Upper West	68.3	23.7	8.0	0.0	100.0	5.5	72.1	12.7	0.4	9.4	100.0	145
Education												
No education	67.1	23.8	8.7	0.4	100.0	8.9	79.8	7.6	1.5	2.2	100.0	1,232
Primary	67.1	27.0	5.7	0.2	100.0	10.3	76.8	9.6	0.7	2.7	100.0	858
Secondary	66.9	26.9	5.9	0.3	100.0	9.5	80.3	7.1	0.6	2.6	100.0	3,082
More than secondary	67.8	28.7	3.5	0.0	100.0	11.6	71.9	13.2	0.8	2.5	100.0	660
Wealth quintile												
Lowest	62.6	29.1	7.7	0.5	100.0	6.2	81.1	9.0	0.9	2.8	100.0	917
Second	63.6	27.6	8.6	0.2	100.0	8.7	79.1	8.4	1.0	2.8	100.0	974
Middle	68.0	25.8	5.7	0.4	100.0	11.2	79.3	6.9	1.1	1.5	100.0	1,153
Fourth	70.8	24.2	4.8	0.3	100.0	11.0	77.4	7.7	0.8	3.1	100.0	1,345
Highest	68.0	26.7	5.2	0.0	100.0	10.3	77.7	9.1	0.5	2.3	100.0	1,443
Total	67.1	26.5	6.2	0.3	100.0	9.7	78.7	8.2	0.9	2.5	100.0	5,832

Note: The term husband includes a partner with whom a woman is living as if married.

Table 15.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15–49 who receive cash earnings and of currently married women age 15–49 whose husbands receive cash earnings by person who decides how husband's cash earnings are used, according to background characteristics, Ghana DHS 2022

	Men						Women					
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of men	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women
Age												
15–19	*	*	*	*	100.0	10	8.4	21.0	70.5	0.1	100.0	190
20–24	2.6	36.4	61.0	0.0	100.0	111	12.2	24.8	62.5	0.5	100.0	1,002
25–29	1.9	46.2	51.2	0.6	100.0	356	11.6	29.9	58.2	0.3	100.0	1,441
30–34	3.6	42.1	54.1	0.3	100.0	525	10.6	28.8	60.5	0.1	100.0	1,707
35–39	3.2	45.1	51.7	0.1	100.0	635	10.0	30.6	59.3	0.1	100.0	1,624
40–44	4.8	44.1	51.0	0.1	100.0	558	9.5	27.9	62.4	0.2	100.0	1,226
45–49	5.9	50.9	43.2	0.0	100.0	447	11.5	27.6	60.9	0.0	100.0	930
Number of living children												
0	2.5	43.4	53.6	0.5	100.0	236	14.1	27.3	58.5	0.1	100.0	586
1–2	3.1	40.2	56.2	0.4	100.0	970	10.8	29.3	59.8	0.2	100.0	2,995
3–4	3.8	51.9	44.2	0.1	100.0	879	10.3	28.4	61.1	0.2	100.0	2,762
5+	5.9	42.9	51.1	0.1	100.0	557	10.2	27.4	62.3	0.1	100.0	1,778
Residence												
Urban	3.5	45.0	51.3	0.2	100.0	1,441	11.5	28.6	59.8	0.1	100.0	4,204
Rural	4.3	44.9	50.5	0.3	100.0	1,201	9.9	28.3	61.6	0.3	100.0	3,917
Region												
Western	2.2	38.4	59.4	0.0	100.0	188	7.1	31.1	61.8	0.0	100.0	485
Central	1.3	62.7	35.9	0.0	100.0	251	7.6	33.0	59.4	0.0	100.0	816
Greater Accra	5.1	41.9	53.0	0.0	100.0	509	9.5	31.6	58.9	0.0	100.0	1,135
Volta	4.1	39.8	56.2	0.0	100.0	113	16.4	30.0	53.6	0.0	100.0	370
Eastern	10.9	37.5	50.6	0.9	100.0	189	4.4	22.5	72.8	0.3	100.0	630
Ashanti	3.9	58.3	37.8	0.0	100.0	435	14.3	35.9	49.8	0.0	100.0	1,408
Western North	0.0	44.0	55.5	0.6	100.0	81	21.8	26.2	51.7	0.2	100.0	230
Ahafo	2.1	61.3	35.4	1.2	100.0	67	18.9	21.9	59.2	0.0	100.0	182
Bono	1.8	61.7	36.5	0.0	100.0	70	8.1	32.6	59.1	0.2	100.0	279
Bono East	2.1	56.8	41.2	0.0	100.0	122	7.2	23.6	69.2	0.0	100.0	372
Oti	9.3	51.5	39.2	0.0	100.0	86	10.2	34.7	52.4	2.8	100.0	240
Northern	2.3	15.3	81.7	0.7	100.0	247	12.8	21.8	65.3	0.2	100.0	861
Savannah	5.7	18.2	74.2	1.8	100.0	56	6.9	12.3	80.7	0.1	100.0	217
North East	2.3	22.4	75.3	0.0	100.0	38	9.7	24.4	65.5	0.4	100.0	226
Upper East	2.8	40.8	56.4	0.0	100.0	130	10.4	25.0	64.3	0.3	100.0	420
Upper West	0.4	53.0	45.4	1.2	100.0	60	11.1	14.1	74.7	0.1	100.0	250
Education												
No education	4.4	35.0	60.1	0.5	100.0	381	10.4	21.5	67.8	0.3	100.0	1,987
Primary	3.4	44.8	51.6	0.2	100.0	309	10.4	27.5	61.7	0.4	100.0	1,221
Secondary	4.2	47.0	48.6	0.3	100.0	1,520	11.7	31.1	57.1	0.1	100.0	4,136
More than secondary	2.7	46.7	50.5	0.0	100.0	433	7.1	33.2	59.7	0.0	100.0	777
Wealth quintile												
Lowest	6.0	39.1	54.4	0.5	100.0	442	9.4	24.4	65.9	0.3	100.0	1,638
Second	2.8	44.0	53.1	0.2	100.0	443	12.8	24.4	62.3	0.5	100.0	1,497
Middle	3.2	42.8	53.4	0.6	100.0	430	11.1	29.4	59.3	0.1	100.0	1,531
Fourth	3.6	49.1	47.1	0.1	100.0	674	12.3	28.9	58.8	0.0	100.0	1,723
Highest	3.9	46.7	49.4	0.0	100.0	653	8.4	34.3	57.4	0.0	100.0	1,732
Total 15–49	3.9	45.0	50.9	0.2	100.0	2,642	10.7	28.4	60.7	0.2	100.0	8,121
50–59	4.4	50.7	44.9	0.0	100.0	606	na	na	na	na	na	na
Total 15–59	4.0	46.0	49.8	0.2	100.0	3,248	na	na	na	na	na	na

Note: The term husband includes a partner with whom a woman is living as if married, and the term wife includes a partner with whom a man is living as if married. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = not applicable

Table 15.3.1 House and land ownership: Women

Percent distribution of women age 15–49 by house ownership status and land ownership status, according to current marital status, Ghana DHS 2022

Ownership status	Marital status				Total
	Never married	Married/ living together	Divorced/ separated	Widowed	
HOUSE OWNERSHIP					
Alone	1.3	3.0	8.6	16.7	3.2
Jointly with husband only	na	17.2	0.0	2.7	9.4
Jointly with someone else only	1.7	2.0	5.8	10.4	2.4
Jointly with husband and someone else	na	1.4	0.0	0.3	0.8
Both alone and jointly	0.2	0.2	0.3	0.6	0.2
Does not own	96.8	76.1	85.2	69.3	83.9
Total	100.0	100.0	100.0	100.0	100.0
Number of women	5,268	8,205	1,175	367	15,014
LAND OWNERSHIP					
Alone	1.3	5.9	9.8	17.8	4.9
Jointly with husband only	na	10.3	0.0	1.6	5.7
Jointly with someone else only	1.0	1.7	3.1	3.2	1.6
Jointly with husband and someone else	na	1.0	0.0	0.2	0.6
Both alone and jointly	0.0	0.1	0.3	0.0	0.1
Does not own	97.6	81.0	86.9	77.2	87.2
Total	100.0	100.0	100.0	100.0	100.0
Number of women	5,268	8,205	1,175	367	15,014

Note: The term husband includes a partner with whom a woman is living as if married.
na = not applicable

Table 15.3.2 House and land ownership: Men

Percent distribution of men age 15–49 by house ownership status and land ownership status, according to current marital status, Ghana DHS 2022

Ownership status	Marital status				Total
	Never married	Married/ living together	Divorced/ separated	Widowed	
HOUSE OWNERSHIP					
Alone	3.9	28.2	17.8	*	15.5
Jointly with wife only	na	9.1	0.0	*	4.1
Jointly with someone else only	1.9	4.4	6.7	*	3.2
Jointly with wife and someone else	na	1.1	0.0	*	0.5
Both alone and jointly	0.1	0.4	0.4	*	0.2
Does not own	94.1	56.9	75.0	*	76.5
Total	100.0	100.0	100.0	100.0	100.0
Number of men	3,208	2,828	224	18	6,277
LAND OWNERSHIP					
Alone	5.8	31.0	33.1	*	18.2
Jointly with wife only	na	6.0	0.0	*	2.7
Jointly with someone else only	2.0	4.8	5.6	*	3.4
Jointly with wife and someone else	na	0.9	0.3	*	0.4
Both alone and jointly	0.2	0.3	0.2	*	0.2
Does not own	92.1	57.0	60.8	*	75.1
Total	100.0	100.0	100.0	100.0	100.0
Number of men	3,208	2,828	224	18	6,277

Note: The term wife includes a partner with whom a man is living as if married. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = not applicable

Table 15.4.1 House ownership and documentation of ownership: Women

Percent distribution of women age 15–49 by ownership of a house, and among women who own a house, percent distribution by whether the house owned has a title/deed and whether or not the woman's name appears on the title/deed, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who own a house:			Percentage who do not own a house	Total	Number of women	House has a title/deed[1]:				Total	Number of women who own a house[4]
	Alone	Jointly[2]	Both alone and jointly				Woman's name is on title/deed[1]	Woman's name is not on title/deed[1]	Does not have a title/deed[1]	Don't know[3]		
Age												
15–19	0.7	1.5	0.1	97.7	100.0	2,682	13.0	26.1	46.8	14.1	100.0	63
20–24	0.9	4.1	0.1	94.9	100.0	2,695	10.2	18.1	67.6	4.1	100.0	138
25–29	1.4	9.2	0.2	89.3	100.0	2,340	19.5	16.0	57.1	7.4	100.0	251
30–34	2.7	14.6	0.3	82.4	100.0	2,252	23.6	21.7	51.2	3.5	100.0	395
35–39	3.8	21.2	0.2	74.8	100.0	2,059	33.1	16.7	48.4	1.8	100.0	520
40–44	6.2	26.0	0.6	67.2	100.0	1,675	31.8	19.4	44.8	4.0	100.0	549
45–49	12.3	25.3	0.3	62.1	100.0	1,312	42.2	12.0	44.1	1.7	100.0	497
Residence												
Urban	3.1	10.5	0.3	86.1	100.0	8,557	40.2	24.9	31.3	3.5	100.0	1,187
Rural	3.3	15.5	0.2	81.0	100.0	6,457	19.9	10.1	66.3	3.7	100.0	1,226
Region												
Western	3.9	14.3	0.5	81.3	100.0	955	28.7	8.0	63.3	0.0	100.0	179
Central	4.0	15.1	0.0	80.9	100.0	1,703	35.2	16.4	48.4	0.0	100.0	325
Greater Accra	2.7	7.9	0.4	88.9	100.0	2,327	45.3	23.2	31.2	0.2	100.0	258
Volta	3.6	9.7	0.2	86.5	100.0	713	32.7	10.1	55.8	1.5	100.0	96
Eastern	3.2	11.4	0.4	84.9	100.0	1,220	42.3	17.7	37.6	2.3	100.0	184
Ashanti	4.1	14.5	0.1	81.2	100.0	2,928	35.5	31.0	27.9	5.5	100.0	550
Western North	4.4	17.0	0.0	78.7	100.0	411	22.5	6.1	67.9	3.5	100.0	88
Ahafo	2.8	15.2	0.4	81.6	100.0	317	39.2	14.4	41.4	4.9	100.0	58
Bono	3.0	10.9	0.1	85.9	100.0	567	46.8	10.6	38.7	4.0	100.0	80
Bono East	2.4	8.3	0.3	88.9	100.0	676	17.9	13.4	65.7	3.0	100.0	75
Oti	2.1	6.7	0.0	91.2	100.0	403	18.6	10.2	70.0	1.2	100.0	35
Northern	2.4	13.1	0.1	84.4	100.0	1,149	8.1	15.3	59.2	17.4	100.0	180
Savannah	2.0	14.7	0.0	83.2	100.0	319	8.6	5.8	83.9	1.7	100.0	54
North East	1.2	6.9	1.0	90.9	100.0	290	10.9	2.5	84.9	1.8	100.0	26
Upper East	1.0	15.6	0.2	83.1	100.0	640	5.0	4.8	87.6	2.6	100.0	108
Upper West	2.8	26.4	0.3	70.5	100.0	398	5.0	6.8	85.9	2.3	100.0	117
Education												
No education	4.0	20.2	0.1	75.7	100.0	2,411	15.9	9.4	67.8	7.0	100.0	587
Primary	4.2	13.1	0.3	82.4	100.0	2,071	25.8	15.1	56.5	2.6	100.0	363
Secondary	2.7	10.4	0.2	86.6	100.0	8,999	34.8	18.5	43.8	2.8	100.0	1,203
More than secondary	3.5	13.2	0.2	83.0	100.0	1,533	44.0	33.7	21.3	1.1	100.0	260
Wealth quintile												
Lowest	2.0	14.8	0.2	83.1	100.0	2,447	7.3	2.9	85.8	3.9	100.0	415
Second	3.8	13.8	0.2	82.2	100.0	2,712	16.8	12.4	65.1	5.7	100.0	484
Middle	2.9	10.3	0.2	86.6	100.0	3,121	26.7	16.1	52.2	5.0	100.0	418
Fourth	2.9	11.0	0.3	85.8	100.0	3,379	38.4	22.4	36.8	2.4	100.0	479
Highest	4.2	14.0	0.2	81.6	100.0	3,355	50.8	28.1	19.4	1.7	100.0	617
Total	3.2	12.6	0.2	83.9	100.0	15,014	29.9	17.4	49.1	3.6	100.0	2,413

[1] Title/deed or other government-recognised document
[2] Jointly with husband, someone else, or both husband and someone else
[3] Includes women who have a house with a title/deed or other government-recognised document, but they do not know if their name is on it, and women who do not know if there is a title/deed or other government-recognised document for the house
[4] Includes women who own a house alone, jointly with their husband only, jointly with someone else only, jointly with their husband and someone else, or both alone and jointly

Table 15.4.2 House ownership and documentation of ownership: Men

Percent distribution of men age 15–49 by ownership of a house, and among men who own a house, percent distribution by whether the house owned has a title/deed and whether or not the man's name appears on the title/deed, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who own a house:			Percentage who do not own a house	Total	Number of men	House has a title/deed[1]:				Total	Number of men who own a house[4]
	Alone	Jointly[2]	Both alone and jointly				Man's name is on title/deed[1]	Man's name is not on title/deed[1]	Does not have a title/deed[1]	Don't know[3]		
Age												
15–19	0.9	0.6	0.0	98.5	100.0	1,424	(33.9)	(1.6)	(61.0)	(3.6)	100.0	22
20–24	3.9	2.8	0.5	92.8	100.0	1,033	25.7	8.9	64.0	1.4	100.0	74
25–29	11.3	5.5	0.1	83.1	100.0	888	33.6	4.2	61.6	0.6	100.0	150
30–34	19.5	9.7	0.0	70.8	100.0	853	31.8	5.4	62.8	0.0	100.0	249
35–39	28.5	10.9	0.3	60.3	100.0	809	45.6	2.9	51.4	0.1	100.0	321
40–44	30.9	14.7	0.2	54.2	100.0	713	43.7	5.7	49.9	0.7	100.0	326
45–49	36.1	22.7	0.9	40.3	100.0	557	48.1	3.1	48.5	0.3	100.0	332
Residence												
Urban	12.3	6.1	0.2	81.3	100.0	3,442	58.8	7.5	33.1	0.7	100.0	643
Rural	19.3	9.8	0.3	70.6	100.0	2,835	27.3	2.0	70.4	0.3	100.0	832
Region												
Western	22.8	3.6	0.0	73.6	100.0	414	17.2	2.2	80.6	0.0	100.0	109
Central	14.3	11.5	0.4	73.9	100.0	686	58.9	0.0	41.1	0.0	100.0	179
Greater Accra	11.7	5.3	0.1	82.9	100.0	1,076	54.5	7.6	36.7	1.3	100.0	184
Volta	17.2	0.5	0.0	82.4	100.0	235	55.8	4.8	39.5	0.0	100.0	41
Eastern	11.4	9.4	0.0	79.2	100.0	466	57.4	1.7	40.9	0.0	100.0	97
Ashanti	11.2	8.1	0.3	80.5	100.0	1,179	70.8	5.7	23.6	0.0	100.0	230
Western North	19.5	12.7	0.3	67.6	100.0	181	20.5	7.7	70.8	1.0	100.0	59
Ahafo	13.7	5.7	0.0	80.6	100.0	133	42.8	2.8	54.4	0.0	100.0	26
Bono	12.5	9.1	0.9	77.6	100.0	222	34.5	16.5	47.8	1.2	100.0	50
Bono East	11.3	7.2	0.0	81.4	100.0	316	23.0	5.8	70.1	1.1	100.0	59
Oti	22.4	7.6	1.2	68.8	100.0	187	29.3	1.2	69.5	0.0	100.0	58
Northern	26.5	3.3	0.0	70.2	100.0	484	29.7	6.7	63.6	0.0	100.0	144
Savannah	26.4	7.5	0.3	65.8	100.0	155	20.6	1.4	75.7	2.3	100.0	53
North East	20.7	20.5	0.0	58.8	100.0	119	5.5	0.4	94.1	0.0	100.0	49
Upper East	16.2	4.6	0.6	78.7	100.0	267	11.9	1.7	84.9	1.5	100.0	57
Upper West	20.4	30.2	0.7	48.7	100.0	155	6.1	3.8	89.8	0.3	100.0	79
Education												
No education	31.3	11.1	0.2	57.4	100.0	628	14.7	2.1	82.9	0.3	100.0	267
Primary	18.8	7.8	0.3	73.0	100.0	725	32.4	1.6	65.9	0.1	100.0	195
Secondary	12.3	7.4	0.2	80.0	100.0	3,990	46.0	5.1	48.5	0.4	100.0	796
More than secondary	15.6	7.1	0.3	76.9	100.0	935	62.9	7.1	28.9	1.1	100.0	216
Wealth quintile												
Lowest	21.5	10.1	0.1	68.2	100.0	1,089	12.1	2.3	85.2	0.5	100.0	346
Second	16.3	8.6	0.1	75.0	100.0	1,133	27.6	2.3	70.1	0.0	100.0	283
Middle	13.2	6.5	0.3	80.0	100.0	1,137	43.3	4.9	51.0	0.9	100.0	228
Fourth	13.7	6.8	0.3	79.3	100.0	1,466	53.1	5.8	41.1	0.0	100.0	304
Highest	13.8	7.5	0.3	78.4	100.0	1,453	71.8	7.0	20.3	0.9	100.0	314
Total 15–49	15.5	7.8	0.2	76.5	100.0	6,277	41.0	4.4	54.1	0.4	100.0	1,475
50–59	42.6	22.0	0.7	34.7	100.0	767	47.5	2.6	49.9	0.0	100.0	501
Total 15–59	18.4	9.3	0.3	72.0	100.0	7,044	42.6	4.0	53.1	0.3	100.0	1,976

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] Title/deed or other government-recognised document
[2] Jointly with wife, someone else, or both wife and someone else
[3] Includes men who have a house with a title/deed or other government-recognised document, but they do not know if their name is on it, and men who do not know if there is a title/deed or other government-recognised document for the house
[4] Includes men who own a house alone, jointly with their wife only, jointly with someone else only, jointly with their wife and someone else, or both alone and jointly

Table 15.5.1 Land ownership and documentation of ownership: Women

Percent distribution of women age 15–49 by ownership of land, and among women who own land, percent distribution by whether the land owned has a title/deed and whether or not the woman's name appears on the title/deed, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who own land: Alone	Jointly[2]	Both alone and jointly	Percentage who do not own land	Total	Number of women	Land has a title/deed[1]: Woman's name is on title/deed[1]	Woman's name is not on title/deed[1]	Does not have a title/deed[1]	Don't know[3]	Total	Number of women who own land[4]
Age												
15–19	0.4	0.7	0.0	98.9	100.0	2,682	(11.1)	(4.3)	(75.1)	(9.6)	100.0	31
20–24	1.2	3.4	0.0	95.4	100.0	2,695	28.1	6.1	61.5	4.3	100.0	124
25–29	2.7	6.6	0.1	90.6	100.0	2,340	25.7	10.9	60.0	3.4	100.0	220
30–34	5.9	10.5	0.1	83.5	100.0	2,252	34.6	7.3	56.9	1.2	100.0	371
35–39	7.4	11.4	0.1	81.1	100.0	2,059	34.2	6.5	57.8	1.5	100.0	389
40–44	8.9	15.0	0.2	76.0	100.0	1,675	35.2	7.2	56.7	0.9	100.0	402
45–49	14.7	14.5	0.4	70.4	100.0	1,312	31.4	5.3	62.3	1.0	100.0	388
Residence												
Urban	3.9	5.2	0.0	90.9	100.0	8,557	50.5	8.0	40.3	1.2	100.0	777
Rural	6.2	11.4	0.1	82.2	100.0	6,457	19.8	6.3	71.8	2.1	100.0	1,148
Region												
Western	7.2	8.6	0.0	84.2	100.0	955	33.3	4.2	62.6	0.0	100.0	151
Central	6.7	9.6	0.1	83.6	100.0	1,703	45.1	7.5	47.5	0.0	100.0	279
Greater Accra	2.2	3.5	0.1	94.2	100.0	2,327	57.1	13.1	29.9	0.0	100.0	135
Volta	5.6	6.3	0.5	87.7	100.0	713	28.9	5.3	65.0	0.8	100.0	88
Eastern	5.0	8.6	0.0	86.5	100.0	1,220	50.0	11.4	37.8	0.8	100.0	165
Ashanti	4.4	7.5	0.1	88.0	100.0	2,928	32.1	7.1	54.2	6.6	100.0	350
Western North	10.4	11.7	0.2	77.7	100.0	411	21.9	4.2	72.8	1.0	100.0	91
Ahafo	3.8	12.1	0.1	84.0	100.0	317	42.5	13.1	43.6	0.8	100.0	51
Bono	7.6	7.1	0.1	85.2	100.0	567	46.1	9.7	43.1	1.0	100.0	84
Bono East	4.0	3.2	0.0	92.8	100.0	676	27.7	2.0	70.2	0.0	100.0	48
Oti	3.7	4.4	0.0	91.9	100.0	403	21.7	9.3	69.0	0.0	100.0	32
Northern	5.4	8.2	0.1	86.3	100.0	1,149	13.3	7.1	77.6	2.1	100.0	157
Savannah	5.6	10.3	0.2	83.9	100.0	319	13.9	2.1	82.6	1.4	100.0	51
North East	2.2	7.1	0.2	90.5	100.0	290	17.0	3.6	79.4	0.0	100.0	28
Upper East	4.1	14.3	0.1	81.5	100.0	640	6.8	1.0	90.3	2.0	100.0	118
Upper West	4.1	19.6	0.1	76.1	100.0	398	5.3	4.5	90.3	0.0	100.0	95
Education												
No education	5.8	13.7	0.1	80.4	100.0	2,411	14.1	4.4	79.7	1.8	100.0	472
Primary	7.1	8.8	0.2	83.8	100.0	2,071	21.9	6.7	70.1	1.3	100.0	335
Secondary	4.0	6.3	0.1	89.7	100.0	8,999	38.5	7.7	51.8	2.1	100.0	929
More than secondary	5.5	6.7	0.1	87.7	100.0	1,533	64.6	10.4	23.9	1.0	100.0	189
Wealth quintile												
Lowest	5.5	10.9	0.0	83.6	100.0	2,447	9.2	2.8	87.7	0.3	100.0	400
Second	5.8	11.3	0.1	82.7	100.0	2,712	17.7	7.2	71.5	3.6	100.0	469
Middle	4.7	6.4	0.2	88.7	100.0	3,121	27.5	8.2	62.5	1.9	100.0	354
Fourth	4.0	5.9	0.0	90.0	100.0	3,379	49.4	5.9	43.6	1.1	100.0	337
Highest	4.7	6.1	0.1	89.1	100.0	3,355	64.8	11.1	22.7	1.4	100.0	366
Total	4.9	7.8	0.1	87.2	100.0	15,014	32.2	7.0	59.1	1.8	100.0	1,925

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] Title/deed or other government-recognised document
[2] Jointly with husband, someone else, or both husband and someone else
[3] Includes women who have land with a title/deed or other government-recognised document, but they do not know if their name is on it, and women who do not know if there is a title/deed or other government-recognised document for the land
[4] Includes women who own land alone, jointly with their husband only, jointly with someone else only, jointly with their husband and someone else, or both alone and jointly

Table 15.5.2 Land ownership and documentation of ownership: Men

Percent distribution of men age 15–49 by ownership of land, and among men who own land, percent distribution by whether the land owned has a title/deed and whether or not the man's name appears on the title/deed, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who own land: Alone	Jointly[2]	Both alone and jointly	Percentage who do not own land	Total	Number of men	Land has a title/deed[1]: Man's name is on title/deed[1]	Man's name is not on title/deed[1]	Does not have a title/deed[1]	Don't know[3]	Total	Number of men who own land[4]
Age												
15–19	1.3	0.9	0.0	97.8	100.0	1,424	(19.9)	(2.1)	(74.2)	(3.7)	100.0	32
20–24	7.8	2.6	0.2	89.4	100.0	1,033	23.6	6.4	69.0	0.9	100.0	109
25–29	18.9	5.2	0.3	75.6	100.0	888	28.4	2.0	68.5	1.1	100.0	217
30–34	23.2	8.0	0.2	68.6	100.0	853	34.1	5.2	60.7	0.0	100.0	268
35–39	30.7	11.9	0.3	57.0	100.0	809	37.3	4.0	58.7	0.0	100.0	347
40–44	31.3	9.9	0.3	58.5	100.0	713	38.1	3.1	58.8	0.0	100.0	296
45–49	37.0	15.2	0.4	47.3	100.0	557	42.1	5.2	52.7	0.0	100.0	293
Residence												
Urban	15.2	5.0	0.1	79.7	100.0	3,442	50.3	6.3	42.8	0.6	100.0	700
Rural	21.8	8.2	0.4	69.6	100.0	2,835	23.1	2.4	74.5	0.0	100.0	863
Region												
Western	29.1	1.7	0.0	69.2	100.0	414	23.2	4.9	71.9	0.0	100.0	128
Central	15.4	8.9	0.5	75.3	100.0	686	39.0	1.3	59.7	0.0	100.0	170
Greater Accra	7.6	4.4	0.1	87.8	100.0	1,076	53.8	16.0	28.4	1.8	100.0	131
Volta	17.3	2.0	0.6	80.0	100.0	235	42.9	3.8	53.3	0.0	100.0	47
Eastern	15.7	11.6	0.2	72.4	100.0	466	54.1	4.6	41.2	0.0	100.0	128
Ashanti	15.7	4.9	0.0	79.4	100.0	1,179	62.8	2.3	34.9	0.0	100.0	243
Western North	23.1	14.7	0.8	61.4	100.0	181	22.5	3.9	73.6	0.0	100.0	70
Ahafo	19.9	8.7	0.0	71.4	100.0	133	44.2	4.5	51.3	0.0	100.0	38
Bono	14.4	8.8	0.0	76.8	100.0	222	37.7	12.6	47.9	1.7	100.0	51
Bono East	17.3	4.6	0.0	78.0	100.0	316	23.0	2.2	74.8	0.0	100.0	70
Oti	25.8	3.6	1.0	69.6	100.0	187	37.8	2.9	59.3	0.0	100.0	57
Northern	28.2	2.6	0.3	69.0	100.0	484	26.3	2.2	71.0	0.5	100.0	150
Savannah	33.4	6.9	0.4	59.3	100.0	155	9.9	4.0	86.1	0.0	100.0	63
North East	31.9	28.7	0.8	38.6	100.0	119	0.5	0.2	98.8	0.4	100.0	73
Upper East	30.1	3.1	0.4	66.4	100.0	267	3.1	1.0	95.9	0.0	100.0	90
Upper West	16.0	18.6	0.0	65.4	100.0	155	7.4	0.9	91.3	0.5	100.0	54
Education												
No education	30.0	9.5	0.2	60.2	100.0	628	11.7	0.9	87.4	0.0	100.0	249
Primary	18.5	5.5	0.3	75.8	100.0	725	21.3	2.4	76.3	0.0	100.0	175
Secondary	15.6	6.1	0.3	78.1	100.0	3,990	38.9	3.9	56.7	0.5	100.0	876
More than secondary	21.2	6.9	0.0	71.9	100.0	935	54.9	9.0	36.0	0.1	100.0	262
Wealth quintile												
Lowest	21.3	9.2	0.2	69.2	100.0	1,089	11.2	2.1	86.7	0.1	100.0	335
Second	22.8	8.1	0.4	68.8	100.0	1,133	26.1	1.8	72.2	0.0	100.0	354
Middle	16.6	6.0	0.3	77.1	100.0	1,137	31.0	4.9	63.8	0.3	100.0	260
Fourth	17.0	5.7	0.1	77.1	100.0	1,466	52.3	5.0	42.7	0.0	100.0	335
Highest	14.8	4.3	0.1	80.8	100.0	1,453	59.4	7.7	31.7	1.2	100.0	279
Total 15–49	18.2	6.5	0.2	75.1	100.0	6,277	35.3	4.1	60.3	0.3	100.0	1,563
50–59	36.7	16.3	0.7	46.3	100.0	767	35.9	2.2	61.9	0.0	100.0	412
Total 15–59	20.2	7.5	0.3	72.0	100.0	7,044	35.4	3.7	60.7	0.2	100.0	1,975

Note: Figures in parentheses are based on 25–49 unweighted cases.
[1] Title/deed or other government-recognised document
[2] Jointly with wife, someone else, or both wife and someone else
[3] Includes men who have land with a title/deed or other government-recognised document, but they do not know if their name is on it, and men who do not know if there is a title/deed or other government-recognised document for the land
[4] Includes men who own land alone, jointly with their wife only, jointly with someone else only, jointly with their wife and someone else, or both alone and jointly

Table 15.6.1 Ownership and use of mobile phones and bank accounts: Women

Percentage of women age 15–49 who own any mobile phone, percentage who own a smartphone, and percentage who used a mobile phone to make financial transactions in the last 12 months; percentage of women who have and use a bank account and percentage who deposited or withdrew money from their own bank account in the last 12 months; and percentage of women who have and use a bank account or used a mobile phone for financial transactions in the last 12 months, according to background characteristics, Ghana DHS 2022

	Mobile phone ownership:			Bank account ownership and use:			
Background characteristic	Percentage who own any mobile phone	Percentage who own a smartphone	Percentage who used a mobile phone for financial transactions in the last 12 months[1]	Percentage who have and use a bank account	Percentage who deposited or withdrew money from their own account in the last 12 months	Percentage who have and use a bank account or used a mobile phone for financial transactions in the last 12 months	Number of women
Age							
15–19	49.8	27.4	37.8	6.7	5.0	39.8	2,682
20–24	86.7	57.0	76.2	27.3	22.6	78.7	2,695
25–29	87.3	53.2	81.4	40.7	32.1	83.1	2,340
30–34	87.7	49.4	78.5	40.7	32.8	81.1	2,252
35–39	85.2	42.8	78.1	42.9	34.4	80.9	2,059
40–44	84.4	35.1	75.0	37.0	28.8	78.8	1,675
45–49	83.8	33.3	73.3	34.7	27.2	76.4	1,312
Residence							
Urban	86.6	57.0	79.8	41.4	32.9	82.3	8,557
Rural	70.4	25.7	57.9	18.6	15.0	60.4	6,457
Region							
Western	82.0	44.3	79.7	37.1	31.7	81.9	955
Central	80.4	40.0	76.3	31.0	25.3	78.9	1,703
Greater Accra	89.8	65.7	85.0	44.0	30.9	87.2	2,327
Volta	75.7	34.7	73.4	18.1	14.1	73.6	713
Eastern	82.9	46.0	71.1	29.8	25.2	73.4	1,220
Ashanti	84.6	55.2	73.2	45.1	36.0	78.2	2,928
Western North	74.1	34.6	66.4	31.1	26.0	70.4	411
Ahafo	75.6	32.4	70.7	27.2	22.6	73.4	317
Bono	81.9	44.4	74.5	37.2	33.6	77.4	567
Bono East	75.3	34.8	58.9	26.4	21.1	61.3	676
Oti	66.6	21.1	54.3	9.5	7.9	55.2	403
Northern	65.3	23.5	48.0	13.5	11.6	48.8	1,149
Savannah	64.6	19.1	41.1	10.7	9.3	42.4	319
North East	63.4	13.3	43.4	4.0	3.4	43.8	290
Upper East	80.5	31.2	75.2	19.3	16.7	76.0	640
Upper West	62.1	23.6	42.2	15.0	11.4	44.1	398
Education							
No education	65.7	12.3	46.5	9.3	7.7	48.3	2,411
Primary	71.0	21.0	60.4	18.5	14.0	63.3	2,071
Secondary	82.0	48.3	74.4	31.5	24.0	77.3	8,999
More than secondary	99.4	95.3	97.8	85.1	74.6	98.5	1,533
Wealth quintile							
Lowest	58.8	10.1	40.7	5.9	4.1	42.1	2,447
Second	69.8	21.1	57.4	13.6	10.7	60.4	2,712
Middle	81.8	36.5	73.1	23.3	18.1	75.6	3,121
Fourth	87.7	56.4	82.8	40.6	31.6	85.5	3,379
Highest	92.6	79.7	87.5	63.5	52.4	90.2	3,355
Total	79.6	43.5	70.4	31.6	25.2	72.9	15,014

[1] Respondents were asked about use of a mobile phone for financial transactions whether or not they owned a mobile phone.

Table 15.6.2 Ownership and use of mobile phones and bank accounts: Men

Percentage of men age 15–49 who own any mobile phone, percentage who own a smartphone, and percentage who used a mobile phone to make financial transactions in the last 12 months; percentage of men who have and use a bank account and percentage who deposited or withdrew money from their own bank account in the last 12 months; and percentage of men who have and use a bank account or used a mobile phone for financial transactions in the last 12 months, according to background characteristics, Ghana DHS 2022

Background characteristic	Mobile phone ownership:		Percentage who used a mobile phone for financial transactions in the last 12 months[1]	Bank account ownership and use:		Percentage who have and use a bank account or used a mobile phone for financial transactions in the last 12 months	Number of men
	Percentage who own any mobile phone	Percentage who own a smartphone		Percentage who have and use a bank account	Percentage who deposited or withdrew money from their own account in the last 12 months		
Age							
15–19	60.6	44.0	42.5	3.9	3.1	43.1	1,424
20–24	94.6	72.9	88.3	30.4	25.6	89.5	1,033
25–29	97.6	73.3	90.8	50.1	45.2	91.9	888
30–34	96.4	67.3	91.3	50.9	44.9	92.7	853
35–39	95.9	61.1	86.9	48.9	42.9	88.8	809
40–44	94.9	55.6	83.8	50.6	43.9	86.6	713
45–49	91.3	44.6	84.3	47.8	41.4	87.6	557
Residence							
Urban	91.3	72.0	84.5	45.7	40.9	85.6	3,442
Rural	82.8	44.7	69.3	24.6	20.3	71.2	2,835
Region							
Western	90.3	64.9	79.9	43.8	37.1	83.3	414
Central	89.0	60.7	80.2	29.7	24.3	82.0	686
Greater Accra	92.8	78.1	88.9	46.8	43.2	89.5	1,076
Volta	86.4	60.4	79.9	30.7	26.7	80.7	235
Eastern	86.8	56.0	77.9	34.2	30.9	78.4	466
Ashanti	88.0	65.9	79.7	44.1	39.2	81.1	1,179
Western North	87.6	55.2	80.4	45.8	39.6	82.9	181
Ahafo	86.7	43.1	75.4	42.7	32.8	79.1	133
Bono	84.1	61.2	73.9	43.7	39.3	77.7	222
Bono East	86.6	54.2	57.2	31.3	25.3	61.9	316
Oti	83.6	42.5	71.9	20.8	15.3	73.3	187
Northern	83.6	41.4	67.9	19.9	16.7	68.5	484
Savannah	79.1	40.6	58.0	18.6	14.1	59.2	155
North East	86.0	38.5	67.6	12.0	11.6	67.6	119
Upper East	82.3	45.5	79.3	29.4	26.7	79.4	267
Upper West	78.2	40.8	69.2	24.1	20.0	70.1	155
Education							
No education	85.1	26.1	58.1	12.5	9.2	59.8	628
Primary	76.3	34.0	59.7	14.2	11.2	62.0	725
Secondary	87.0	61.0	79.1	31.8	26.8	80.6	3,990
More than secondary	99.8	96.1	98.2	87.5	82.8	99.1	935
Wealth quintile							
Lowest	75.5	27.2	56.2	10.2	7.4	57.7	1,089
Second	82.9	42.7	68.5	19.5	15.7	70.7	1,133
Middle	87.4	56.3	79.6	29.6	24.1	81.7	1,137
Fourth	91.7	71.9	85.0	42.4	36.8	86.1	1,466
Highest	95.8	87.5	91.8	67.4	62.7	92.8	1,453
Total 15–49	87.5	59.6	77.6	36.2	31.6	79.1	6,277
50–59	91.0	36.0	79.6	46.6	37.3	84.9	767
Total 15–59	87.9	57.1	77.8	37.3	32.2	79.8	7,044

[1] Respondents were asked about use of a mobile phone for financial transactions whether or not they owned a mobile phone.

Table 15.7 Participation in decision making

Percent distribution of currently married women and currently married men age 15–49 by person who usually makes decisions about various issues, Ghana DHS 2022

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number
			WOMEN				
Own health care	38.2	37.4	23.8	0.5	0.1	100.0	8,205
Major household purchases	30.0	37.6	31.4	0.8	0.2	100.0	8,205
Visits to her family or relatives	28.2	48.9	22.3	0.4	0.3	100.0	8,205
			MEN				
Own health care	7.8	42.8	48.4	0.8	0.1	100.0	2,828
Major household purchases	11.4	48.2	39.5	0.5	0.4	100.0	2,828

Note: The term husband includes a partner with whom a woman is living as if married, and the term wife includes a partner with whom a man is living as if married.

Table 15.8.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15–49 who usually make specific decisions either alone or jointly with their husband, according to background characteristics, Ghana DHS 2022

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15–19	56.6	44.8	60.3	33.2	26.4	194
20–24	67.0	56.0	70.2	43.2	16.4	1,013
25–29	73.2	64.0	74.6	50.1	12.8	1,457
30–34	76.2	65.6	76.3	55.8	12.7	1,719
35–39	78.9	72.8	80.6	60.7	9.1	1,641
40–44	77.8	73.0	80.1	59.5	9.5	1,239
45–49	82.7	77.4	83.1	67.7	7.9	941
Employment (last 12 months)						
Not employed	55.2	43.5	61.0	34.4	28.5	986
Employed for cash	80.3	72.3	81.0	60.6	8.2	5,832
Employed not for cash	70.4	64.7	72.2	49.6	14.7	1,387
Number of living children						
0	70.3	64.2	76.4	50.2	13.0	593
1–2	76.7	66.8	76.6	55.8	11.9	3,018
3–4	76.2	68.0	78.1	56.2	10.9	2,792
5+	74.5	69.2	76.6	56.2	12.3	1,801
Residence						
Urban	80.5	72.0	81.6	61.1	8.4	4,248
Rural	70.3	62.8	72.3	49.7	15.4	3,956
Region						
Western	89.5	74.7	92.8	68.9	2.7	487
Central	87.0	66.6	78.7	56.9	5.3	816
Greater Accra	84.6	80.2	88.3	68.9	4.6	1,144
Volta	75.0	71.2	80.2	56.8	7.4	375
Eastern	56.8	63.3	61.8	43.2	25.8	633
Ashanti	79.3	71.2	78.0	55.2	6.3	1,426
Western North	61.6	56.5	77.8	41.1	14.2	231
Ahafo	58.8	63.1	63.5	45.2	21.9	183
Bono	80.6	77.2	88.6	71.3	7.8	284
Bono East	72.0	62.8	70.6	57.4	21.8	376
Oti	70.4	67.3	64.8	47.9	12.4	248
Northern	68.0	60.3	68.0	49.7	21.3	870
Savannah	74.3	42.7	72.0	38.1	17.5	218
North East	61.1	53.8	71.2	42.5	20.9	229
Upper East	81.2	70.5	84.8	63.3	8.5	426
Upper West	59.5	48.7	65.6	39.3	23.0	258
Education						
No education	68.6	59.5	69.8	48.3	18.7	2,015
Primary	74.7	65.7	75.7	52.9	12.3	1,233
Secondary	77.0	70.1	79.3	57.1	9.3	4,174
More than secondary	87.7	77.8	86.0	70.3	5.7	783
Wealth quintile						
Lowest	67.0	57.7	68.8	47.7	20.6	1,662
Second	69.9	62.6	71.3	50.1	15.6	1,513
Middle	74.9	70.2	78.6	54.8	9.2	1,545
Fourth	78.8	69.7	80.6	56.2	8.2	1,743
Highest	86.2	76.8	85.1	68.0	5.9	1,742
Total	75.6	67.6	77.1	55.6	11.8	8,205

Note: The term husband includes a partner with whom a woman is living as if married.

Table 15.8.2 Men's participation in decision making by background characteristics

Percentage of currently married men age 15–49 who usually make specific decisions either alone or jointly with their wife, according to background characteristics, Ghana DHS 2022

Background characteristic	Specific decisions		Both decisions	Neither of the two decisions	Number of men
	Man's own health care	Making major household purchases			
Age					
15–19	*	*	*	*	13
20–24	94.5	87.6	85.4	3.3	126
25–29	92.4	88.4	83.9	3.1	383
30–34	93.2	88.6	85.7	4.0	568
35–39	90.4	88.3	82.9	4.2	665
40–44	91.0	88.4	84.5	5.1	597
45–49	89.0	85.1	80.9	6.8	475
Employment (last 12 months)					
Not employed	*	*	*	*	14
Employed for cash	91.1	87.4	83.2	4.8	2,642
Employed not for cash	93.0	91.5	88.7	4.2	171
Number of living children					
0	92.3	88.7	85.4	4.4	249
1–2	91.6	87.8	83.3	3.9	1,036
3–4	90.7	87.0	83.2	5.5	929
5+	90.8	88.1	83.9	4.9	613
Residence					
Urban	90.2	87.1	82.8	5.5	1,479
Rural	92.4	88.3	84.5	3.8	1,349
Region					
Western	70.7	85.5	63.5	7.3	190
Central	95.2	92.5	90.6	3.0	256
Greater Accra	90.5	86.4	83.9	6.9	509
Volta	93.2	89.4	88.5	6.0	113
Eastern	87.4	82.0	79.2	9.7	192
Ashanti	88.9	87.4	81.8	5.5	442
Western North	97.5	81.6	81.0	1.9	82
Ahafo	97.9	85.7	85.7	2.1	69
Bono	93.5	89.5	85.8	2.9	87
Bono East	97.9	92.0	90.4	0.6	143
Oti	87.7	87.0	84.3	9.6	87
Northern	96.4	93.0	90.4	1.0	276
Savannah	91.0	90.7	85.8	4.1	86
North East	97.0	81.7	81.0	2.3	74
Upper East	94.9	82.7	80.2	2.6	137
Upper West	97.9	90.4	88.9	0.6	86
Education					
No education	91.6	88.8	85.5	5.0	469
Primary	91.7	88.5	84.7	4.4	335
Secondary	91.2	87.8	83.6	4.6	1,580
More than secondary	90.4	85.6	80.9	4.9	444
Wealth quintile					
Lowest	92.8	85.5	84.1	5.7	548
Second	91.2	90.0	84.4	3.2	491
Middle	91.5	87.4	84.0	5.1	447
Fourth	92.7	88.7	84.7	3.4	684
Highest	88.2	86.9	81.3	6.2	657
Total 15–49	91.2	87.7	83.6	4.7	2,828
50–59	91.3	88.1	83.9	4.5	658
Total 15–59	91.2	87.8	83.7	4.7	3,485

Note: The term wife includes a partner with whom a man is living as if married. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.9.1 Attitude toward wife beating: Women

Percentage of all women age 15–49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Ghana DHS 2022

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of women
	Goes out without telling him	Neglects the children	Argues with him	Refuses to have sexual intercourse with him	Burns the food		
Age							
15–19	11.6	17.1	11.5	8.0	4.9	24.7	2,682
20–24	8.6	12.6	9.3	6.7	3.7	19.8	2,695
25–29	9.5	11.9	9.5	7.5	3.5	18.5	2,340
30–34	9.5	11.6	8.6	6.7	3.0	17.1	2,252
35–39	9.8	11.6	8.1	6.0	3.3	17.7	2,059
40–44	8.8	10.8	8.1	7.2	3.4	16.7	1,675
45–49	10.4	12.5	9.5	7.7	4.2	18.0	1,312
Employment (last 12 months)							
Not employed	9.0	13.7	9.4	6.8	3.6	20.5	3,273
Employed for cash	8.4	10.8	7.6	5.9	3.1	16.3	9,055
Employed not for cash	15.4	18.5	15.2	11.4	6.3	27.9	2,686
Number of living children							
0	7.8	12.4	8.6	6.2	3.6	18.5	4,925
1–2	9.5	12.1	8.6	6.5	3.3	18.4	4,598
3–4	10.0	12.1	8.5	7.1	3.5	18.6	3,391
5+	14.5	16.4	13.9	10.6	5.6	24.2	2,100
Marital status							
Never married	7.5	12.0	7.9	5.4	3.4	17.8	5,268
Married or living together	11.6	13.8	10.6	8.2	4.1	20.6	8,205
Divorced/separated/widowed	7.6	10.4	7.3	6.7	3.3	17.2	1,542
Residence							
Urban	6.3	9.5	6.4	4.7	2.5	14.3	8,557
Rural	14.4	17.1	13.2	10.2	5.4	25.9	6,457
Region							
Western	6.3	7.5	6.4	3.5	0.7	12.6	955
Central	9.4	12.8	7.0	5.2	2.7	19.3	1,703
Greater Accra	1.6	3.3	3.1	1.9	0.7	5.8	2,327
Volta	5.4	7.7	3.8	3.4	1.7	12.7	713
Eastern	3.1	5.4	3.2	2.0	1.0	7.5	1,220
Ashanti	7.5	9.8	4.4	4.1	2.0	16.0	2,928
Western North	11.1	16.7	14.3	7.2	6.9	27.3	411
Ahafo	11.6	16.2	12.5	7.7	4.2	22.8	317
Bono	9.4	10.9	8.6	5.7	1.3	17.2	567
Bono East	9.7	13.5	11.3	5.4	3.9	19.0	676
Oti	15.1	16.7	8.2	6.5	4.6	24.1	403
Northern	25.9	33.3	33.0	25.3	14.8	47.0	1,149
Savannah	37.3	43.3	41.0	31.1	15.1	57.8	319
North East	24.3	19.1	21.1	17.2	6.0	34.4	290
Upper East	8.5	13.6	6.3	8.5	3.8	21.2	640
Upper West	27.3	36.0	22.3	22.3	14.0	48.4	398
Education							
No education	21.4	24.4	22.4	18.3	9.3	35.6	2,411
Primary	12.5	16.0	10.9	9.5	4.3	24.6	2,071
Secondary	7.4	10.6	6.8	4.5	2.7	16.2	8,999
More than secondary	1.5	3.3	1.7	1.4	0.5	4.5	1,533
Wealth quintile							
Lowest	20.9	23.8	20.2	16.0	9.0	34.2	2,447
Second	13.9	17.1	13.7	9.8	5.6	26.6	2,712
Middle	9.7	13.0	9.0	6.6	3.5	20.3	3,121
Fourth	5.9	9.6	5.2	4.2	1.4	14.2	3,379
Highest	2.3	4.3	2.4	1.9	0.9	6.6	3,355
Total	9.8	12.8	9.3	7.1	3.7	19.3	15,014

Note: The term husband includes a partner with whom a woman is living as if married.

Table 15.9.2 Attitude toward wife beating: Men

Percentage of all men age 15–49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Ghana DHS 2022

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of men
	Goes out without telling him	Neglects the children	Argues with him	Refuses to have sexual intercourse with him	Burns the food		
Age							
15–19	10.2	16.7	13.1	7.6	3.9	25.9	1,424
20–24	6.1	9.8	9.4	4.2	1.9	17.6	1,033
25–29	6.1	7.7	6.9	4.1	1.7	13.3	888
30–34	5.4	6.3	4.7	2.5	1.4	10.8	853
35–39	6.2	7.6	4.7	2.8	1.3	12.0	809
40–44	5.7	8.8	7.2	3.2	0.9	11.9	713
45–49	4.1	4.5	4.2	2.1	0.7	9.0	557
Employment (last 12 months)							
Not employed	6.5	11.2	8.7	5.6	3.1	17.7	899
Employed for cash	5.7	7.7	6.5	3.3	1.3	13.1	4,679
Employed not for cash	13.6	21.3	16.7	8.8	4.7	31.4	699
Number of living children							
0	7.2	11.3	9.5	5.3	2.7	18.4	3,270
1–2	5.8	7.6	5.8	3.0	1.2	12.6	1,356
3–4	4.9	7.0	5.0	2.2	0.8	10.5	1,014
5+	9.2	10.5	9.0	4.6	1.6	17.9	636
Marital status							
Never married	6.8	11.3	9.5	5.2	2.7	18.3	3,208
Married or living together	6.5	8.1	6.1	3.2	1.2	13.0	2,828
Divorced/separated/widowed	8.0	8.2	8.7	3.0	0.8	16.6	242
Residence							
Urban	4.1	5.8	5.3	2.3	1.0	10.2	3,442
Rural	9.8	14.5	11.1	6.6	3.1	22.7	2,835
Region							
Western	7.0	12.7	17.3	3.3	4.2	24.2	414
Central	7.4	11.4	6.9	3.8	1.4	15.6	686
Greater Accra	1.3	1.9	1.5	0.6	0.6	3.5	1,076
Volta	1.7	4.1	2.5	1.0	0.8	6.0	235
Eastern	6.5	10.6	7.7	2.0	0.6	15.8	466
Ashanti	3.4	7.1	3.1	2.5	0.9	11.3	1,179
Western North	5.1	5.1	6.3	3.4	1.3	11.3	181
Ahafo	5.6	9.2	10.0	4.8	2.8	17.0	133
Bono	6.3	12.3	8.7	5.0	3.0	15.9	222
Bono East	3.7	4.0	6.7	2.8	0.2	10.0	316
Oti	9.2	8.2	8.8	4.2	1.9	19.1	187
Northern	19.1	24.4	19.7	12.2	4.6	37.4	484
Savannah	25.1	22.7	26.7	20.1	6.1	43.2	155
North East	11.8	13.5	14.6	9.0	3.8	21.4	119
Upper East	7.4	11.8	8.4	8.3	4.3	19.5	267
Upper West	17.9	25.2	16.3	9.8	5.8	36.5	155
Education							
No education	15.0	16.2	15.8	9.1	3.1	27.9	628
Primary	12.0	15.8	13.3	7.5	3.9	23.8	725
Secondary	5.8	9.4	7.3	3.7	1.8	15.3	3,990
More than secondary	1.2	2.2	1.3	0.7	0.5	3.8	935
Wealth quintile							
Lowest	13.2	16.8	14.1	10.2	4.4	27.1	1,089
Second	11.2	16.1	11.8	6.3	3.5	24.2	1,133
Middle	6.9	9.3	9.8	3.2	1.0	17.1	1,137
Fourth	3.6	6.3	4.4	1.9	0.7	10.6	1,466
Highest	1.4	3.3	2.3	1.3	0.9	5.1	1,453
Total 15–49	6.7	9.7	7.9	4.2	1.9	15.8	6,277
50–59	6.4	5.0	4.9	3.5	0.4	10.3	767
Total 15–59	6.7	9.2	7.6	4.2	1.8	15.2	7,044

Note: The term wife includes a partner with whom a man is living as if married.

Table 15.10 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15–49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), according to background characteristics, Ghana DHS 2022

	Women			Men		
Background characteristic	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age						
15–24	72.3	84.2	5,376	69.4	85.7	2,458
15–19	72.0	82.3	2,682	67.5	82.6	1,424
20–24	72.6	86.0	2,695	72.0	89.9	1,033
25–29	71.4	87.0	2,340	69.4	86.7	888
30–39	70.5	84.8	4,311	71.3	89.1	1,662
40–49	69.4	83.9	2,987	72.9	87.3	1,270
Marital status						
Never married	75.0	86.5	5,268	70.7	86.1	3,208
Ever had sex	77.7	90.3	3,134	75.3	89.0	1,922
Never had sex	71.0	81.0	2,134	63.9	81.6	1,286
Married/living together	68.0	83.0	8,205	69.9	88.1	2,828
Divorced/separated/widowed	73.9	87.8	1,542	78.7	88.3	242
Residence						
Urban	75.2	87.7	8,557	73.3	88.9	3,442
Rural	65.7	80.8	6,457	67.4	84.9	2,835
Region						
Western	61.0	82.6	955	67.9	90.3	414
Central	78.6	95.1	1,703	77.8	85.3	686
Greater Accra	84.5	88.5	2,327	80.6	92.1	1,076
Volta	70.0	86.9	713	71.3	92.9	235
Eastern	74.6	87.3	1,220	77.3	95.5	466
Ashanti	75.1	92.4	2,928	70.1	90.5	1,179
Western North	78.2	88.2	411	75.3	81.0	181
Ahafo	75.3	92.9	317	72.7	93.0	133
Bono	68.7	81.4	567	72.2	89.3	222
Bono East	73.3	81.5	676	64.1	80.2	316
Oti	66.7	85.1	403	72.1	88.8	187
Northern	50.1	67.7	1,149	49.2	74.6	484
Savannah	55.4	70.9	319	51.1	72.0	155
North East	35.8	54.3	290	56.7	73.3	119
Upper East	58.6	63.7	640	64.0	81.0	267
Upper West	58.6	72.2	398	69.8	77.2	155
Education						
No education	53.6	69.4	2,411	56.5	72.6	628
Primary	69.1	81.8	2,071	65.0	81.3	725
Secondary	75.0	88.2	8,999	72.8	89.3	3,990
More than secondary	78.1	92.4	1,533	75.0	91.8	935
Wealth quintile						
Lowest	57.3	71.5	2,447	59.1	76.8	1,089
Second	65.9	80.7	2,712	68.4	87.1	1,133
Middle	75.3	86.8	3,121	71.8	85.9	1,137
Fourth	75.8	89.7	3,379	74.8	91.2	1,466
Highest	76.7	90.8	3,355	75.9	91.4	1,453
Total 15–49	71.1	84.7	15,014	70.6	87.1	6,277
50–59	na	na	na	74.4	83.8	767
Total 15–59	na	na	na	71.0	86.7	7,044

na = not applicable

Table 15.11 Ability to negotiate sexual relations with husband

Percentage of currently married women age 15–49 who can say no to their husband if they do not want to have sexual intercourse, and percentage who can ask their husband to use a condom, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who can say no to their husband if they do not want to have sexual intercourse	Percentage who can ask their husband to use a condom	Number of women
Age			
15–24	69.5	68.9	1,207
15–19	66.7	63.4	194
20–24	70.1	69.9	1,013
25–29	71.2	70.1	1,457
30–39	74.2	73.0	3,360
40–49	71.5	66.2	2,180
Residence			
Urban	77.5	77.6	4,248
Rural	66.6	61.9	3,956
Region			
Western	81.5	66.6	487
Central	72.3	82.4	816
Greater Accra	84.9	86.5	1,144
Volta	79.5	74.5	375
Eastern	75.5	76.6	633
Ashanti	64.0	68.8	1,426
Western North	65.3	57.9	231
Ahafo	74.2	71.6	183
Bono	79.4	73.8	284
Bono East	70.9	64.4	376
Oti	80.5	66.3	248
Northern	66.1	53.6	870
Savannah	61.6	49.1	218
North East	55.3	46.0	229
Upper East	68.2	68.2	426
Upper West	68.9	64.9	258
Education			
No education	59.1	49.3	2,015
Primary	72.6	65.5	1,233
Secondary	75.6	77.6	4,174
More than secondary	87.8	90.2	783
Wealth quintile			
Lowest	62.0	53.7	1,662
Second	67.9	61.2	1,513
Middle	73.5	72.3	1,545
Fourth	74.7	78.4	1,743
Highest	82.3	83.1	1,742
Total	72.3	70.1	8,205

Note: The term husband includes a partner with whom a woman is living as if married.

Table 15.12 Women's participation in decision making regarding sexual and reproductive health

Percentage of currently married women age 15–49 years who make their own informed decisions regarding sexual relations, contraceptive use, and reproductive health care, Ghana DHS 2022

Background characteristic	Percentage who make decisions regarding sexual relations, contraceptive use, and reproductive care[1]	Number of currently married women
Age		
15–19	32.4	194
20–24	43.7	1,013
25–29	48.1	1,457
30–34	55.2	1,719
35–39	55.5	1,641
40–44	51.5	1,239
45–49	57.3	941
Employment (last 12 months)		
Not employed	34.4	986
Employed for cash	57.4	5,832
Employed not for cash	40.2	1,387
Residence		
Urban	59.3	4,248
Rural	43.6	3,956
Region		
Western	69.0	487
Central	59.4	816
Greater Accra	69.0	1,144
Volta	54.5	375
Eastern	42.1	633
Ashanti	47.8	1,426
Western North	40.5	231
Ahafo	37.4	183
Bono	61.7	284
Bono East	50.9	376
Oti	50.5	248
Northern	40.1	870
Savannah	39.1	218
North East	28.5	229
Upper East	52.5	426
Upper West	40.8	258
Education		
No education	35.7	2,015
Primary	50.3	1,233
Secondary	55.6	4,174
More than secondary	74.5	783
Wealth quintile		
Lowest	38.4	1,662
Second	43.3	1,513
Middle	51.2	1,545
Fourth	56.4	1,743
Highest	67.6	1,742
Total	51.7	8,205

[1] Percentages of currently married women who make decisions regarding sexual relations, contraceptive use, and health care are presented in Table 15.11, Table 7.17, and Table 15.8.1, respectively.

HOUSEHOLD WATER AND SANITATION 16

Key Findings

- ***Drinking water sources, availability, and treatment:*** 84% of de jure household members have at least basic drinking water service, 81% report that they have enough drinking water, and 92% do not use any method or treatment to make their water safer to drink.
- ***Person collecting drinking water:*** In the 60% of households that do not have drinking water on the premises, the person responsible for collecting drinking water is most often a female adult age 15 or older (62%).
- ***Sanitation:*** 69% of households have an improved sanitation facility, while 19% have no sanitation facility or practice open defecation. Overall, 24% of the household population has at least basic sanitation service.
- ***Management of excreta:*** 58% of household members manage their excreta appropriately.
- ***Handwashing:*** Overall, 44% of the household population has access to a basic handwashing facility.
- ***Menstrual hygiene:*** 88% of women use disposable sanitary pads; nearly all women were able to wash and change in privacy during their last menstruation.

The extent to which households have access to and use safe drinking water and sanitation facilities and engage in hygienic practices has profound implications for the health, safety, and overall well-being of the population. This chapter presents information on source of drinking water, type of sanitation facility, disposal of excreta (including disposal of young children's stools), handwashing, and menstrual hygiene.

16.1 DRINKING WATER SOURCES, AVAILABILITY, AND TREATMENT

Improved sources of drinking water

Include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells and springs, rainwater, water delivered via tanker truck or a cart with a small tank, and bottled and sachet water.

Sample: Households and de jure population

Improved sources of water protect against outside contamination so that water is more likely to be safe to drink. **Table 16.1** shows that 91% of households use improved sources of drinking water. Sachet water is the most common improved drinking water used by households (41%), followed by tube wells or boreholes (20%) and public taps/standpipes (11%). Seven percent of households use surface water as their main source of drinking water.

Forty-four percent of households have water on the premises, and 50% report traveling 30 minutes or less (round trip) to obtain drinking water.

Trends: The percentage of households with drinking water from an improved source increased from 56% in 1993 to 91% in 2022.

16.1.1 Drinking Water Service Ladder

Drinking water service ladder

Safely managed

Drinking water from an improved water source that is located on the premises, available when needed, and free from faecal and priority chemical contamination.

Basic

Drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less.

Limited

Drinking water from an improved source, and round-trip collection time is more than 30 minutes.

Unimproved

Drinking water from an unprotected dug well or unprotected spring.

Surface water

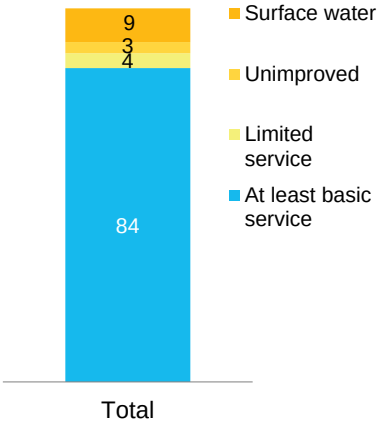
Drinking water directly from a river, dam, lake, pond, stream, canal, or irrigation canal.

Sample: De jure population

Building off the classification of drinking water sources as improved or unimproved, the Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has devised a five-rung drinking water service ladder to benchmark and compare progress towards achieving Sustainable Development Goal (SDG) targets (WHO/UNICEF 2018). The 2022 GDHS captured information on four out of the five rungs; because the survey did not include testing drinking water for faecal or chemical contamination, safely managed and basic drinking water services cannot be distinguished and are grouped together in **Table 16.2** as "at least basic service."

Figure 16.1 **Household population drinking water service**

Percent distribution of de jure population by drinking water

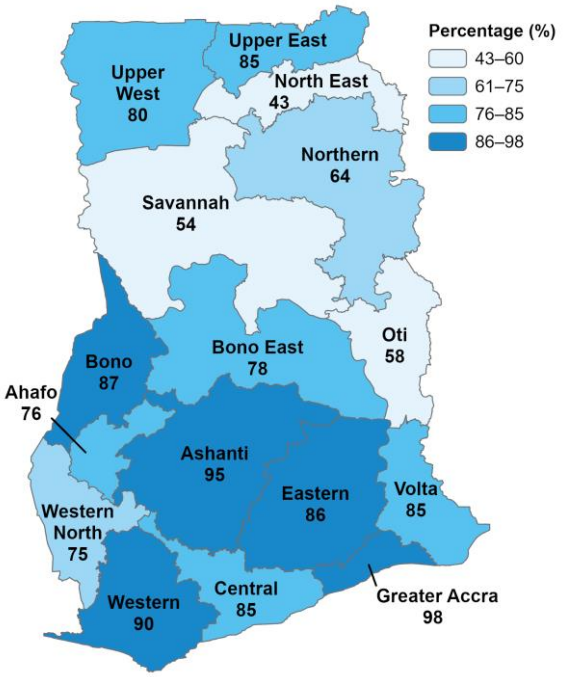


Overall, 84% of the population has access to at least basic drinking water service. Three percent of household residents use drinking water from an unimproved source, 4% have limited service, and 9% use surface water as their main source of drinking water (**Table 16.2** and **Figure 16.1**). These numbers are calculated for the de jure population to report on SDG indicators. Subnational estimates of access to at least basic drinking water service can be seen in **Map 16.1**.

Trends: The population living in households with at least basic water service increased from 52% in 1993 to 84% in 2022.

Map 16.1 **At least basic drinking water service by region**

Percentage of household population with at least basic drinking water service

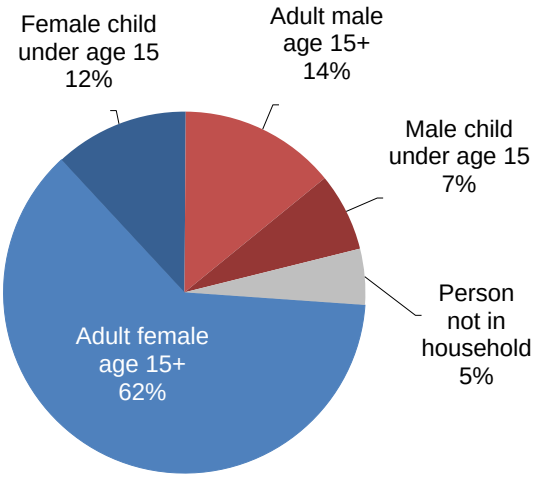


16.1.2 Person Collecting Drinking Water

Sixty percent of the population lives in households without drinking water on the premises (**Table 16.3**). In households without drinking water, the individual collecting water is more often an adult female age 15 or older (62%) than an adult male (14%). Similarly, female children under age 15 (12%) are more likely to be responsible for collecting water than male children (7%) (**Figure 16.2**).

Figure 16.2 **Person collecting drinking water**

Among de jure household population without drinking water on premises, percent distribution by person who collects drinking water



16.1.3 Availability of Drinking Water

Availability of sufficient drinking water

Percentage of the population with sufficient quantities of drinking water in the last month.

Sample: De jure population

The majority (81%) of the population has sufficient quantities of drinking water (**Table 16.4**).

16.1.4 Treatment of Drinking Water

Table 16.5 shows that only 5% of household members who use an unimproved source of water and 6% of those who drink surface water use an appropriate treatment method (boiling, bleaching, filtering, or solar disinfecting). Eighty-two percent of household members who use an unimproved source of drinking water and 84% of household members using surface water do not use an appropriate method to treat their drinking water.

16.2 SANITATION

Improved sanitation facilities

Include flush/pour flush toilets that flush water and waste to a piped sewer system, septic tank, pit latrine, or unknown destination; ventilated improved pit (VIP) latrines; pit latrines with slabs; and composting toilets.

Sample: Households and de jure population

Table 16.6 shows that 69% of households have improved toilet facilities, which are facilities that prevent people from coming into contact with human waste and can reduce the transmission of cholera, typhoid, and other diseases. Toilets that flush/pour flush water and waste to a septic tank are the most common type of sanitation facility (24%), followed by ventilated improved pit (VIP) latrines (19%) and pit latrines with slabs (18%). Twelve percent of households use unimproved toilet facilities.

One in five households (20%) have toilet facilities in their own dwelling, and 42% have facilities in their own yard/plot; 38% of households use toilet facilities located elsewhere (**Table 16.6**).

Trends: The percentage of households with an improved toilet facility increased from 21% in 1993 to 69% in 2022.

16.2.1 Sanitation Service Ladder

Sanitation service ladder

Safely managed

Use of improved facilities that are not shared with other households and where excreta are safely disposed of in situ or transported and treated off-site.

Basic

Use of improved facilities that are not shared with other households.

Limited

Use of improved facilities shared by two or more households.

Unimproved

Use of pit latrines without a slab or platform, hanging latrines, or bucket latrines.

Open defecation

Disposal of human faeces in fields, forests, bushes, open bodies of water, beaches, or other open spaces or with solid waste.

Sample: De jure population

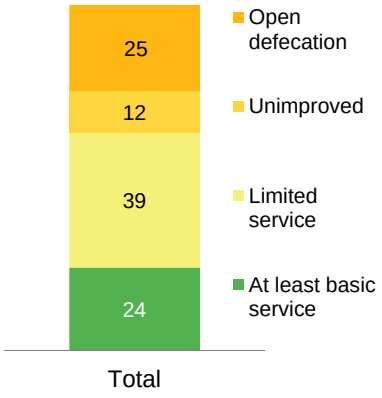
The JMP has also devised a five-rung sanitation service ladder to benchmark and compare progress towards achieving SDG targets related to sanitation. The 2022 GDHS captured information about all five rungs. However, for those households whose excreta were taken off-site, it is not possible to know if they were treated appropriately; therefore, safely managed and basic sanitation services are grouped together in **Table 16.7** as "at least basic service."

Overall, only 24% of the population has at least basic sanitation service, while 39% has limited service, 12% has unimproved sanitation, and 25% has no sanitation facility or practices open defecation (**Table 16.7** and **Figure 16.3**).

Trends: The percentage of the population with at least basic sanitation service increased from 7% in 2003 to 24% in 2022.

Figure 16.3 **Household population sanitation service**

Percent distribution of de jure population by sanitation service ladder



16.2.2 Removal and Disposal of Excreta

Disposal of excreta from on-site facilities

Excreta safely disposed of in situ

Includes septic tanks and latrines in which waste is buried in a covered pit, waste is never emptied, and it is unknown if waste is ever emptied.

Excreta disposed of unsafely

Includes septic tanks and latrines in which waste is emptied to uncovered pits, open ground, a water body, or other locations.

Excreta removed for treatment

Includes septic tanks and latrines in which waste is removed by a service provider to a treatment plant or an unknown location or is removed by a non-service provider to an unknown location.

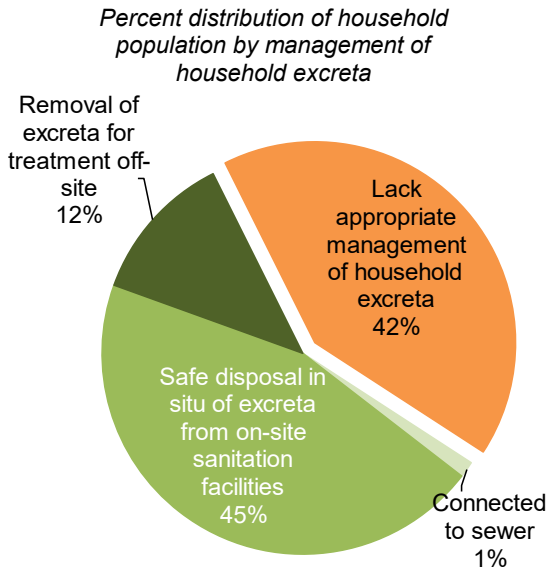
Sample: De jure population with on-site sanitation facilities (septic tanks, pit latrines, and composting toilets)

Information on the disposal of excreta from sanitation facilities that are not connected to a sewer system is essential for assessing the proportion of the population using safely managed sanitation services.

Among de jure residents living in households with septic tanks, 20% have their excreta removed by a service provider to an unknown location and 69% have never emptied their septic tanks. Among residents living in households with on-site sanitation facilities, 75% safely dispose of their excreta in situ and 24% have their excreta removed for treatment (**Table 16.8**).

Slightly less than half (45%) of the household population safely disposes of excreta from on-site sanitation facilities in situ, and 12% removes excreta for treatment off-site. Twelve percent of the household population uses unimproved sanitation facilities, and 25% practices open defecation. Overall, 58% of household members manage their excreta appropriately (**Table 16.9** and **Figure 16.4**).

Figure 16.4 **Appropriate management of household excreta**



16.3 Disposal of Children's Stools

Appropriate disposal of children's stools

The child's last stools were put or rinsed into a toilet or latrine, or the child used a toilet or latrine.

Sample: Youngest children under age 2 living with their mother

Proper disposal of human waste is important to prevent diseases transmitted through faeces. Only 16% of children under age 2 living with their mother had their last stool disposed of appropriately. Fifteen percent of children's last stools were put/rinsed into a toilet or latrine, while 65% were thrown into the garbage, 8% were put/rinsed into a drain or ditch, and 3% were left in the open (**Table 16.10**).

16.4 Handwashing

Handwashing facilities

Basic

Availability of a handwashing facility on the premises with soap and water.

Limited

Availability of a handwashing facility on the premises without soap and water.

Sample: De jure population for whom a place for handwashing was observed or with no place for handwashing in dwelling, yard, or plot; excludes the de jure population for whom permission to see the facility was not granted

Handwashing is an important step in monitoring hygiene and preventing the spread of disease. Rather than asking direct questions on the practice of handwashing, which can be subject to overreporting, interviewers asked to see the place where members of the household most often washed their hands. A place for washing hands was observed for 87% of the de jure population (**Table 16.11**). Of the handwashing places observed, 19% were in a fixed location and 69% were mobile.

According to the definition of handwashing facilities developed by the JMP, 44% of the population has a basic handwashing facility and 46% has a limited handwashing facility. Among the population living in households where handwashing facilities were observed, 50% had soap available and 66% had water available.

16.5 MENSTRUAL HYGIENE

Appropriate menstrual hygiene materials

Reusable sanitary pads, disposable sanitary pads, tampons, menstrual cup, cloth, toilet paper, and/or cotton wool.

Sample: Women age 15–49 with a menstrual period in the last year

Privacy and use of appropriate menstrual hygiene materials

Percentage of women who were able to wash and change in privacy and who used appropriate materials during their last menstruation.

Sample: Women age 15–49 with a menstrual period in the last year who were home during their last menstrual period

Using appropriate menstrual hygiene materials is important for women's health in general and their menstrual health in particular. In the 2022 GDHS, women age 15–49 were asked what materials they use for menstrual hygiene. Eighty-eight percent of women use disposable sanitary pads, 9% use cloth, and 2% use reusable sanitary pads (**Table 16.12**).

Women were also asked if they were able to wash and change in privacy during their last menstrual period; 98% of respondents reported that they were able to do so. Overall, 97% of women were able to wash and change in privacy and used appropriate materials during their last menstrual period (**Table 16.12**).

LIST OF TABLES

For more information on water and sanitation characteristics, see the following tables:

- **Table 16.1 Household drinking water**
- **Table 16.2 Drinking water service ladder**
- **Table 16.3 Person collecting drinking water**
- **Table 16.4 Availability of sufficient drinking water**
- **Table 16.5 Treatment of household drinking water**
- **Table 16.6 Household sanitation facilities**
- **Table 16.7 Sanitation service ladder**
- **Table 16.8 Emptying and removal of waste from on-site sanitation facilities**
- **Table 16.9 Management of household excreta**
- **Table 16.10 Disposal of children's stools**
- **Table 16.11 Handwashing**
- **Table 16.12 Menstrual hygiene**

Table 16.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water and by time to obtain drinking water, according to residence, Ghana DHS 2022

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	98.3	80.0	90.5	97.5	77.4	87.9
Piped into dwelling/yard/plot	9.2	4.2	7.1	9.9	4.1	7.2
Piped to neighbour	5.2	3.5	4.5	6.0	3.0	4.6
Public tap/standpipe	8.4	15.2	11.3	10.2	16.4	13.1
Tube well or borehole	9.4	33.2	19.5	11.5	35.4	22.9
Protected dug well	2.9	4.4	3.5	3.6	4.7	4.2
Protected spring	0.1	0.3	0.2	0.1	0.2	0.1
Rainwater	0.4	1.1	0.7	0.4	0.8	0.6
Tanker truck/cart with small tank	0.2	0.0	0.1	0.3	0.0	0.2
Bottled water	3.9	0.5	2.4	2.5	0.3	1.4
Sachet water	58.5	17.6	41.1	53.0	12.4	33.6
Unimproved source	0.8	4.1	2.2	1.1	4.4	2.7
Unprotected dug well	0.8	2.6	1.5	1.1	2.8	1.9
Unprotected spring	0.0	1.5	0.6	0.1	1.6	0.8
Surface water	0.9	15.9	7.3	1.3	18.2	9.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises[1]	62.5	20.0	44.4	60.9	17.3	40.1
30 minutes or less	35.1	71.2	50.4	36.0	71.9	53.1
More than 30 minutes	2.0	8.6	4.8	2.7	10.6	6.5
Don't know	0.4	0.2	0.3	0.4	0.1	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	10,320	7,613	17,933	33,294	30,317	63,611

[1] Includes water piped to a neighbour and those reporting a round-trip collection time of zero minutes

Table 16.2 Drinking water service ladder

Percent distribution of de jure population by drinking water service ladder, according to background characteristics, Ghana DHS 2022

Background characteristic	At least basic service[1]	Limited service[2]	Unimproved[3]	Surface water	Total	Number of persons
Residence						
Urban	94.9	2.7	1.1	1.3	100.0	33,294
Rural	71.6	5.8	4.4	18.2	100.0	30,317
Region						
Western	90.4	1.9	2.1	5.5	100.0	3,944
Central	85.0	5.2	0.8	9.1	100.0	6,957
Greater Accra	97.7	0.8	0.0	1.5	100.0	9,217
Volta	84.8	1.6	2.7	10.8	100.0	2,902
Eastern	85.5	1.8	2.9	9.8	100.0	5,234
Ashanti	94.8	1.8	1.9	1.4	100.0	11,844
Western North	75.0	6.4	11.5	7.0	100.0	1,775
Ahafo	75.8	5.8	6.8	11.6	100.0	1,397
Bono	87.0	4.8	1.1	7.1	100.0	2,262
Bono East	78.3	4.0	0.9	16.8	100.0	2,831
Oti	57.8	5.2	1.4	35.6	100.0	1,937
Northern	64.4	6.3	2.9	26.4	100.0	5,493
Savannah	54.2	4.1	3.0	38.8	100.0	1,586
North East	43.4	14.1	25.1	17.4	100.0	1,552
Upper East	85.1	10.5	4.1	0.4	100.0	2,904
Upper West	79.9	18.0	0.9	1.3	100.0	1,774
Wealth quintile						
Lowest	52.1	7.7	7.9	32.3	100.0	12,721
Second	78.2	6.5	3.6	11.7	100.0	12,725
Middle	93.1	3.4	1.2	2.4	100.0	12,719
Fourth	97.7	1.5	0.4	0.4	100.0	12,726
Highest	97.9	1.7	0.3	0.1	100.0	12,719
Total	83.8	4.1	2.7	9.4	100.0	63,611

Note: Service ladder concept/definitions are based on the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP).
[1] Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.
[2] Drinking water from an improved source, and round-trip collection time is more than 30 minutes or is unknown
[3] Drinking water from an unprotected dug well or unprotected spring

Table 16.3 Person collecting drinking water

Percentage of de jure population in households without drinking water on premises, and percent distribution of de jure population in households without drinking water on premises by the person who usually collects drinking water used in the household, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of de jure population without drinking water on premises[1]	Number of persons	Person who usually collects drinking water					Total	Number of persons without drinking water on premises[1]
			Adult female age 15 or older	Adult male age 15 or older	Female child under age 15	Male child under age 15	Person not in household		
Residence									
Urban	39.1	33,294	56.2	17.4	11.1	8.6	6.7	100.0	13,023
Rural	82.7	30,317	65.2	12.0	11.9	6.9	4.0	100.0	25,073
Region									
Western	66.1	3,944	49.0	17.8	17.0	9.4	6.9	100.0	2,607
Central	61.2	6,957	50.1	16.6	13.3	13.2	6.8	100.0	4,257
Greater Accra	22.0	9,217	43.0	27.6	8.1	12.1	9.2	100.0	2,029
Volta	47.1	2,902	62.8	14.0	9.5	8.4	5.2	100.0	1,367
Eastern	60.1	5,234	48.6	20.5	13.9	8.9	8.1	100.0	3,148
Ashanti	56.8	11,844	54.3	16.9	13.4	10.5	4.9	100.0	6,727
Western North	77.9	1,775	53.7	19.4	11.0	12.6	3.2	100.0	1,383
Ahafo	78.5	1,397	59.7	16.0	12.6	6.1	5.6	100.0	1,097
Bono	63.9	2,262	66.9	9.6	14.3	4.7	4.4	100.0	1,445
Bono East	65.3	2,831	77.2	9.8	8.0	2.8	2.2	100.0	1,849
Oti	83.5	1,937	72.8	9.7	11.7	2.9	2.9	100.0	1,618
Northern	72.9	5,493	84.8	4.2	6.1	2.4	2.6	100.0	4,005
Savannah	89.8	1,586	74.5	7.1	11.2	2.1	5.0	100.0	1,425
North East	86.5	1,552	80.7	6.0	6.7	3.5	3.1	100.0	1,343
Upper East	77.8	2,904	75.0	8.9	10.6	4.3	1.2	100.0	2,261
Upper West	86.5	1,774	74.1	6.7	14.4	0.9	3.8	100.0	1,535
Source of drinking water[2]									
Improved	55.0	55,937	60.6	14.5	12.0	7.6	5.2	100.0	30,787
Unimproved	82.2	1,704	61.3	14.6	11.5	8.1	4.5	100.0	1,400
Surface	99.0	5,970	70.1	10.3	9.6	6.6	3.3	100.0	5,910
Wealth quintile									
Lowest	93.6	12,721	71.4	9.7	10.9	4.7	3.3	100.0	11,907
Second	82.8	12,725	63.6	13.6	12.1	7.4	3.4	100.0	10,542
Middle	63.1	12,719	58.9	14.1	12.4	10.0	4.6	100.0	8,025
Fourth	42.4	12,726	51.2	21.0	11.8	8.7	7.3	100.0	5,401
Highest	17.5	12,719	43.8	18.9	10.3	10.4	16.6	100.0	2,222
Total	59.9	63,611	62.1	13.9	11.6	7.4	4.9	100.0	38,096

[1] Excludes water piped to a neighbour and those reporting a round-trip collection time of zero minutes

Table 16.4 Availability of sufficient drinking water

Percentage of de jure population with sufficient quantities of drinking water when needed, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage with drinking water available in sufficient quantities[1]	Number of persons
Residence		
Urban	80.2	33,294
Rural	81.7	30,317
Region		
Western	85.4	3,944
Central	81.4	6,957
Greater Accra	82.0	9,217
Volta	77.0	2,902
Eastern	81.6	5,234
Ashanti	85.5	11,844
Western North	80.8	1,775
Ahafo	79.9	1,397
Bono	83.0	2,262
Bono East	85.1	2,831
Oti	68.8	1,937
Northern	67.9	5,493
Savannah	77.4	1,586
North East	73.8	1,552
Upper East	86.0	2,904
Upper West	82.6	1,774
Source of drinking water[2]		
Improved	81.1	55,937
Unimproved	79.0	1,704
Surface	79.8	5,970
Time to obtain drinking water (round trip)		
Water on premises[1]	81.0	25,514
30 minutes or less	82.4	33,789
More than 30 minutes	67.6	4,120
Don't know	89.0	187
Wealth quintile		
Lowest	82.1	12,721
Second	76.7	12,725
Middle	78.9	12,719
Fourth	80.7	12,726
Highest	86.2	12,719
Total	80.9	63,611

[1] Defined as having sufficient quantities of drinking water in the last month
[2] Includes water piped to a neighbour and those reporting a round-trip collection time of zero minutes

Table 16.5 Treatment of household drinking water

Percentage of de jure population using various methods to treat drinking water, and percentage using an appropriate treatment method, according to background characteristics, Ghana DHS 2022

Background characteristic	Boiled	Bleach/ chlorine added	Strained through cloth	Ceramic, sand, or other filter	Solar disin-fection	Let stand and settle	Other	Don't know	No treatment	Percent-age using an appro-priate treatment method[1]	Number of persons
Residence											
Urban	1.5	1.6	0.6	0.7	0.0	0.8	2.7	0.1	92.5	3.7	33,294
Rural	2.0	0.8	1.9	0.3	0.1	2.0	2.7	0.1	91.4	3.1	30,317
Region											
Western	0.6	0.6	0.5	0.3	0.0	1.4	0.9	0.0	96.0	1.5	3,944
Central	1.9	0.1	0.9	0.1	0.0	2.4	3.6	0.0	91.9	2.2	6,957
Greater Accra	0.8	0.0	0.5	0.6	0.0	0.5	0.6	0.1	97.4	1.4	9,217
Volta	2.1	0.6	4.7	0.3	0.0	1.9	3.7	0.0	88.8	3.0	2,902
Eastern	2.1	3.0	0.8	0.3	0.0	4.0	3.5	0.0	86.6	5.2	5,234
Ashanti	2.6	3.1	0.6	1.2	0.0	0.7	4.7	0.4	87.5	6.8	11,844
Western North	4.0	1.5	1.3	0.2	0.1	3.0	2.1	0.1	89.3	5.7	1,775
Ahafo	3.1	0.4	1.0	0.2	0.0	0.9	1.4	0.0	93.4	3.6	1,397
Bono	0.3	0.4	0.2	0.2	0.0	0.5	0.3	0.0	98.3	0.9	2,262
Bono East	0.5	0.9	1.1	0.0	0.0	0.9	1.7	0.1	95.2	1.4	2,831
Oti	3.8	0.6	2.6	0.5	0.0	1.6	2.5	0.0	91.0	4.6	1,937
Northern	2.0	1.2	2.3	0.5	0.4	1.1	2.8	0.0	91.6	3.8	5,493
Savannah	1.2	1.3	4.3	0.3	0.0	0.8	2.9	0.0	90.2	2.8	1,586
North East	1.3	1.0	4.3	0.0	0.0	0.6	3.7	0.0	89.7	2.3	1,552
Upper East	1.1	1.3	0.5	0.4	0.0	1.5	3.8	0.1	91.9	2.7	2,904
Upper West	0.4	0.0	0.1	0.1	0.1	0.0	0.9	0.0	98.6	0.5	1,774
Source of drinking water[2]											
Improved	1.4	1.2	0.7	0.5	0.0	1.0	2.5	0.1	93.1	3.1	55,937
Unimproved	2.3	2.9	3.9	0.0	0.2	4.8	4.9	0.0	82.3	5.4	1,704
Surface	4.3	1.1	5.2	0.7	0.3	3.9	3.8	0.0	84.3	6.1	5,970
Wealth quintile											
Lowest	2.1	0.8	3.0	0.4	0.1	2.1	2.9	0.0	90.1	3.4	12,721
Second	1.8	0.9	1.6	0.2	0.1	2.0	2.4	0.2	91.9	2.9	12,725
Middle	1.4	1.0	0.6	0.0	0.0	1.5	2.9	0.1	93.0	2.5	12,719
Fourth	1.3	1.1	0.5	0.1	0.0	0.7	2.3	0.2	94.3	2.4	12,726
Highest	1.9	2.5	0.3	1.7	0.0	0.5	3.1	0.1	90.5	6.0	12,719
Total	1.7	1.3	1.2	0.5	0.0	1.4	2.7	0.1	91.9	3.4	63,611

Note: Respondents may report multiple treatment methods, so the sum of treatment may exceed 100%.
[1] Appropriate water treatment methods are boiling, bleaching, filtering, and solar disinfecting.

Table 16.6 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, and percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, according to residence, Ghana DHS 2022

Type and location of toilet/ latrine facility	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Improved sanitation facility	83.7	49.4	69.1	81.0	43.6	63.2
Flush/pour flush to piped sewer system	2.2	0.3	1.4	2.2	0.3	1.3
Flush/pour flush to septic tank	36.7	6.5	23.9	34.7	5.0	20.5
Flush/pour flush to pit latrine	4.1	1.2	2.9	4.1	1.1	2.7
Flush, biodigester (Biofil)	4.6	1.2	3.2	4.6	1.0	2.9
Flush/pour flush, don't know where	0.1	0.0	0.1	0.1	0.0	0.0
Ventilated improved pit (VIP) latrine	22.1	15.5	19.3	21.1	13.8	17.6
Pit latrine with slab	13.7	24.6	18.3	14.0	22.4	18.0
Composting toilet	0.1	0.1	0.1	0.1	0.1	0.1
Unimproved sanitation facility	6.9	17.7	11.5	7.4	17.5	12.2
Flush/pour flush not to sewer/septic tank/pit latrine	0.1	0.0	0.1	0.1	0.0	0.0
Pit latrine without slab/open pit	6.3	17.4	11.0	6.8	17.3	11.8
Bucket	0.0	0.0	0.0	0.0	0.0	0.0
Hanging toilet/hanging latrine	0.0	0.1	0.1	0.0	0.1	0.1
Other	0.5	0.1	0.4	0.5	0.1	0.3
Open defecation (no facility/bush/ field)	9.4	32.9	19.4	11.7	38.8	24.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	10,320	7,613	17,933	33,294	30,317	63,611
Location of toilet facility						
In own dwelling	26.8	7.2	19.9	28.5	6.3	19.9
In own yard/plot	40.5	45.8	42.4	40.2	46.4	42.6
Elsewhere	32.7	47.0	37.8	31.4	47.3	37.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population with a toilet/latrine facility	9,354	5,109	14,463	29,415	18,542	47,957

Table 16.7 Sanitation service ladder

Percent distribution of de jure population by type of sanitation service, according to background characteristics, Ghana DHS 2022

Background characteristic	At least basic service[1]	Limited service[2]	Unimproved[3]	Open defecation	Total	Number of persons
Residence						
Urban	33.5	47.5	7.4	11.7	100.0	33,294
Rural	14.2	29.5	17.5	38.8	100.0	30,317
Region						
Western	24.1	46.1	20.2	9.6	100.0	3,944
Central	21.7	48.1	17.5	12.7	100.0	6,957
Greater Accra	40.0	51.2	3.9	4.9	100.0	9,217
Volta	28.1	39.1	11.0	21.7	100.0	2,902
Eastern	25.1	48.4	20.8	5.7	100.0	5,234
Ashanti	29.2	52.2	9.3	9.3	100.0	11,844
Western North	18.4	30.6	44.7	6.3	100.0	1,775
Ahafo	19.1	30.7	38.4	11.8	100.0	1,397
Bono	28.8	40.4	17.8	13.0	100.0	2,262
Bono East	18.6	31.0	6.4	44.0	100.0	2,831
Oti	13.9	28.9	6.6	50.6	100.0	1,937
Northern	12.9	13.0	3.6	70.6	100.0	5,493
Savannah	11.0	12.5	2.8	73.6	100.0	1,586
North East	11.4	9.1	15.3	64.2	100.0	1,552
Upper East	13.9	13.3	1.6	71.3	100.0	2,904
Upper West	11.8	13.2	18.6	56.4	100.0	1,774
Wealth quintile						
Lowest	5.3	11.8	18.7	64.3	100.0	12,721
Second	9.3	33.7	19.6	37.4	100.0	12,725
Middle	15.8	54.7	13.2	16.4	100.0	12,719
Fourth	23.0	64.9	7.5	4.6	100.0	12,726
Highest	68.2	29.3	2.0	0.4	100.0	12,719
Total	24.3	38.9	12.2	24.6	100.0	63,611

Note: Service ladder concept/definitions are based on the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP).

[1] Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.

[2] Defined as use of improved facilities shared by two or more households

[3] Use of flush/pour flush toilet not to sewer, septic tank, or pit latrine; pit latrine without a slab/open pit; hanging toilet/latrine; or bucket

Table 16.8 Emptying and removal of waste from on-site sanitation facilities

Percent distribution of de jure population in households with septic tanks and improved latrines by method of emptying and removal, and percentage of the population with on-site sanitation facilities for which excreta was safely disposed of in situ, percentage with on-site sanitation facilities for which excreta was disposed of unsafely, and percentage with on-site sanitation facilities for which excreta was removed for treatment, according to background characteristics, Ghana DHS 2022

Background characteristic	Percent distribution of method of emptying and disposal of waste from septic tanks or other on-site sanitation facilities									Percentage of population with on-site sanitation facilities for which:			
	Removed by a service provider to treatment plant	Removed by a service provider, don't know where	Buried in a covered pit	Emptied to un-covered pit, open ground, water body, or else-where	Other	Don't know where waste was taken	Never emptied	Don't know if ever emptied	Total	Excreta was safely disposed of in situ[1]	Excreta was disposed of unsafely[2]	Excreta was removed for treat-ment[3]	Number of persons with improved on-site sanitation facilities
Sanitation facility type													
Flush to septic tank	6.3	32.7	0.0	0.1	0.0	1.3	54.8	4.8	100.0	59.6	0.1	40.3	13,060
Latrines and other improved facilities	1.6	13.4	1.0	0.2	0.0	0.9	76.6	6.3	100.0	83.9	0.2	15.9	24,428
Flush to pit latrine	2.1	24.8	0.2	0.1	0.0	1.1	65.9	5.7	100.0	71.8	0.1	28.0	1,692
Ventilated improved pit (VIP) latrine	2.8	20.2	1.5	0.2	0.1	1.0	64.2	10.0	100.0	75.7	0.3	24.0	11,200
Pit latrine with slab	0.3	5.1	0.7	0.1	0.0	0.8	90.3	2.6	100.0	93.6	0.1	6.3	11,467
Composting toilet	0.0	4.8	0.0	0.0	0.0	0.0	68.2	27.0	100.0	95.2	0.0	4.8	68
Residence													
Urban	4.8	27.1	0.2	0.1	0.1	1.3	59.6	6.9	100.0	66.7	0.2	33.1	24,641
Rural	0.3	6.8	1.5	0.1	0.0	0.7	87.0	3.6	100.0	92.1	0.1	7.8	12,847
Region													
Western	1.2	11.6	0.0	0.4	0.0	1.1	81.7	4.0	100.0	85.7	0.4	13.9	2,640
Central	1.6	17.5	0.3	0.0	0.2	0.2	79.4	0.8	100.0	80.5	0.2	19.3	4,514
Greater Accra	11.3	40.3	0.0	0.2	0.0	0.9	41.0	6.3	100.0	47.2	0.2	52.6	7,001
Volta	1.2	15.1	0.6	0.4	0.0	1.1	76.1	5.4	100.0	82.1	0.4	17.5	1,840
Eastern	0.7	20.4	0.5	0.0	0.1	2.4	70.4	5.5	100.0	76.4	0.1	23.5	3,667
Ashanti	1.6	17.9	1.2	0.1	0.0	1.0	69.5	8.7	100.0	79.4	0.1	20.5	9,337
Western North	0.4	5.1	0.1	0.4	0.0	0.9	87.9	5.3	100.0	93.3	0.4	6.3	850
Ahafo	0.3	11.0	0.3	0.2	0.0	0.8	82.4	4.9	100.0	87.6	0.2	12.1	690
Bono	2.1	7.4	0.0	0.0	0.0	1.0	80.9	8.7	100.0	89.5	0.0	10.5	1,535
Bono East	0.4	17.0	1.0	0.0	0.0	1.0	73.5	7.0	100.0	81.5	0.0	18.5	1,381
Oti	2.8	5.1	0.7	0.1	0.0	0.7	89.5	1.2	100.0	91.4	0.1	8.5	806
Northern	2.6	18.1	4.2	0.3	0.0	1.3	71.2	2.2	100.0	77.7	0.3	22.0	1,345
Savannah	0.2	5.8	2.1	0.0	0.5	3.3	85.1	3.0	100.0	90.2	0.5	9.3	373
North East	0.0	0.9	0.0	0.5	0.0	0.4	94.8	3.4	100.0	98.2	0.5	1.3	317
Upper East	0.9	14.4	0.3	0.3	0.0	0.9	79.2	3.9	100.0	83.4	0.3	16.3	751
Upper West	0.0	10.8	0.0	0.0	0.0	1.9	73.3	13.9	100.0	87.2	0.0	12.8	441
Wealth quintile													
Lowest	0.1	5.1	1.1	0.3	0.0	2.0	87.9	3.6	100.0	92.6	0.3	7.1	2,164
Second	0.2	9.5	2.1	0.1	0.0	0.3	81.3	6.3	100.0	89.8	0.2	10.0	5,439
Middle	1.4	14.4	1.1	0.1	0.1	1.1	75.1	6.7	100.0	82.9	0.2	16.9	8,749
Fourth	3.2	23.1	0.1	0.2	0.0	1.5	64.7	7.1	100.0	72.0	0.2	27.8	10,443
Highest	6.8	30.4	0.0	0.0	0.0	0.9	58.1	3.8	100.0	61.8	0.1	38.1	10,692
Total	3.2	20.1	0.7	0.1	0.0	1.1	69.0	5.8	100.0	75.4	0.2	24.4	37,488

Note: On-site sanitation facilities are those where excreta are stored in a septic tank, pit latrine, or composting toilet.
[1] Includes septic tanks and latrines in which waste was buried in a covered pit, never emptied, and don't know if ever emptied
[2] Includes septic tanks and latrines in which waste was emptied to uncovered pits, open ground, water body, or other locations
[3] Includes septic tanks and latrines in which waste was removed by a service provider to a treatment plant or an unknown location or was removed by a non-service provider to an unknown location

Table 16.9 Management of household excreta

Percent distribution of de jure population by management of excreta from household sanitation facilities, according to background characteristics, Ghana DHS 2022

Background characteristic	Connected to sewer	Using improved on-site sanitation facilities			Using improved sanitation facilities, on-site status unknown	Using un-improved sanitation facilities	Practicing open defecation	Total	Percent-age connected to sewer, with safe disposal on-site, or with removal for treatment off-site	Number of persons
		Safe disposal in situ of excreta from on-site sanitation facilities	Unsafe disposal of excreta from on-site sanitation facilities	Removal of excreta for treatment off-site						
Residence										
Urban	2.2	49.8	3.1	21.1	4.7	7.4	11.7	100.0	73.2	33,294
Rural	0.3	39.6	0.5	2.3	1.0	17.5	38.8	100.0	42.2	30,317
Region										
Western	0.7	58.3	2.0	6.6	2.6	20.2	9.6	100.0	65.5	3,944
Central	0.9	52.3	3.1	9.5	4.1	17.5	12.7	100.0	62.6	6,957
Greater Accra	5.1	36.0	5.9	34.1	10.1	3.9	4.9	100.0	75.2	9,217
Volta	0.5	52.8	0.7	9.9	3.4	11.0	21.7	100.0	63.1	2,902
Eastern	1.1	53.7	1.3	15.0	2.3	20.8	5.7	100.0	69.8	5,234
Ashanti	1.0	64.0	0.1	14.7	1.6	9.3	9.3	100.0	79.7	11,844
Western North	0.3	44.7	0.3	2.9	0.9	44.7	6.3	100.0	47.9	1,775
Ahafo	0.2	43.4	1.2	4.7	0.2	38.4	11.8	100.0	48.4	1,397
Bono	0.6	61.5	0.9	5.5	0.7	17.8	13.0	100.0	67.6	2,262
Bono East	0.5	40.6	2.9	5.2	0.3	6.4	44.0	100.0	46.3	2,831
Oti	0.0	38.8	0.2	2.7	1.1	6.6	50.6	100.0	41.5	1,937
Northern	0.6	19.3	0.9	4.2	0.8	3.6	70.6	100.0	24.1	5,493
Savannah	0.0	21.4	0.4	1.7	0.1	2.8	73.6	100.0	23.1	1,586
North East	0.0	20.1	0.1	0.3	0.0	15.3	64.2	100.0	20.4	1,552
Upper East	0.2	21.6	0.9	3.4	1.1	1.6	71.3	100.0	25.1	2,904
Upper West	0.1	21.7	0.3	2.8	0.0	18.6	56.4	100.0	24.7	1,774
Wealth quintile										
Lowest	0.0	15.8	0.3	1.0	0.0	18.7	64.3	100.0	16.8	12,721
Second	0.1	39.2	0.5	3.1	0.1	19.6	37.4	100.0	42.3	12,725
Middle	0.5	57.6	1.5	9.7	1.1	13.2	16.4	100.0	67.8	12,719
Fourth	1.0	59.7	2.9	19.5	4.8	7.5	4.6	100.0	80.2	12,726
Highest	4.8	52.6	3.9	27.6	8.7	2.0	0.4	100.0	84.9	12,719
Total	1.3	45.0	1.8	12.1	2.9	12.2	24.6	100.0	58.4	63,611

Note: On-site sanitation facilities are those where excreta are stored in a septic tank, pit latrine, or composting toilet.

Table 16.10 Disposal of children's stools

Percent distribution of youngest children under age 2 living with their mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of appropriately, according to background characteristics, Ghana DHS 2022

Background characteristic	Manner of disposal of children's stools							Total	Percentage of children whose stools are disposed of appro-priately[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other			
Age of child in months										
0–1	0.0	5.2	5.7	16.7	65.2	1.5	5.7	100.0	5.2	304
2–3	0.6	10.4	5.5	11.3	69.7	0.3	2.1	100.0	11.0	260
4–5	0.4	9.7	5.0	12.2	68.3	0.9	3.5	100.0	10.1	262
6–8	0.2	10.4	5.1	8.0	70.1	3.3	2.9	100.0	10.5	429
9–11	0.2	13.4	5.4	7.7	70.0	1.3	2.0	100.0	13.6	416
12–17	0.4	16.2	6.4	6.0	65.7	3.9	1.5	100.0	16.5	887
18–23	0.7	24.1	6.8	4.8	56.5	4.5	2.5	100.0	24.8	830
6–23	0.4	17.3	6.1	6.2	64.2	3.6	2.1	100.0	17.7	2,562
Type of toilet facility[2]										
Improved sanitation facility	0.4	17.0	3.4	5.1	71.7	1.1	1.2	100.0	17.4	1,984
Unimproved facility	1.0	35.0	3.9	6.6	51.0	1.0	1.4	100.0	36.1	398
Open defecation	0.1	3.5	11.8	14.2	57.3	7.3	5.8	100.0	3.6	1,007
Residence										
Urban	0.4	12.6	3.6	5.2	75.5	1.2	1.5	100.0	13.0	1,573
Rural	0.3	17.4	8.0	10.4	55.9	4.5	3.5	100.0	17.7	1,815
Region										
Western	0.0	30.6	3.3	2.7	61.2	2.2	0.0	100.0	30.6	200
Central	0.0	15.4	4.3	3.3	76.2	0.4	0.5	100.0	15.4	347
Greater Accra	0.0	9.5	3.7	5.7	80.2	0.0	0.9	100.0	9.5	398
Volta	0.8	18.5	8.7	13.1	55.8	0.0	3.1	100.0	19.3	130
Eastern	0.9	11.2	1.3	5.2	79.9	0.0	1.5	100.0	12.1	239
Ashanti	0.5	18.4	2.9	1.6	72.4	3.6	0.4	100.0	19.0	603
Western North	0.0	53.3	0.0	1.4	43.7	0.0	1.5	100.0	53.3	96
Ahafo	0.0	25.9	2.0	6.1	65.9	0.0	0.0	100.0	25.9	75
Bono	2.9	19.2	6.2	16.2	48.4	3.1	4.0	100.0	22.1	110
Bono East	0.7	11.1	5.2	4.7	72.5	1.4	4.4	100.0	11.8	183
Oti	0.3	12.9	8.5	21.5	47.5	0.3	8.9	100.0	13.2	118
Northern	0.3	4.4	6.4	16.2	61.1	10.1	1.5	100.0	4.7	386
Savannah	0.6	10.3	5.5	7.6	43.9	2.4	29.6	100.0	11.0	103
North East	0.2	15.5	4.1	27.5	43.6	6.9	2.1	100.0	15.7	110
Upper East	0.0	7.3	36.6	13.5	34.6	6.9	1.1	100.0	7.3	187
Upper West	0.0	11.9	3.1	8.3	66.9	3.7	6.0	100.0	11.9	103
Mother's education										
No education	0.7	13.4	6.2	15.6	51.7	7.0	5.4	100.0	14.1	711
Primary	0.2	14.6	7.2	9.4	61.1	3.8	3.7	100.0	14.8	522
Secondary	0.3	16.1	5.9	5.8	68.8	1.6	1.5	100.0	16.4	1,835
More than secondary	0.5	14.5	4.0	1.5	79.1	0.2	0.3	100.0	14.9	320
Wealth quintile										
Lowest	0.6	13.6	11.6	15.6	46.0	7.5	5.2	100.0	14.2	829
Second	0.4	16.3	5.5	9.8	61.2	3.4	3.3	100.0	16.7	692
Middle	0.2	18.6	5.1	6.5	66.2	1.6	1.9	100.0	18.8	687
Fourth	0.5	16.4	3.0	3.5	75.1	0.3	1.2	100.0	16.9	618
Highest	0.2	10.4	2.7	1.5	85.0	0.0	0.2	100.0	10.6	562
Total	0.4	15.1	6.0	8.0	65.0	2.9	2.6	100.0	15.5	3,388

[1] Children's stools are considered to be disposed of appropriately if the child used a toilet or latrine or if the faecal matter was put/rinsed into a toilet or latrine.
[2] See Table 16.6 for definition of categories.

Table 16.11 Handwashing

Percentage of the de jure population for whom the place most often used for washing hands was observed, by whether the location was fixed or mobile, and total percentage of the de jure population for whom the place for handwashing was observed; among the de jure population for whom the place for handwashing was observed, percentage with water available, percentage with soap available, and percentage with a cleansing agent other than soap available; percentage of the de jure population with a basic handwashing facility; and percentage with a limited handwashing facility, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage of de jure population for whom place for washing hands was observed:			Number of persons	Place for handwashing observed and:			Number of persons for whom place for hand-washing was observed	Percentage of the de jure population with a basic hand-washing facility[3]	Percentage of the de jure population with a limited hand-washing facility[4]	Number of persons for whom a place for hand-washing was observed or with no place for hand-washing in the dwelling, yard, or plot
	Place for hand-washing was a fixed place	Place for hand-washing was mobile	Total		Water available	Soap available[1]	Cleansing agent other than soap available[2]				
Residence											
Urban	27.5	61.8	89.3	33,294	74.0	59.1	0.7	29,726	52.8	38.3	32,643
Rural	9.3	75.9	85.2	30,317	57.7	39.9	1.9	25,820	33.3	53.8	29,622
Region											
Western	25.8	73.4	99.2	3,944	93.6	85.0	0.0	3,910	83.6	15.9	3,930
Central	21.1	65.0	86.1	6,957	53.0	41.7	0.0	5,989	33.1	53.1	6,943
Greater Accra	38.4	59.8	98.2	9,217	89.9	70.3	0.9	9,048	68.5	30.0	9,180
Volta	15.8	81.9	97.7	2,902	79.7	55.9	1.1	2,837	54.6	43.1	2,902
Eastern	15.8	79.6	95.4	5,234	80.8	54.8	0.0	4,993	53.8	44.7	5,066
Ashanti	19.5	66.5	86.0	11,844	56.9	49.2	0.3	10,187	42.9	49.1	11,066
Western North	8.7	81.6	90.2	1,775	41.9	23.0	0.1	1,602	20.1	72.2	1,736
Ahafo	9.5	66.6	76.1	1,397	70.0	52.3	0.0	1,063	39.5	37.1	1,388
Bono	11.4	70.0	81.4	2,262	51.4	41.1	0.4	1,840	32.6	49.5	2,241
Bono East	7.5	57.9	65.5	2,831	74.0	50.1	9.8	1,854	32.5	34.1	2,784
Oti	5.8	81.0	86.9	1,937	59.2	30.8	0.0	1,682	26.4	60.5	1,935
Northern	14.8	63.1	78.0	5,493	44.3	26.0	4.0	4,283	19.8	58.7	5,450
Savannah	4.3	86.5	90.8	1,586	76.8	43.4	12.6	1,440	39.5	51.9	1,574
North East	8.4	66.9	75.3	1,552	17.8	5.2	0.1	1,169	3.2	74.7	1,501
Upper East	12.0	59.3	71.3	2,904	67.9	47.0	0.2	2,070	32.4	40.6	2,836
Upper West	6.0	83.0	89.1	1,774	30.3	28.5	0.1	1,581	25.7	65.6	1,732
Wealth quintile											
Lowest	5.8	74.2	80.0	12,721	55.0	31.3	3.5	10,173	25.0	56.4	12,505
Second	6.4	77.3	83.7	12,725	56.6	38.3	1.5	10,651	31.8	54.5	12,339
Middle	8.9	79.7	88.5	12,719	59.9	44.7	0.9	11,262	39.3	51.2	12,437
Fourth	16.7	73.7	90.4	12,726	68.5	53.4	0.4	11,504	47.3	44.8	12,490
Highest	56.2	37.8	94.0	12,719	89.0	78.8	0.3	11,956	74.1	21.6	12,494
Total	18.8	68.5	87.3	63,611	66.4	50.2	1.3	55,546	43.5	45.7	62,264

[1] Soap includes soap or detergent in bar, liquid, powder, or paste form.
[2] Cleansing agents other than soap include locally available materials such as ash, mud, or sand.
[3] The availability of a handwashing facility on premises with soap and water
[4] The availability of a handwashing facility on premises without soap and/or water

Table 16.12 Menstrual hygiene

Among women age 15–49 whose most recent menstrual period was in the last year, percentage who used specified materials to collect or absorb blood from the most recent menstrual period, and among women age 15–49 whose most recent menstrual period was in the last year and who were at home during their last menstrual period, percentage who were able to wash and change in privacy while at home and percentage who were able to both wash and change in privacy and who used appropriate materials during their last menstruation, according to background characteristics, Ghana DHS 2022

	Among women whose most recent menstrual period was in the last year, percentage who used the specified materials to collect or absorb blood from the most recent menstrual period											Among women whose most recent menstrual period was in the last year and who were at home during their last menstrual period		
Background characteristic	Reusable sanitary pads	Disposable sanitary pads	Tampons	Menstrual cup	Cloth	Toilet paper	Cotton wool	Underwear only	Other	Nothing	Number of women	Percentage able to wash and change in privacy	Percentage able to wash and change in privacy and who used appropriate materials during last menstruation[1]	Number of women
Age														
15–19	2.2	93.4	0.1	0.0	4.4	1.4	0.0	0.2	0.5	0.1	2,491	96.9	96.4	2,460
20–24	2.0	94.1	0.0	0.1	4.1	0.2	0.1	0.2	1.0	0.0	2,334	97.2	96.8	2,311
25–29	2.2	92.0	0.5	0.0	5.5	1.0	0.2	0.3	0.9	0.1	1,848	98.7	98.0	1,830
30–34	1.9	87.8	0.2	0.1	11.0	0.8	0.2	0.4	1.4	0.2	1,784	98.0	96.7	1,779
35–39	2.4	84.4	0.0	0.2	12.2	1.6	0.3	0.5	2.1	0.2	1,709	97.8	96.0	1,702
40–44	2.7	79.1	0.3	0.0	16.3	1.5	0.3	0.8	2.3	0.1	1,431	97.9	95.4	1,414
45–49	1.5	75.9	0.0	0.0	20.6	3.2	0.6	0.5	2.7	0.4	900	97.6	95.9	894
Residence														
Urban	2.2	92.4	0.2	0.1	4.5	1.1	0.1	0.1	1.3	0.1	7,386	97.5	96.6	7,354
Rural	2.1	82.6	0.1	0.0	15.6	1.3	0.3	0.8	1.4	0.2	5,111	97.9	96.4	5,037
Region														
Western	0.5	89.1	0.0	0.2	10.4	1.2	0.0	0.2	1.6	0.0	814	97.9	96.4	806
Central	3.1	89.2	0.1	0.0	8.9	0.8	0.2	0.1	1.1	0.0	1,450	98.4	98.3	1,429
Greater Accra	0.3	95.5	0.4	0.2	1.7	2.0	0.0	0.0	1.7	0.0	2,004	97.8	96.8	2,003
Volta	0.2	87.6	0.3	0.0	13.5	0.4	0.5	0.2	0.7	0.0	600	97.6	96.9	595
Eastern	5.3	88.4	0.0	0.0	6.0	2.6	0.3	0.0	1.0	0.2	1,041	99.6	98.7	1,039
Ashanti	1.5	92.6	0.2	0.0	4.6	1.6	0.3	0.2	2.5	0.1	2,504	95.5	94.2	2,476
Western North	1.6	93.8	0.0	0.0	5.0	1.8	0.2	0.3	1.5	0.2	353	98.6	97.4	351
Ahafo	0.1	95.0	0.3	0.0	4.9	0.8	0.1	0.1	1.6	0.1	274	98.0	96.7	273
Bono	0.0	97.2	0.0	0.0	1.7	0.6	0.0	0.2	1.0	0.0	484	97.9	97.1	478
Bono East	15.7	75.0	0.0	0.0	10.0	0.6	0.1	0.3	0.6	0.6	561	97.8	96.9	557
Oti	4.7	71.1	0.0	0.0	24.7	0.4	0.1	1.3	0.9	0.0	305	98.3	96.5	305
Northern	0.7	65.7	0.2	0.1	34.2	0.0	0.4	2.2	0.3	0.8	884	98.0	95.2	866
Savannah	0.2	80.8	0.0	0.0	19.5	0.4	0.4	1.1	0.4	0.0	245	99.2	98.2	235
North East	1.2	79.6	0.0	0.0	19.3	1.1	0.2	0.3	0.0	0.0	202	99.7	99.4	202
Upper East	0.7	92.0	0.0	0.0	7.6	0.2	0.1	0.4	0.2	0.1	471	97.7	96.9	470
Upper West	0.3	90.5	0.2	0.0	8.5	0.0	0.0	1.4	0.6	0.2	306	97.1	95.4	305
Education														
No education	2.1	65.4	0.1	0.0	32.1	0.9	0.2	1.9	1.4	0.5	1,749	98.4	95.3	1,721
Primary	3.2	83.0	0.3	0.0	14.0	0.9	0.4	0.5	1.3	0.2	1,602	97.2	95.8	1,594
Secondary	2.0	93.2	0.1	0.0	4.3	1.4	0.2	0.1	1.5	0.1	7,780	97.3	96.5	7,716
More than secondary	2.2	96.8	0.5	0.3	0.5	0.6	0.0	0.0	0.3	0.0	1,367	99.1	99.0	1,359
Wealth quintile														
Lowest	2.9	72.3	0.2	0.0	25.6	0.6	0.1	1.5	0.7	0.4	1,779	98.1	96.2	1,744
Second	1.9	83.1	0.2	0.0	15.5	0.8	0.2	0.5	1.3	0.2	2,193	98.0	96.7	2,166
Middle	1.9	89.5	0.0	0.0	7.9	1.7	0.3	0.2	2.1	0.0	2,624	97.4	96.1	2,610
Fourth	2.8	92.7	0.1	0.0	3.5	1.7	0.1	0.1	1.4	0.1	2,913	96.8	95.8	2,895
Highest	1.6	96.7	0.3	0.2	0.9	0.9	0.2	0.0	1.0	0.0	2,987	98.1	97.8	2,974
Total	2.2	88.4	0.2	0.0	9.0	1.2	0.2	0.4	1.3	0.1	12,497	97.7	96.5	12,390

[1] Reusable sanitary pads, disposable sanitary pads, tampons, menstrual cup, cloth, toilet paper, and/or cotton wool

DOMESTIC VIOLENCE 17

Key Findings

- ***Experience of violence:*** 33% of women age 15–49 have experienced physical violence since age 15.
- ***Controlling behaviours:*** 61% of women who have ever had a husband/intimate partner reported that they have experienced at least one specific type of controlling behaviour by their current or most recent husband/intimate partner.
- ***Violence by current or most recent husband/intimate partner:*** 36% of women who have ever had a husband/intimate partner report having experienced emotional, physical, or sexual violence by their current or most recent husband/intimate partner, and 28% experienced such violence in the 12 months preceding the survey.
- ***Trends in intimate partner violence by current or most recent husband/partner:*** The percentage of ever-married women who have experienced physical, sexual, or emotional violence committed by their current or most recent husband/partner decreased from 40% in 2008 to 36% in 2022.
- ***Injuries due to intimate partner violence:*** 32% of ever-married/partnered women who experienced intimate partner physical or sexual violence in the 12 months preceding the survey sustained an injury.
- ***Help seeking:*** 38% of women who have ever experienced physical or sexual violence have sought help to stop the violence.

Gender-based violence is defined by the United Nations as any act of violence that results in physical, sexual, or psychological harm or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty. Increasing research has highlighted the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations 2006).

A common form of gender-based violence is intimate partner violence, which refers to behaviour within an intimate relationship that causes physical, sexual, or psychological harm and includes acts of physical aggression, sexual coercion, psychological abuse, and controlling behaviour. This definition of intimate partner violence covers violence by both current and former spouses and partners.[1] This chapter focuses on intimate partner violence, a form of gender-based violence, and other forms of domestic violence.

Historically, The DHS Program has collected detailed information only on intimate partner violence experienced by ever-married women, defined as women who are currently married or living with a man as if married and women who were formerly married or lived with a man as if married. More recently, the questionnaire module used to capture intimate partner violence in a DHS survey was revised to also capture intimate partner violence experienced by never-married women who reported that they currently or

[1] https://apps.who.int/violence-info/intimate-partner-violence.

formerly had an intimate partner. In the 2022 Ghana DHS, the revised version of the domestic violence questionnaire module was used for the first time, and therefore indicators on intimate partner violence are reported for women who have ever had a husband or other intimate partner. In the context of the revised questionnaire module and this report, the term "boyfriend" excludes anyone reported as an intimate partner. Given these changes, when examining trends in intimate partner violence, only the estimates provided separately for ever-married women and women living with a man as if married should be compared with corresponding estimates from previous surveys.

The 2022 Ghana DHS implemented the module of questions on domestic violence in accordance with the World Health Organization's guidelines on the ethical collection of information on domestic violence (WHO 2001). Only one eligible woman per household was selected to answer this module. In households with more than one eligible woman, one respondent was randomly selected. The module was administered only if complete privacy could be obtained; among the women eligible, less than 1% were unable to be interviewed because privacy could not be obtained. Overall, among women eligible for the 2022 GDHS, 38% were eligible for the module, and 15,317 women were successfully interviewed.

17.1 Measurement of Violence

Terminology for this chapter

Husband: a man with whom a woman is married or living with as if married.

Intimate partner: a man with whom a never-married woman is in a relationship that involves physical and/or emotional intimacy and for which the relationship is or has the expectation of being longer lasting. As defined for the purposes of this chapter, an intimate partner is not a husband or a man a woman is living with and is also not a boyfriend with whom her relationship is casual or a man with whom she has a one-time encounter.

Husband/intimate partner: the current husband for currently married women; the most recent husband for divorced, separated, or widowed women; the current intimate partner for never-married women who currently have an intimate partner; and the most recent intimate partner for never-married women who do not currently have an intimate partner but had one in the past.

Boyfriend: a man with whom a woman has a casual relationship and who she did not mention as an intimate partner.

In the 2022 Ghana DHS, information was obtained from women age 15–49 on their experience of violence committed by any perpetrator, including current and former husbands or other intimate partners. To capture intimate partner violence, ever-married women were asked about their experience of violence committed by their current and former husbands/live-in partners, and, if applicable, never-married women were asked about their experience of violence committed by their current and former intimate partners. More specifically, intimate partner violence was measured by asking women if their current or former husband/intimate partner ever did the following to them:

Physical violence: push you, shake you, or throw something at you; slap you; twist your arm or pull your hair; punch you with his fist or with something that could hurt you; kick you, drag you, or beat you up; choke you or burn you on purpose; or attack you with a knife, gun, or other weapon.

Sexual violence: physically force you to have sexual intercourse with him when you did not want to, physically force you to perform any other sexual acts you did not want to, or force you with threats or in any other way to perform sexual acts you did not want to.

***Emotional violence*:** say or do something to humiliate you in front of others, threaten to hurt or harm you or someone you care about, or insult you or make you feel bad about yourself.

In addition to the questions on different forms of intimate partner violence, information was also obtained from all women about physical violence committed by anyone other than any husband/intimate partner since they were age 15 by asking if anyone had hit, slapped, kicked, or done something else to hurt them physically. Similarly, women were asked if they had experienced sexual violence committed by anyone other than any husband/intimate partner. Specifically, they were asked if at any time in their life, as a child or as an adult, they were forced in any way to have sexual intercourse or to perform any other sexual acts when they did not want to. Additionally, women who had ever been pregnant were asked about their experience of physical violence during any pregnancy.

17.2 Women's Experience of Physical Violence

Physical violence by any perpetrator

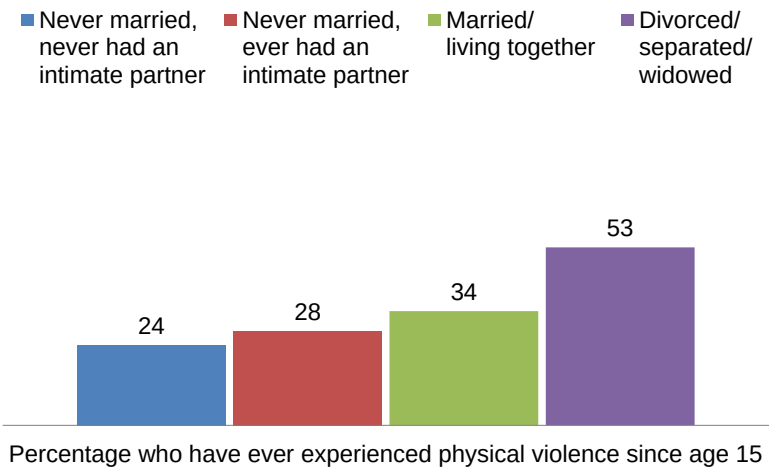
Percentage of women who have experienced any physical violence (committed by a husband, intimate partner, or anyone else) since age 15 and in the 12 months before the survey.

Sample: Women age 15–49

Thirty-three percent of women age 15–49 have experienced physical violence since age 15. Twelve percent of women experienced physical violence in the 12 months preceding the survey (**Figure 17.1** and **Table 17.1**).

Trends: The percentage of women who have experienced physical violence since age 15 decreased from 37% in 2008 to 33% in 2022.

Figure 17.1 **Women's experience of physical violence by marital status**



17.2.1 Perpetrators of Physical Violence

Among ever-married women and women who have had an intimate partner and have experienced physical violence since age 15, the most common perpetrators of violence were the current husband/intimate partner (37%) and a former husband/intimate partner (33%). Among never-married women who have never had an intimate partner, the most common perpetrators were mothers or stepmothers (28%) and fathers or stepfathers (24%); 18% of these women reported experiencing violence by a teacher and 13% by a schoolmate or classmate (**Table 17.2**).

17.2.2 Experience of Physical Violence during Pregnancy

Physical violence during pregnancy

Percentage of women who have experienced physical violence (committed by a husband, intimate partner, or anyone else) during any pregnancy.

Sample: Women age 15–49 who have ever been pregnant

In Ghana, 7% of women age 15–49 who have ever been pregnant have experienced physical violence during a pregnancy (**Table 17.3**).

17.3 Experience of Sexual Violence

Sexual violence by any perpetrator

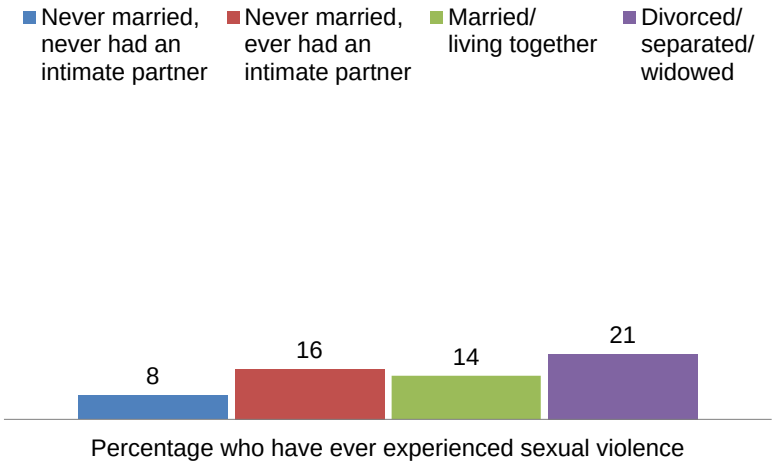
Percentage of women who have experienced any sexual violence (committed by a husband, intimate partner, or anyone else) ever and in the 12 months before the survey.

Sample: Women age 15–49

17.3.1 Prevalence of Sexual Violence

Fourteen percent of women age 15–49 have ever experienced sexual violence by any perpetrator, and 6% of women experienced sexual violence in the 12 months preceding the survey (**Table 17.4**). Experience of sexual violence is higher among divorced, separated, or widowed women (21%) than among currently married women and never-married women who have ever had an intimate partner (14% and 16%, respectively); sexual violence is lowest among never-married women who have never had an intimate partner (8%) (**Table 17.4** and **Figure 17.2**).

Figure 17.2 **Women's experience of sexual violence by marital status**



Trends: The percentage of women who have ever experienced sexual violence has declined steadily over time, from 19% in 2008 to 14% in 2022.

17.3.2 Perpetrators of Sexual Violence

Among women age 15–49 who have ever been married or had an intimate partner and have experienced sexual violence, the most common perpetrators were their current husband/intimate partner (54%) and a former husband/intimate partner (26%). Ten percent of women experienced sexual violence by a stranger and 6% by a friend or acquaintance (**Table 17.5**).

17.3.3 Experience of Sexual Violence by a Non-intimate Partner

In Ghana, 6% of women age 15–49 have ever experienced sexual violence by a non-intimate partner, and less than 1% experienced such violence in the 12 months preceding the survey. Experience of sexual violence by any non-intimate partner generally decreases with age, from 8% among women age 15–19 to 5% among women age 40–49 (**Table 17.6**).

17.3.4 Age at First Experience of Sexual Violence

Three percent of women first experienced sexual violence by age 15, while 6% first experienced such violence by age 18 and 10% by age 22 (**Table 17.7**).

17.4 Experience of Different Forms of Violence

Physical and sexual violence may not occur in isolation; rather, women may experience a combination of forms of violence. Nearly 4 in 10 women (38%) have experienced physical or sexual violence: 24% have

experienced physical violence only, 5% have experienced sexual violence only, and 9% have experienced both physical and sexual violence (**Table 17.8**).

17.5 Forms of Controlling Behaviours and Intimate Partner Violence

Controlling behaviour

Percentage of women whose current or most recent husband/intimate partner demonstrates one or more controlling behaviours.

***Sample*:** Women age 15–49 who ever had a husband or an intimate partner

Intimate partner violence

Percentage of women who have experienced any of the specified acts of physical, sexual, or emotional violence committed by their current or most recent husband/intimate partner, ever and in the 12 months preceding the survey.

Sample: Women age 15–49 who ever had a husband or an intimate partner

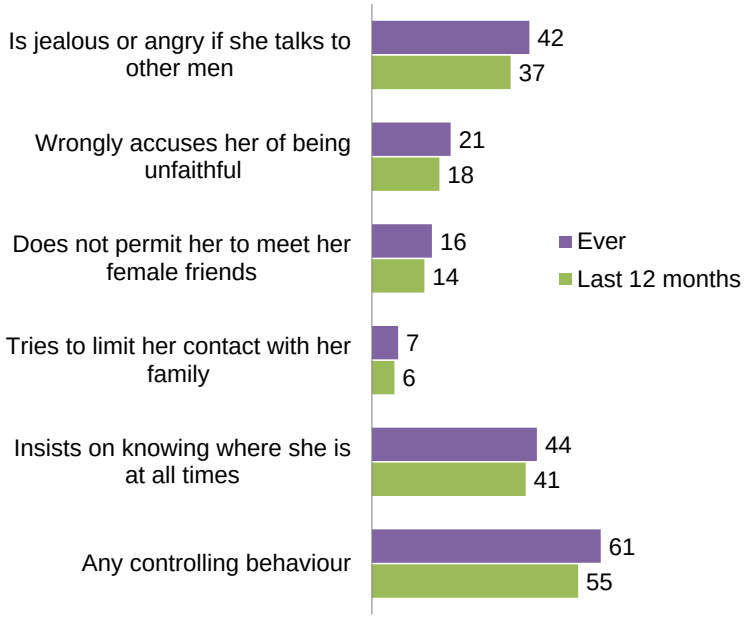
17.5.1 Prevalence of Controlling Behaviours and Intimate Partner Violence

Controlling Behaviours

Marital controlling behaviours are important early warning signs and correlates of violence in a relationship. Because the concentration of behaviours is more significant than the display of any single behaviour, the percentage of women whose husbands/partners display at least three such behaviours is also an important indicator.

***Figure 17.3* Forms of controlling behaviours**

Percentage of women age 15–49 who have ever had a husband/intimate partner and have experienced specific types of controlling behaviours



Overall, about 6 in 10 women (61%) age 15–49 who have ever had a husband/intimate partner reported that they have experienced at least one specific type of controlling behaviour by their current or most recent husband/intimate partner. The most common controlling behaviours women reported were insisting on knowing where they are at all times (44%) and jealousy or anger if they talk to other men (42%). Twenty-one percent of women said that their husband/intimate partner has wrongly accused them of being unfaithful (**Figure 17.3** and **Tables 17.9** and **17.10**).

Trends: The percentage of ever-married women whose husband/partner displays three or more controlling behaviours has remained steady over the years at 20% in 2008 and 2022.

Violence by Current or Most Recent Husband/Intimate Partner

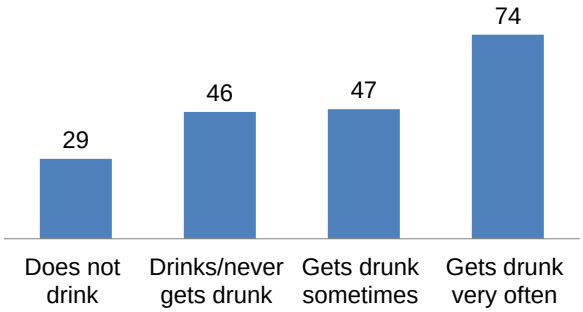
Nearly 4 out of 10 women (36%) who have ever had a husband/intimate partner report having experienced emotional, physical, or sexual violence by their current or most recent husband/intimate partner. Thirty-one percent of women have experienced emotional violence, 17% have experienced physical violence, and 8% have experienced sexual violence. Four percent of women have experienced all three types of violence (**Table 17.11**).

Women whose husband/intimate partner does not drink alcohol are much less likely (29%) to have experienced physical, sexual, or emotional violence than women whose husband/intimate partner is often drunk (74%) (**Table 17.12** and **Figure 17.4**).

Trends: The percentage of ever-married women age 15–49 who have experienced physical, sexual, or emotional intimate partner violence has decreased over time, from 40% in 2008 to 36% in 2022.

Figure 17.4 **Intimate partner violence by husband's/intimate partner's alcohol consumption**

Percentage of women who have ever had a husband/intimate partner and have ever experienced emotional, physical, or sexual violence by their husband/intimate partner



17.5.2 Intimate Partner Violence in the Last 12 Months Perpetrated by any Husband/Intimate Partner

Intimate partner violence by any partner in the last 12 months

Percentage of women who experienced any of the specified acts of physical, sexual, or emotional violence committed by any husband or any intimate partner in the 12 months preceding the survey. These indicators correspond to SDG 5.2.1.

Sample: Women age 15–49 who ever had a husband or an intimate partner

Overall, 28% of women who have ever had one or more husbands or intimate partners experienced physical, sexual, or emotional violence by any husband/intimate partner in the past 12 months. By region, the percentage of women who experienced such violence ranges from a high of 47% in Savanah to a low of 18% in Bono (**Table 17.13**).

17.6 Injuries to Women due to Intimate Partner Violence

Injuries due to intimate partner violence

Percentage of women who have the following types of injuries from intimate partner violence: cuts, bruises, or aches; eye injuries, sprains, dislocations, or burns; or deep wounds, broken bones, broken teeth, or any other serious injury.

Sample: Women age 15–49 who have experienced physical or sexual violence committed by their current or most recent husband or intimate partner

Three in 10 (31%) ever-married/partnered women who have experienced sexual or physical violence committed by their current or most recent husband/intimate partner have sustained injuries; 32% sustained

injuries after experiencing such violence in the 12 months preceding the survey. The most common injuries reported are cuts, bruises, or aches (26%), followed by eye injuries, sprains, dislocations, or burns (14%). Eight percent of women who have experienced physical or sexual intimate partner violence reported deep wounds, broken bones, broken teeth, or other serious injuries (**Table 17.14**).

17.7 Violence Initiated by Women against Their Husband/Intimate Partner

Initiation of physical violence by women

Percentage of women who have ever hit, slapped, kicked, or done anything else to physically hurt their current or most recent husband/intimate partner at times when he was not already beating or physically hurting them.

Sample: Women age 15–49 who ever had a husband or an intimate partner

Either spouse can play a role in instigating domestic violence. The 2022 GDHS asked all women responding to the domestic violence module who have ever had a husband or intimate partner if they had ever initiated acts of physical violence against their husband/intimate partner when he was not already hitting or beating them. Seven percent of women who have ever had a husband/intimate partner reported that they have initiated physical violence against their current or most recent husband/intimate partner, and 5% reported having done so in the 12 months preceding the survey. Initiation of violence against husbands or intimate partners is much more common among women who have experienced physical intimate partner violence (23%) than among women who have never experienced such violence (4%) (**Table 17.15** and **Table 17.16**).

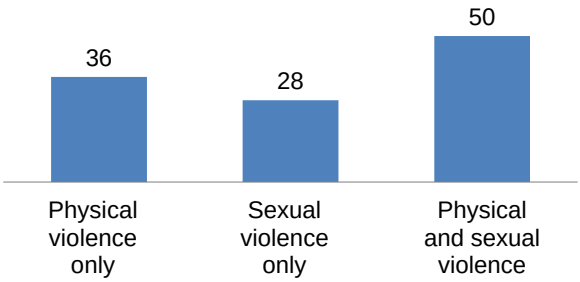
Trends: The percentage of ever-married women who have initiated violence against their husbands/partners has remained unchanged over time (7% in both 2008 and 2022). Similarly, the percentage of women who initiated violence against their husbands or partners in the 12 months preceding the survey was 5% in both 2008 and 2022.

17.8 Help Seeking among Women Who Have Experienced Violence

Fifty-one percent of women age 15–49 who have experienced physical or sexual violence have never sought help to end the violence or told anyone about the violence; 10% of women who have experienced violence told someone about the violence but did not seek help. Thirty-eight percent of women sought help to stop the violence (**Table 17.17**). Women who have experienced both physical and sexual violence are more likely (50%) to have sought help than women who have experienced physical violence only (36%) or sexual violence only (28%) (**Figure 17.5**).

***Figure 17.5* Help seeking by type of violence experienced**

Percentage of women age 15–49 who have experienced physical or sexual violence and sought help



Sources for Help

Among women who have experienced physical or sexual violence and sought help, the most common source of help is their own family (71%), followed by their husband/intimate partner's family (23%) and friends (10%) (**Table 17.18**).

List of Tables

For more information on domestic violence, see the following tables:

Table 17.1 Experience of physical violence by any perpetrator

Percentage of women age 15–49 who have experienced physical violence by any perpetrator since age 15 and percentage who experienced physical violence by any perpetrator in the 12 months preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who experienced physical violence in the last 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Age					
15–19	25.6	2.6	12.5	15.6	966
20–24	33.7	2.6	10.0	13.2	1,005
25–29	31.5	3.4	8.9	12.9	920
30–39	33.4	3.1	7.1	10.3	1,662
40–49	39.7	3.3	7.0	10.6	1,184
Religion					
Catholic	28.3	2.5	9.4	12.3	497
Anglican	(30.8)	(1.8)	(8.1)	(9.9)	53
Methodist	33.3	3.3	7.5	10.9	316
Presbyterian	30.3	2.3	5.9	9.3	341
Pentecostal/Charismatic	35.1	3.2	8.0	11.6	2,414
Other Christian	32.6	3.6	8.8	12.9	816
Islam	30.2	1.9	9.9	11.8	1,094
Traditional/spiritualist	39.5	11.1	14.6	25.7	95
No religion	51.2	1.8	22.1	23.9	105
Other	*	*	*	*	7
Ethnic group					
Akan	33.6	3.3	7.9	11.7	2,670
Ga/Dangme	31.4	1.5	9.9	12.3	389
Ewe	40.4	3.2	9.1	12.4	665
Guan	33.4	3.1	7.7	10.8	181
Mole-Dagbani	29.4	2.6	9.8	12.8	1,065
Grusi	25.6	1.1	8.8	9.8	201
Gurma	36.1	5.4	11.8	17.3	370
Mande	25.3	1.6	7.8	9.4	159
Other	(39.1)	(1.5)	(4.3)	(5.7)	36
Residence					
Urban	32.0	2.5	8.0	11.1	3,296
Rural	34.7	3.7	9.8	13.6	2,441
Region					
Western	30.5	5.0	6.5	11.8	373
Central	44.6	2.7	7.2	11.5	665
Greater Accra	29.3	1.2	7.0	8.4	937
Volta	40.2	4.1	9.2	13.3	252
Eastern	29.5	3.4	10.0	13.7	479
Ashanti	33.8	3.4	6.2	9.9	1,124
Western North	31.7	1.9	10.8	13.0	137
Ahafo	30.6	2.3	13.8	16.1	123
Bono	26.2	1.9	7.7	9.7	224
Bono East	25.7	3.7	5.5	9.5	240
Oti	36.8	2.6	14.4	17.2	146
Northern	33.9	5.0	12.7	17.6	420
Savannah	42.9	5.3	13.0	18.6	123
North East	23.7	3.5	12.7	16.2	100
Upper East	35.0	1.7	19.2	21.1	245
Upper West	23.7	2.3	9.1	11.4	148
Marital status					
Never married	26.2	1.7	8.8	11.1	1,912
Never ever had intimate partner	24.3	2.0	11.7	13.8	818
Ever had intimate partner	27.6	1.4	6.7	9.0	1,094
Ever married	36.6	3.7	8.8	12.7	3,825
Married/living together	33.8	3.4	9.2	12.8	3,259
Divorced/separated/widowed	53.3	5.4	6.1	12.1	566
Education					
No education	35.8	4.9	10.1	15.1	947
Primary	42.1	5.4	9.8	16.0	784
Secondary	32.2	2.3	8.7	11.4	3,422
More than secondary	22.2	1.3	5.7	7.1	584

Continued...

Table 17.1—*Continued*

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who experienced physical violence in the last 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Wealth quintile					
Lowest	32.5	3.4	10.8	14.3	904
Second	36.3	3.9	9.8	13.9	1,014
Middle	39.8	3.8	10.4	15.1	1,182
Fourth	33.0	1.9	9.4	11.9	1,335
Highest	25.3	2.6	4.4	7.1	1,302
Total	33.2	3.0	8.8	12.2	5,737

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes physical violence in the last 12 months. For women who were married or living together before age 15 and reported violence only by their husband and for never-married women who had an intimate partner before age 15 and reported violence only by their intimate partner, the violence could have occurred before age 15.
[2] Includes women for whom frequency in the last 12 months is not known

Table 17.2 Persons committing physical violence

Among women age 15–49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's partnership status, Ghana DHS 2022

Person	Partnership status		Total
	Ever married/ever had intimate partner	Never married/never had intimate partner	
Current husband/intimate partner	37.1	na	33.2
Former husband/intimate partner	33.4	na	29.9
Current boyfriend	0.3	1.2	0.4
Former boyfriend	3.6	1.1	3.3
Father/stepfather	10.5	23.7	11.9
Mother/stepmother	10.0	28.3	11.9
Sister/brother	10.5	9.9	10.4
Other relative	9.4	15.2	10.0
Mother-in-law	0.3	na	0.3
Father-in-law	0.2	na	0.2
Other in-law	0.7	na	0.6
Teacher	3.4	17.9	4.9
Schoolmate/classmate	3.5	13.3	4.6
Employer/someone at work	1.1	0.0	1.0
Police/soldier	0.0	0.0	0.0
Other	5.3	12.6	6.1
Number of women who have experienced physical violence since age 15	1,704	198	1,902

Note: The term husband includes a partner with whom a woman is living as if married. Percentages may add to more than 100% since women can report more than one perpetrator.
na = not applicable

Table 17.3 Experience of physical violence during pregnancy

Among women age 15–49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15–19	11.3	158
20–24	5.8	582
25–29	6.1	753
30–39	7.3	1,574
40–49	6.6	1,159
Religion		
Catholic	6.2	326
Anglican	(0.0)	42
Methodist	5.1	216
Presbyterian	7.5	248
Pentecostal/Charismatic	7.5	1,792
Other Christian	7.4	614
Islam	5.2	814
Traditional/spiritualist	10.9	84
No religion	9.7	85
Other	*	4
Ethnic group		
Akan	8.0	1,965
Ga/Dangme	3.4	262
Ewe	5.4	484
Guan	13.1	119
Mole-Dagbani	5.6	804
Grusi	4.8	143
Gurma	7.3	308
Mande	5.9	113
Other	(1.4)	29
Residence		
Urban	6.6	2,334
Rural	7.1	1,891
Region		
Western	4.5	272
Central	7.7	476
Greater Accra	4.2	650
Volta	7.3	186
Eastern	9.5	340
Ashanti	10.0	868
Western North	7.2	111
Ahafo	6.5	88
Bono	3.8	148
Bono East	4.8	181
Oti	11.3	115
Northern	5.9	333
Savannah	3.6	90
North East	4.3	81
Upper East	3.8	182
Upper West	5.1	105
Marital status		
Never married	9.1	522
Never ever had intimate partner	(10.2)	23
Ever had intimate partner	9.0	499
Ever married	6.5	3,704
Married/living together	6.0	3,158
Divorced/separated/widowed	9.4	546
Number of living children		
0	5.2	310
1–2	6.2	1,755
3–4	8.1	1,340
5+	6.8	820
Education		
No education	6.1	891
Primary	9.3	664
Secondary	6.8	2,329
More than secondary	4.0	341

Continued...

Table 17.3—*Continued*

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Wealth quintile		
Lowest	5.5	723
Second	8.7	806
Middle	10.3	857
Fourth	5.9	958
Highest	3.8	882
Total	6.8	4,226

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.4 Experience of sexual violence by any perpetrator

Percentage of women age 15–49 who have ever experienced sexual violence by any perpetrator and percentage who experienced sexual violence by any perpetrator in the 12 months preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who have experienced sexual violence by any perpetrator: Ever[1]	In the last 12 months	Number of women
Age			
15–19	10.3	4.7	966
20–24	12.6	5.0	1,005
25–29	13.6	5.1	920
30–39	16.6	7.1	1,662
40–49	15.4	5.0	1,184
Religion			
Catholic	11.4	5.0	497
Anglican	(13.4)	(2.0)	53
Methodist	13.9	3.7	316
Presbyterian	12.8	7.8	341
Pentecostal/Charismatic	16.9	5.9	2,414
Other Christian	15.2	6.8	816
Islam	8.6	3.8	1,094
Traditional/spiritualist	15.4	12.0	95
No religion	17.8	5.2	105
Other	*	*	7
Ethnic group			
Akan	14.6	4.7	2,670
Ga/Dangme	18.3	8.7	389
Ewe	17.2	7.0	665
Guan	15.7	6.4	181
Mole-Dagbani	10.9	5.5	1,065
Grusi	8.2	3.0	201
Gurma	13.2	6.5	370
Mande	11.0	6.8	159
Other	(14.7)	(3.2)	36
Residence			
Urban	14.8	5.4	3,296
Rural	13.1	5.9	2,441
Region			
Western	11.4	5.0	373
Central	19.6	6.9	665
Greater Accra	14.4	4.5	937
Volta	22.3	11.6	252
Eastern	12.9	4.7	479
Ashanti	16.8	5.3	1,124
Western North	11.5	7.4	137
Ahafo	11.0	6.6	123
Bono	9.2	2.1	224
Bono East	7.4	3.8	240
Oti	18.9	9.5	146
Northern	7.5	4.9	420
Savannah	19.6	11.1	123
North East	5.2	2.9	100
Upper East	9.0	3.7	245
Upper West	10.9	6.4	148
Marital status			
Never married	12.5	4.1	1,912
Never ever had intimate partner	7.7	1.7	818
Ever had intimate partner	16.1	5.9	1,094
Ever married	14.9	6.3	3,825
Married/living together	13.9	6.5	3,259
Divorced/separated/widowed	20.7	4.8	566
Employment			
Employed for cash	15.6	5.8	3,507
Employed not for cash	10.8	5.1	993
Not employed	12.6	5.4	1,236
Education			
No education	13.1	7.1	947
Primary	16.1	7.3	784
Secondary	14.0	5.1	3,422
More than secondary	13.9	3.5	584

Continued...

Table 17.4—*Continued*

Background characteristic	Percentage who have experienced sexual violence by any perpetrator: Ever[1]	In the last 12 months	Number of women
Wealth quintile			
Lowest	10.7	5.8	904
Second	13.3	5.1	1,014
Middle	14.9	7.1	1,182
Fourth	16.7	5.9	1,335
Highest	13.7	4.0	1,302
Total	14.1	5.6	5,737

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes experience of sexual violence in the last 12 months

Table 17.5 Persons committing sexual violence

Among women age 15–49 who have experienced sexual violence, percentage who report specific persons who committed the violence, according to the respondent's partnership status, Ghana DHS 2022

Person	Partnership status: Ever married/ever had intimate partner	Never married/never had intimate partner	Total
Current husband/intimate partner	54.3	na	50.1
Former husband/intimate partner	26.3	na	24.2
Current/former boyfriend	3.4	(11.0)	4.0
Father/stepfather	0.1	(11.9)	1.0
Brother/stepbrother	1.3	(2.6)	1.4
Other relative	4.3	(22.0)	5.6
Own friend/acquaintance	6.3	(12.0)	6.8
Family friend	4.8	(11.5)	5.3
Teacher	2.4	(0.0)	2.2
Schoolmate/classmate	1.7	(14.9)	2.8
Employer/someone at work	0.8	(0.0)	0.7
Police/soldier	0.0	(0.0)	0.0
Priest/religious leader	0.2	(0.0)	0.2
Stranger	9.6	(32.0)	11.3
Other	5.5	(5.8)	5.5
Number women who have experienced sexual violence	747	63	810

Note: The term husband includes a partner with whom a woman is living as if married. Percentages may add to more than 100% since women can report more than one perpetrator. Figures in parentheses are based on 25–49 unweighted cases.
na = not applicable

Table 17.6 Experience of sexual violence by any non-intimate partner

Percentage of women age 15–49 who have ever experienced sexual violence by someone who is not a husband or intimate partner, and percentage who experienced sexual violence by someone who is not a husband or intimate partner in the 12 months preceding the survey, according to background characteristics, Ghana DHS 2022

Background characteristic	Percentage who have experienced sexual violence by someone other than a husband/intimate partner		Number of women
	Ever[1]	In the last 12 months	
Age			
15–19	8.1	2.1	966
20–24	6.0	0.5	1,005
25–29	6.6	0.0	920
30–39	5.8	0.2	1,662
40–49	4.9	0.3	1,184
Religion			
Catholic	5.5	0.5	497
Anglican	(1.1)	(0.0)	53
Methodist	5.3	0.9	316
Presbyterian	6.0	1.2	341
Pentecostal/Charismatic	7.7	0.7	2,414
Other Christian	5.9	0.0	816
Islam	3.8	0.3	1,094
Traditional/spiritualist	2.1	1.6	95
No religion	10.1	0.0	105
Other	*	*	7
Ethnic group			
Akan	6.4	0.2	2,670
Ga/Dangme	8.3	3.2	389
Ewe	7.7	0.6	665
Guan	7.3	2.2	181
Mole-Dagbani	4.9	0.2	1,065
Grusi	3.1	0.8	201
Gurma	4.4	0.5	370
Mande	3.9	1.2	159
Other	(11.5)	(0.0)	36
Residence			
Urban	7.0	0.6	3,296
Rural	5.0	0.6	2,441
Region			
Western	3.9	0.5	373
Central	8.7	0.9	665
Greater Accra	8.4	0.9	937
Volta	10.5	0.6	252
Eastern	6.2	1.2	479
Ashanti	6.4	0.0	1,124
Western North	1.5	0.0	137
Ahafo	5.1	0.7	123
Bono	6.7	0.9	224
Bono East	2.8	0.4	240
Oti	5.8	0.2	146
Northern	2.6	0.4	420
Savannah	6.5	1.8	123
North East	0.9	0.2	100
Upper East	4.5	0.2	245
Upper West	3.7	0.3	148
Marital status			
Never married	8.0	1.2	1,912
Never ever had intimate partner	7.7	1.7	818
Ever had intimate partner	8.2	0.8	1,094
Ever married	5.3	0.3	3,825
Married/living together	5.3	0.3	3,259
Divorced/separated/widowed	4.8	0.0	566
Education			
No education	2.8	0.2	947
Primary	5.5	1.7	784
Secondary	6.9	0.5	3,422
More than secondary	8.4	0.3	584

Continued...

Table 17.6—*Continued*

Background characteristic	Percentage who have experienced sexual violence by someone other than a husband/intimate partner: Ever[1]	In the last 12 months	Number of women
Wealth quintile			
Lowest	3.2	0.5	904
Second	5.3	0.5	1,014
Middle	5.8	0.6	1,182
Fourth	7.8	0.6	1,335
Highest	7.6	0.6	1,302
Total	6.2	0.6	5,737

Note: The term husband includes a partner with whom a woman is living as if married. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes experience of violence in the last 12 months

Table 17.7 Age at first experience of sexual violence

Percentage of women age 15–49 who experienced sexual violence by specific exact ages, according to current age and type of perpetrator, Ghana DHS 2022

Background characteristic	Percentage who first experienced sexual violence by exact age: 10	12	15	18	22	Percentage who have not experienced sexual violence	Number of women
Age							
15–19	1.2	1.2	4.0	na	na	89.7	966
20–24	0.5	1.4	2.9	7.0	na	87.4	1,005
25–29	0.7	1.0	3.3	6.2	9.3	86.4	920
30–39	0.6	1.5	2.5	5.7	9.7	83.4	1,662
40–49	0.3	0.7	1.7	4.3	7.4	84.6	1,184
18–29	0.8	1.4	3.1	6.9	na	87.5	2,263
Total	0.7	1.2	2.8	6.4	9.5	85.9	5,737
Type of perpetrator							
Any husband/intimate partner[1]	0.1	0.2	0.6	2.6	5.6	84.8	4,919
Any non-intimate partner[2]	0.6	1.0	2.4	4.7	5.6	93.6	5,737

Note: The term husband includes a partner with whom a woman is living as if married.
na = not applicable
[1] Includes only ever-married women and never-married women who have ever had an intimate partner
[2] Includes all women

Table 17.8 Experience of different forms of violence

Percentage of women age 15–49 who have ever experienced different forms of violence, by current age, Ghana DHS 2022

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15–19	20.4	5.1	5.2	30.7	966
15–17	18.7	4.7	6.2	29.6	628
18–19	23.5	5.7	3.4	32.6	339
20–24	25.9	4.8	7.8	38.5	1,005
25–29	22.7	4.8	8.8	36.3	920
30–39	22.6	5.7	10.8	39.2	1,662
40–49	28.3	4.0	11.4	43.7	1,184
Total	24.0	5.0	9.2	38.1	5,737

Table 17.9 Forms of controlling behaviours and intimate partner violence

Percentage of women age 15–49 who have ever had a husband or intimate partner and have experienced controlling behaviours and various forms of intimate partner violence ever or in the 12 months preceding the survey perpetrated by a husband or intimate partner, Ghana DHS 2022

Type of violence experienced	Ever experienced	Experienced in the last 12 months	Frequency in the last 12 months	
			Often	Sometimes
Controlling behaviour				
Any controlling behaviour	61.0	55.4	32.9	22.5
Is jealous or angry if she talks to other men	41.9	36.6	15.7	20.9
Wrongly accuses her of being unfaithful	20.8	17.7	7.2	10.4
Does not permit her to meet her female friends	15.7	13.8	7.1	6.7
Tries to limit her contact with her family	6.6	5.7	2.3	3.4
Insists on knowing where she is at all times	44.4	40.6	24.4	16.2
Physical violence				
Any physical violence	16.9	9.4	2.8	6.6
Pushed her, shook her, or threw something at her	9.4	5.8	1.6	4.2
Slapped her	11.6	5.7	1.3	4.4
Twisted her arm or pulled her hair	4.2	2.4	0.7	1.8
Punched her with his fist or with something that could hurt her	6.3	3.5	0.9	2.7
Kicked her, dragged her, or beat her up	6.6	3.5	1.2	2.3
Tried to choke her or burn her on purpose	1.9	1.2	0.3	0.9
Attacked her with a knife, gun, or other weapon	1.1	0.5	0.1	0.4
Sexual violence				
Any sexual violence	8.2	5.9	1.6	4.2
Physically forced her to have sexual intercourse with him when she did not want to	7.4	5.2	1.4	3.9
Physically forced her to perform any other sexual acts she did not want to	3.4	2.3	0.5	1.9
Forced her with threats or in any other way to perform sexual acts she did not want to	2.5	1.8	0.6	1.2
Emotional violence				
Any emotional violence	31.3	25.1	7.9	17.3
Said or did something to humiliate her in front of others	16.9	12.8	4.8	8.1
Threatened to hurt or harm her or someone she cared about	6.9	5.1	2.0	3.1
Insulted her or made her feel bad about herself	27.1	21.7	6.3	15.4
At least three forms of controlling behaviours	20.2	18.7	14.5	4.1
Any form of physical and/or sexual violence	20.6	12.6	3.9	8.7
Any form of emotional and/or physical and/or sexual violence	36.2	27.9	8.8	19.1
Intimate partner violence perpetrated by any current or previous husband or intimate partner				
Physical violence	22.7	9.8	na	na
Sexual violence	11.2	6.1	na	na
Emotional violence	35.2	25.5	na	na
Any form of physical or sexual violence	27.1	13.0	na	na
Any form of emotional or physical or sexual violence	41.6	28.4	na	na
Number of women ever-married or never-married who ever had an intimate partner	4,919	4,919	4,919	4,919

Note: The term husband includes a partner with whom a woman is living as if married. Husband/intimate partner refers to the current husband for currently married women; the most recent husband for divorced, separated, or widowed women; the current intimate partner for never-married women who currently have an intimate partner; and the most recent intimate partner for never-married women who do not currently have an intimate partner but had one in the past.
na = not available

Table 17.10 Controlling behaviours of husband/intimate partner by background characteristics

Percentage of women age 15–49 who have ever had a husband or intimate partner whose husband/intimate partner has ever demonstrated specific types of controlling behaviours, according to background characteristics, Ghana DHS 2022

	Percentage of women whose husband/intimate partner:								
Background characteristic	Is jealous or angry if she talks to other men	Wrongly accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Does not trust her with any money	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of women who ever had a husband/ intimate partner
Age									
15–19	48.3	27.5	10.8	3.2	50.9	0.0	23.9	32.5	351
20–24	52.3	25.8	20.7	5.3	54.0	0.0	25.4	27.5	872
25–29	47.4	22.7	14.4	6.0	46.0	0.0	21.7	33.2	884
30–39	37.8	16.6	15.8	6.9	41.5	0.0	17.3	44.1	1,635
40–49	33.7	19.5	14.4	8.5	38.1	0.0	18.3	46.7	1,177
Religion									
Catholic	38.5	22.6	13.7	6.8	41.3	0.0	19.3	40.0	394
Anglican	(53.6)	(27.0)	(26.5)	(12.9)	(41.1)	(0.0)	(27.4)	(33.3)	50
Methodist	50.6	27.8	14.4	9.3	46.5	0.0	22.4	32.4	265
Presbyterian	39.8	22.2	14.7	9.4	48.4	0.0	22.1	39.7	287
Pentecostal/Charismatic	43.7	21.5	16.0	5.7	46.7	0.0	21.4	37.2	2,094
Other Christian	37.9	22.8	17.9	5.7	40.7	0.0	20.4	40.8	720
Islam	39.3	13.1	13.9	6.4	39.8	0.0	15.0	44.6	926
Traditional/spiritualist	40.5	23.1	21.1	18.5	52.3	0.0	28.6	33.9	85
No religion	44.1	27.0	16.3	5.0	54.3	0.0	22.6	30.6	95
Other	*	*	*	*	*	*	*	*	4
Ethnic group									
Akan	42.9	24.5	17.3	6.0	45.4	0.0	22.7	36.5	2,312
Ga/Dangme	44.8	17.7	11.0	4.5	44.5	0.0	18.5	41.4	318
Ewe	42.3	23.7	17.3	7.6	45.8	0.0	22.4	39.2	562
Guan	45.1	20.8	19.9	6.5	45.9	0.0	17.7	36.2	148
Mole-Dagbani	39.7	14.9	12.6	6.8	41.6	0.0	15.8	42.6	906
Grusi	37.7	14.3	12.1	7.1	38.6	0.0	17.0	42.8	156
Gurma	37.5	15.5	16.1	10.1	46.0	0.0	19.4	42.4	345
Mande	39.5	15.3	15.3	8.2	37.9	0.0	13.7	42.1	140
Other	(50.1)	(12.4)	(4.7)	(1.7)	(48.6)	(0.0)	(12.7)	(37.4)	32
Residence									
Urban	42.7	20.3	16.1	5.8	43.3	0.0	19.6	38.9	2,772
Rural	40.8	21.5	15.2	7.6	45.8	0.0	21.1	39.2	2,148
Region									
Western	42.7	14.6	11.6	5.8	47.9	0.0	15.4	35.3	317
Central	50.7	31.1	23.1	7.9	55.5	0.0	31.1	29.7	558
Greater Accra	39.8	17.8	9.4	3.5	36.7	0.0	17.1	47.9	784
Volta	47.3	22.7	18.2	12.2	48.4	0.0	24.0	33.9	225
Eastern	42.1	26.0	17.7	4.7	41.1	0.0	21.9	39.6	403
Ashanti	41.0	24.0	18.2	4.7	42.2	0.0	20.2	36.9	986
Western North	34.8	16.9	9.3	2.7	49.5	0.0	14.9	40.0	128
Ahafo	40.9	16.5	16.0	6.6	56.1	0.0	18.2	31.5	105
Bono	41.1	21.5	11.3	8.2	39.4	0.0	17.9	42.8	184
Bono East	28.4	13.2	7.2	3.2	34.9	0.0	11.7	55.3	204
Oti	38.4	19.3	20.2	8.3	49.0	0.0	21.7	35.1	130
Northern	44.7	12.0	16.0	12.0	51.6	0.0	18.6	34.0	367
Savannah	49.9	25.6	31.7	12.3	63.5	0.0	28.9	23.5	104
North East	37.1	16.7	16.6	9.3	36.5	0.0	19.0	45.5	90
Upper East	38.6	15.7	11.3	10.5	34.0	0.0	15.2	47.2	208
Upper West	37.9	17.0	17.2	9.4	42.4	0.0	21.4	43.9	126
Marital status									
Never married	50.1	25.0	12.6	3.1	49.3	0.0	20.3	30.0	1,094
Currently has intimate partner	51.5	25.9	11.1	2.6	51.0	0.0	20.3	28.1	846
Had intimate partner	45.3	22.2	17.6	4.5	43.6	0.0	20.0	36.5	248
Ever married	39.5	19.6	16.6	7.6	42.9	0.0	20.2	41.6	3,825
Married/living together	37.4	17.6	15.9	6.5	41.4	0.0	18.3	43.0	3,259
Divorced/separated/ widowed	51.8	30.7	20.6	14.3	51.8	0.0	31.4	33.6	566
Education									
No education	35.5	15.1	16.6	8.9	41.3	0.0	16.8	44.1	914
Primary	44.4	27.2	17.8	8.1	46.2	0.0	27.1	37.4	696
Secondary	44.2	22.4	15.7	5.9	46.2	0.0	21.2	37.1	2,789
More than secondary	36.9	13.5	11.7	4.3	37.3	0.0	12.0	42.3	521

Continued...

Table 17.10—*Continued*

Background characteristic	Percentage of women whose husband/intimate partner: Is jealous or angry if she talks to other men	Wrongly accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Does not trust her with any money	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of women who ever had a husband/ intimate partner
Wealth quintile									
Lowest	37.1	19.2	16.0	10.0	43.6	0.0	19.5	41.6	797
Second	45.3	22.6	16.5	8.1	49.2	0.0	24.3	37.1	887
Middle	44.8	25.8	16.1	6.2	47.9	0.0	24.5	37.2	983
Fourth	42.2	20.5	16.4	5.2	44.6	0.0	17.9	36.9	1,157
Highest	39.5	16.3	13.8	4.8	37.6	0.0	16.1	42.5	1,095
Woman afraid of husband/ intimate partner									
Afraid most of the time	53.6	30.1	30.8	19.0	62.9	0.0	39.3	25.6	321
Sometimes afraid	51.5	27.1	19.7	9.2	52.0	0.0	28.2	29.9	946
Never afraid	38.3	18.3	13.4	4.8	40.8	0.0	16.5	42.5	3,653
Total	41.9	20.8	15.7	6.6	44.4	0.0	20.2	39.0	4,919

Note: The term husband includes a partner with whom a woman is living as if married. Husband/intimate partner refers to the current husband for currently married women; the most recent husband for divorced, separated, or widowed women; the current intimate partner for never-married women who currently have an intimate partner; and the most recent intimate partner for never-married women who do not currently have an intimate partner but had one in the past. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.11 Intimate partner violence by background characteristics

Percentage of women age 15–49 who have ever had a husband or intimate partner and have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/intimate partner, according to background characteristics, Ghana DHS 2022

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of women who ever had a husband/ intimate partner
Age								
15–19	19.7	11.6	7.2	2.1	2.0	16.6	26.0	351
20–24	28.8	15.3	7.2	3.2	2.9	19.2	33.7	872
25–29	28.7	12.0	6.3	3.6	3.6	14.7	33.0	884
30–39	29.3	15.9	9.0	4.5	4.3	20.4	34.8	1,635
40–49	41.4	24.6	9.8	6.9	6.0	27.5	45.3	1,177
Religion								
Catholic	26.2	12.0	7.2	2.6	2.5	16.7	31.0	394
Anglican	(25.8)	(19.6)	(5.7)	(0.2)	(0.2)	(25.0)	(42.9)	50
Methodist	35.6	19.2	7.2	5.3	4.2	21.0	39.4	265
Presbyterian	34.2	12.8	9.9	3.9	3.9	18.8	37.3	287
Pentecostal/Charismatic	31.6	17.2	9.0	5.2	4.8	21.0	36.1	2,094
Other Christian	34.2	17.6	9.6	5.0	4.7	22.3	39.2	720
Islam	27.5	15.3	5.3	2.9	2.8	17.7	32.2	926
Traditional/spiritualist	38.7	27.8	12.4	9.1	9.1	31.1	44.8	85
No religion	35.3	30.9	9.1	5.7	5.7	34.3	49.0	95
Other	*	*	*	*	*	*	*	4
Ethnic group								
Akan	30.9	16.5	8.1	4.8	4.5	19.8	35.4	2,312
Ga/Dangme	33.1	17.9	8.7	4.5	4.4	22.0	35.7	318
Ewe	35.4	19.7	10.8	6.9	5.9	23.5	41.0	562
Guan	37.8	20.8	10.3	5.3	4.6	25.9	43.4	148
Mole-Dagbani	27.8	15.4	6.9	2.7	2.6	19.6	34.1	906
Grusi	29.4	14.2	5.2	0.7	0.4	18.7	33.8	156
Gurma	34.4	18.3	8.5	4.8	4.6	22.0	39.3	345
Mande	26.5	13.4	9.7	4.3	4.3	18.8	28.5	140
Other	(37.2)	(18.9)	(3.6)	(2.2)	(0.5)	(20.3)	(43.6)	32
Residence								
Urban	29.9	15.2	8.4	5.0	4.5	18.6	34.2	2,772
Rural	33.2	19.0	8.1	3.9	3.7	23.2	38.7	2,148
Region								
Western	36.1	20.6	8.0	4.2	4.2	24.3	40.2	317
Central	38.7	20.8	11.5	6.7	5.9	25.5	44.0	558
Greater Accra	31.2	12.4	6.9	4.3	3.7	15.0	33.5	784
Volta	39.0	18.1	14.2	7.2	7.0	25.0	43.6	225
Eastern	30.6	17.4	6.1	4.0	3.6	19.5	34.2	403
Ashanti	27.2	15.1	9.4	4.5	4.4	19.9	33.5	986
Western North	25.7	14.9	8.5	5.4	5.4	18.1	30.4	128
Ahafo	32.6	20.1	8.0	2.2	1.3	25.9	44.0	105
Bono	23.5	14.7	3.1	2.9	2.6	15.0	26.3	184
Bono East	25.3	14.9	4.9	3.2	2.9	16.6	28.7	204
Oti	33.8	19.5	13.6	8.2	7.7	25.0	40.9	130
Northern	34.1	21.2	5.4	2.7	2.7	23.9	40.1	367
Savannah	43.6	25.6	16.0	7.4	6.1	34.1	53.4	104
North East	23.9	14.5	3.9	1.9	1.9	16.5	27.2	90
Upper East	29.8	16.4	5.2	2.2	2.0	19.4	34.0	208
Upper West	20.7	12.9	8.2	3.4	3.4	17.7	27.4	126
Marital status								
Never married	21.6	8.1	6.4	2.1	1.9	12.4	26.4	1,094
Currently has intimate partner	20.4	7.8	5.6	2.0	1.8	11.4	24.6	846
Had intimate partner	25.6	9.1	9.2	2.5	2.5	15.8	32.3	248
Ever married	34.1	19.4	8.8	5.2	4.8	22.9	39.0	3,825
Married/living together	31.4	17.2	7.6	4.1	3.8	20.7	36.2	3,259
Divorced/separated/widowed	49.8	31.8	15.6	11.6	10.5	35.8	54.7	566
Employment								
Employed for cash	34.6	18.4	8.6	4.9	4.5	22.0	39.5	3,365
Employed not for cash	25.1	14.6	5.9	3.7	3.6	16.8	28.9	835
Not employed	23.2	12.4	9.5	3.6	3.4	18.3	29.1	719
Education								
No education	35.8	23.7	9.3	5.1	4.9	27.9	42.1	914
Primary	40.4	22.2	9.2	3.5	3.4	27.9	44.9	696
Secondary	29.8	15.4	8.3	5.1	4.6	18.6	34.5	2,789
More than secondary	19.4	5.6	4.8	1.6	1.6	8.8	23.0	521

Continued...

Table 17.11—*Continued*

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of women who ever had a husband/ intimate partner
Wealth quintile								
Lowest	33.5	21.2	7.3	3.0	2.7	25.6	39.8	797
Second	36.2	18.0	8.5	4.6	4.4	21.9	40.8	887
Middle	34.5	19.6	10.0	5.8	5.6	23.8	39.4	983
Fourth	28.2	17.3	9.0	5.1	4.7	21.3	33.5	1,157
Highest	26.2	9.8	6.3	3.7	3.3	12.4	29.7	1,095
Total	31.3	16.9	8.2	4.5	4.2	20.6	36.2	4,919

Note: The term husband includes a partner with whom a woman is living as if married. Husband/intimate partner refers to the current husband for currently married women; the most recent husband for divorced, separated, or widowed women; the current intimate partner for never-married women who currently have an intimate partner; and the most recent intimate partner for never-married women who do not currently have an intimate partner but had one in the past. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.12 Intimate partner violence by husband's/intimate partner's characteristics and women's empowerment indicators

Percentage of women age 15–49 who have ever had a husband or intimate partner and have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/intimate partner, according to the husband's/intimate partner's characteristics and women's empowerment indicators, Ghana DHS 2022

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of women who ever had a husband/ intimate partner
Husband's/intimate partner's alcohol consumption								
Does not drink alcohol	24.6	12.3	5.0	2.1	2.0	15.2	29.2	3,447
Drinks alcohol but is never drunk	43.2	18.2	8.8	6.4	4.8	20.7	45.7	263
Is sometimes drunk	40.7	22.7	13.3	8.0	7.2	28.0	46.9	887
Is often drunk	67.7	48.1	28.8	19.4	18.9	57.5	73.5	323
Husband's education[1]								
No education	34.9	20.7	7.2	3.9	3.4	24.1	40.6	690
Primary	42.9	30.7	7.4	4.3	3.5	33.7	53.5	296
Secondary	30.5	16.0	7.9	4.6	4.4	19.3	34.3	1,752
More than secondary	21.4	7.2	7.3	2.6	2.5	11.9	25.5	483
Don't know/missing	(43.6)	(31.4)	(4.9)	(2.1)	(2.1)	(34.2)	(48.7)	38
Spousal education difference[1]								
Husband better educated	32.5	17.9	9.0	4.5	4.2	22.5	37.4	1,264
Wife better educated	35.6	18.6	6.6	4.3	3.6	20.9	41.8	570
Both equally educated	26.2	12.6	6.6	3.9	3.8	15.4	29.7	901
Neither educated	32.2	21.0	7.0	3.4	3.1	24.7	38.1	486
Don't know/missing	(43.6)	(31.4)	(4.9)	(2.1)	(2.1)	(34.2)	(48.7)	38
Spousal age difference[1]								
Wife older	30.2	18.9	12.1	7.4	6.2	23.6	36.1	155
Wife is same age	31.9	19.6	6.1	2.9	2.9	22.8	34.7	135
Wife 1–4 years younger	29.3	18.1	8.2	4.7	4.6	21.6	35.2	1,102
Wife 5–9 years younger	30.4	16.7	6.6	3.8	3.7	19.5	34.7	1,045
Wife 10 or more years younger	35.5	16.0	7.4	3.1	2.6	20.3	39.9	821
Number of decisions in which women participate[2]								
0	27.6	15.8	7.0	3.2	3.1	19.6	32.0	368
1–2	33.4	18.4	8.8	4.3	4.2	22.8	39.6	1,105
3	30.9	16.8	7.0	4.2	3.7	19.6	35.1	1,785
Number of controlling behaviours displayed by husband/intimate partner[3]								
0	16.3	6.7	2.5	0.7	0.6	8.5	19.8	1,918
1–2	31.3	15.9	8.1	3.6	3.2	20.4	37.4	2,006
3–4	57.1	36.5	17.5	12.9	12.0	41.1	62.2	871
5	82.1	52.1	35.7	20.3	20.1	67.6	86.0	125
Number of reasons for which wife beating is justified[4]								
0	29.2	14.2	7.8	4.3	4.0	17.7	33.5	3,956
1–2	39.4	25.5	11.3	5.3	5.0	31.5	45.6	635
3–4	39.0	31.7	7.3	5.9	5.0	33.0	48.1	244
5	45.7	32.8	9.2	2.7	2.7	39.3	55.7	84
Woman's father beat mother								
Yes	43.5	26.2	15.0	7.3	7.0	33.9	52.3	608
No	29.3	15.3	7.2	4.0	3.7	18.5	33.5	4,191
Don't know	39.5	24.2	10.2	8.6	7.2	25.7	47.8	120
Woman afraid of husband/ intimate partner								
Afraid most of the time	61.4	51.9	25.1	19.6	18.9	57.4	71.1	321
Sometimes afraid	45.8	26.7	13.1	6.8	6.5	33.1	52.1	946
Never afraid	24.9	11.2	5.5	2.6	2.3	14.1	29.0	3,653
Total	31.3	16.9	8.2	4.5	4.2	20.6	36.2	4,919

Note: The term husband includes a partner with whom a woman is living as if married. Husband/intimate partner refers to the current husband for currently married women; the most recent husband for divorced, separated, or widowed women; the current intimate partner for never-married women who currently have an intimate partner; and the most recent intimate partner for never-married women who do not currently have an intimate partner but had one in the past. Figures in parentheses are based on 25–49 unweighted cases.

[1] Includes only currently married women

[2] According to the wife's report. Includes only currently married women. See Table 15.8.1 for list of decisions.

[3] According to the woman's report. See Table 17.9 for list of behaviours.

[4] According to the woman's report. See Table 15.9.1 for list of reasons.

Table 17.13 Violence by any husband or intimate partner in the last 12 months

Percentage of women age 15–49 who have ever had a husband or intimate partner and experienced emotional, physical, or sexual violence by any husband/intimate partner in the last 12 months, according to background characteristics, Ghana DHS 2022

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of women who ever had a husband/ intimate partner
Age								
15–19	19.3	10.5	7.6	1.9	1.9	16.1	25.0	351
20–24	27.5	13.1	5.5	2.5	2.3	16.1	31.1	872
25–29	24.7	8.2	5.3	3.1	3.0	10.4	27.3	884
30–39	24.5	9.2	7.2	3.1	3.1	13.3	27.7	1,635
40–49	27.8	9.3	5.0	2.8	2.6	11.5	29.1	1,177
Residence								
Urban	23.9	8.7	6.0	3.1	3.0	11.6	26.6	2,772
Rural	27.5	11.3	6.1	2.5	2.4	14.9	30.7	2,148
Region								
Western	25.7	10.3	5.7	3.0	3.0	12.9	28.2	317
Central	32.6	10.1	8.3	3.7	3.5	14.6	34.8	558
Greater Accra	23.3	4.9	4.5	2.4	2.4	6.9	24.0	784
Volta	33.3	11.5	12.3	5.4	5.4	18.4	36.3	225
Eastern	24.5	12.4	4.1	2.9	2.7	13.6	27.0	403
Ashanti	20.8	7.3	6.0	2.2	2.2	11.1	24.1	986
Western North	22.6	9.4	7.9	3.5	3.5	13.8	25.8	128
Ahafo	30.7	15.3	6.8	2.3	1.3	19.8	38.5	105
Bono	16.1	8.4	1.5	1.5	1.2	8.4	18.3	184
Bono East	22.5	10.0	4.0	2.4	2.0	11.6	24.6	204
Oti	28.2	13.9	10.6	6.2	6.2	18.2	32.3	130
Northern	31.7	16.8	5.2	2.5	2.5	19.5	36.7	367
Savannah	39.4	17.0	12.6	4.7	4.3	24.9	46.9	104
North East	23.0	13.1	3.2	1.4	1.4	14.8	25.6	90
Upper East	26.4	12.4	4.2	1.8	1.8	14.8	29.5	208
Upper West	18.0	8.2	7.3	2.7	2.5	12.7	22.2	126
Marital status								
Never married	19.4	5.9	5.3	1.7	1.6	9.4	22.7	1,094
Currently has intimate partner	20.4	6.6	5.6	1.8	1.6	10.4	24.3	846
Had intimate partner	15.7	3.4	4.2	1.5	1.5	6.2	17.3	248
Ever married	27.3	11.0	6.3	3.2	3.1	14.1	30.0	3,825
Married/living together	28.1	11.2	6.5	3.2	3.1	14.5	31.1	3,259
Divorced/separated/widowed	22.6	9.6	4.8	2.9	2.9	11.5	23.8	566
Education								
No education	30.6	13.8	7.2	3.5	3.4	17.6	34.3	914
Primary	34.6	12.9	7.0	2.3	2.3	17.6	37.1	696
Secondary	23.6	9.1	5.9	3.1	2.9	12.0	26.5	2,789
More than secondary	14.3	2.5	3.5	1.3	1.3	4.7	16.3	521
Wealth quintile								
Lowest	29.3	13.1	6.0	2.3	2.0	16.8	33.2	797
Second	28.3	10.2	5.5	2.3	2.2	13.4	31.1	887
Middle	30.3	13.3	8.0	4.1	4.0	17.1	33.9	983
Fourth	23.1	9.9	6.8	3.6	3.5	13.1	25.9	1,157
Highest	18.8	4.0	4.1	1.8	1.7	6.3	20.3	1,095
Total	25.5	9.8	6.1	2.9	2.7	13.0	28.4	4,919

Note: The term husband includes a partner with whom a woman is living as if married. Any husband/intimate partner includes all current, most recent, and former husbands for ever-married women and all current, most recent, or former intimate partners for never-married women.

Table 17.14 Injuries to women due to intimate partner violence

Among women age 15–49 who have ever had a husband or intimate partner and have experienced violence committed by their current or most recent husband/intimate partner, percentage who have been injured as a result of the violence, by types of injuries, according to type of violence, Ghana DHS 2022

Type of violence experienced	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of women who have experienced specified type of violence
Physical violence[1]					
Ever[2]	31.1	17.0	9.7	37.2	829
Last 12 months	31.8	19.5	10.2	39.5	463
Sexual violence					
Ever[2]	29.6	16.7	9.0	34.0	406
Last 12 months	24.3	16.2	10.2	30.1	289
Physical or sexual violence[1]					
Ever[2]	26.1	14.3	8.0	31.4	1,013
Last 12 months	25.0	15.5	7.8	31.5	617

Note: The term husband includes a partner with whom a woman is living as if married. Husband/intimate partner refers to the current husband for currently married women; the most recent husband for divorced, separated, or widowed women; the current intimate partner for never-married women who currently have an intimate partner; and the most recent intimate partner for never-married women who do not currently have an intimate partner but had one in the past.

[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy

[2] Includes in the last 12 months

Table 17.15 Violence by women against their husband/intimate partner by women's background characteristics

Percentage of women age 15–49 who have ever had a husband or intimate partner and have committed physical violence against their current or most recent husband/intimate partner when he was not already beating or physically hurting them, ever and in the last 12 months, according to women's own experience of intimate partner violence and background characteristics, Ghana DHS 2022

Background characteristic	Percentage who have committed physical violence against their husband/ intimate partner		Number of women who ever had a husband/ intimate partner
	Ever[1]	In the last 12 months	
Women's experience of physical intimate partner violence			
Ever[1]	23.4	14.9	829
In the last 12 months	24.2	21.4	463
Never	3.6	2.4	4,090
Age			
15–19	5.3	4.6	351
20–24	7.0	5.8	872
25–29	5.6	4.4	884
30–39	6.5	4.3	1,635
40–49	9.1	3.9	1,177
Religion			
Catholic	4.3	2.5	394
Anglican	(9.3)	(3.4)	50
Methodist	10.8	9.1	265
Presbyterian	6.8	4.0	287
Pentecostal/Charismatic	7.7	4.8	2,094
Other Christian	10.2	6.5	720
Islam	2.5	1.6	926
Traditional/spiritualist	3.5	3.5	85
No religion	13.4	10.7	95
Other	*	*	4
Ethnic group			
Akan	10.5	6.6	2,312
Ga/Dangme	6.6	3.8	318
Ewe	6.3	5.4	562
Guan	3.4	2.9	148
Mole-Dagbani	2.3	1.5	906
Grusi	4.2	3.6	156
Gurma	1.6	0.7	345
Mande	2.5	1.3	140
Other	(8.3)	(0.5)	32
Residence			
Urban	7.2	4.6	2,772
Rural	6.7	4.4	2,148
Region			
Western	7.4	4.7	317
Central	8.7	5.3	558
Greater Accra	4.0	2.2	784
Volta	5.2	4.0	225
Eastern	7.8	6.6	403
Ashanti	14.9	9.4	986
Western North	9.3	4.7	128
Ahafo	4.5	3.0	105
Bono	2.5	2.2	184
Bono East	2.6	0.9	204
Oti	1.7	1.3	130
Northern	1.9	1.9	367
Savannah	1.1	0.5	104
North East	3.4	3.4	90
Upper East	3.7	1.5	208
Upper West	2.1	1.5	126
Marital status			
Never married	5.1	3.6	1,094
Currently has intimate partner	5.8	4.0	846
Had intimate partner	2.9	2.1	248
Ever married	7.5	4.8	3,825
Married/living together	6.6	4.6	3,259
Divorced/separated/widowed	12.9	6.0	566
Employment			
Employed for cash	8.0	4.8	3,365
Employed not for cash	5.2	4.4	835
Not employed	4.1	3.5	719

Continued...

Table 17.15—*Continued*

Background characteristic	Percentage who have committed physical violence against their husband/ intimate partner		Number of women who ever had a husband/ intimate partner
	Ever[1]	In the last 12 months	
Education			
No education	5.6	3.9	914
Primary	8.4	5.7	696
Secondary	7.6	4.9	2,789
More than secondary	3.9	1.7	521
Wealth quintile			
Lowest	2.7	1.4	797
Second	9.9	6.7	887
Middle	8.6	6.0	983
Fourth	7.6	4.7	1,157
Highest	5.6	3.4	1,095
Total	7.0	4.5	4,919

Note: The term husband includes a partner with whom a woman is living as if married. Husband/intimate partner refers to the current husband for currently married women; the most recent husband for divorced, separated, or widowed women; the current intimate partner for never-married women who currently have an intimate partner; and the most recent intimate partner for never-married women who do not currently have an intimate partner but had one in the past. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes in the last 12 months

Table 17.16 Violence by women against their husband/intimate partner by husband's/intimate partner's characteristics and women's empowerment indicators

Percentage of women age 15–49 who have ever had a husband or intimate partner and have committed physical violence against their current or most recent husband/intimate partner when he was not already beating or physically hurting them, ever and in the last 12 months, according to their husband's/intimate partner's characteristics and women's empowerment indicators, Ghana DHS 2022

Background characteristic	Percentage who committed physical violence against their husband/ intimate partner		Number of women who ever had a husband/ intimate partner
	Ever[1]	Last 12 months	
Husband's/intimate partner's alcohol consumption			
Does not drink alcohol	4.4	3.1	3,447
Drinks alcohol but is never drunk	7.1	2.7	263
Is sometimes drunk	11.5	6.5	887
Is often drunk	22.3	15.8	323
Husband's education[2]			
No education	6.0	3.8	690
Primary	7.9	6.2	296
Secondary	7.5	5.6	1,752
More than secondary	2.9	0.8	483
Don't know/missing	(9.6)	(9.6)	38
Spousal education difference[2]			
Husband better educated	6.7	4.5	1,264
Wife better educated	8.4	5.3	570
Both equally educated	6.5	4.9	901
Neither educated	3.9	2.8	486
Don't know /missing	(9.6)	(9.6)	38
Spousal age difference[2]			
Wife older	3.5	1.5	155
Wife is same age	7.9	7.5	135
Wife 1–4 years younger	6.9	4.8	1,102
Wife 5–9 years younger	6.7	5.2	1,045
Wife 10 or more years younger	6.2	3.7	821
Number of decisions in which women participate[3]			
0	3.3	2.8	368
1–2	7.9	6.5	1,105
3	6.4	3.8	1,785
Number of controlling behaviours displayed by husband/intimate partner[4]			
0	2.6	1.0	1,918
1–2	7.8	5.0	2,006
3–4	12.1	9.4	871
5	25.5	17.3	125
Number of reasons for which wife beating is justified[5]			
0	6.5	4.0	3,956
1–2	11.7	9.1	635
3–4	4.7	2.5	244
5	1.6	1.6	84
Woman's father beat mother			
Yes	16.1	10.8	608
No	5.6	3.7	4,191
Don't know	7.0	0.8	120
Woman afraid of husband/intimate partner			
Afraid most of the time	8.1	5.8	321
Sometimes afraid	7.7	6.1	946
Never afraid	6.7	4.0	3,653
Total	7.0	4.5	4,919

Note: The term husband includes a partner with whom a woman is living as if married. Husband/intimate partner refers to the current husband for currently married women; the most recent husband for divorced, separated, or widowed women; the current intimate partner for never-married women who currently have an intimate partner; and the most recent intimate partner for never-married women who do not currently have an intimate partner but had one in the past. Figures in parentheses are based on 25–49 unweighted cases.

[1] Includes in the last 12 months

[2] Includes only currently married women

[3] According to the wife's report. Includes only currently married women. See Table 15.8.1 for list of decisions.

[4] According to the woman's report. See Table 17.9 for list of behaviours.

[5] According to the woman's report. See Table 15.9.1 for list of reasons.

Table 17.17 Help seeking to stop violence

Percent distribution of women age 15–49 who have ever experienced physical or sexual violence by their help-seeking behaviour, according to type of violence and background characteristics, Ghana DHS 2022

Type of violence/ background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Don't know	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced						
Physical only	36.1	9.7	54.2	0.0	100.0	1,377
Sexual only	28.0	13.5	58.5	0.0	100.0	284
Both physical and sexual	50.1	9.6	40.3	0.0	100.0	525
Age						
15–19	32.4	13.5	54.1	0.0	100.0	296
20–24	37.6	7.8	54.6	0.0	100.0	387
25–29	39.1	12.2	48.7	0.0	100.0	334
30–39	38.5	8.8	52.7	0.0	100.0	651
40–49	41.9	10.5	47.7	0.0	100.0	518
Religion						
Catholic	40.3	9.9	49.8	0.0	100.0	163
Anglican	*	*	*	*	100.0	22
Methodist	49.3	14.1	36.6	0.0	100.0	115
Presbyterian	43.2	12.2	44.6	0.0	100.0	124
Pentecostal/Charismatic	40.2	10.9	48.8	0.0	100.0	983
Other Christian	34.6	10.1	55.2	0.0	100.0	317
Islam	29.9	9.1	61.1	0.0	100.0	362
Traditional/spiritualist	(28.8)	(6.1)	(65.1)	(0.0)	100.0	40
No religion	42.1	0.0	57.9	0.0	100.0	56
Other	*	*	*	*	100.0	3
Ethnic group						
Akan	43.2	11.6	45.2	0.0	100.0	1,020
Ga/Dangme	34.9	9.5	55.6	0.0	100.0	154
Ewe	38.9	10.5	50.6	0.0	100.0	304
Guan	42.4	9.8	47.8	0.0	100.0	69
Mole-Dagbani	30.8	8.5	60.6	0.0	100.0	366
Grusi	25.0	14.8	60.1	0.0	100.0	59
Gurma	32.0	2.9	65.1	0.0	100.0	152
Mande	40.9	11.6	47.5	0.0	100.0	46
Other	*	*	*	*	100.0	15
Residence						
Urban	38.1	11.7	50.2	0.0	100.0	1,229
Rural	38.7	8.2	53.0	0.0	100.0	958
Region						
Western	43.9	3.3	52.9	0.0	100.0	132
Central	40.6	9.0	50.4	0.0	100.0	325
Greater Accra	30.7	19.2	50.1	0.0	100.0	333
Volta	45.5	7.2	47.3	0.0	100.0	121
Eastern	50.6	9.0	40.4	0.0	100.0	166
Ashanti	47.9	10.3	41.8	0.0	100.0	452
Western North	37.3	14.0	48.8	0.0	100.0	47
Ahafo	28.4	6.7	64.9	0.0	100.0	44
Bono	31.7	17.0	51.3	0.0	100.0	63
Bono East	32.3	6.5	61.2	0.0	100.0	66
Oti	46.5	1.5	52.0	0.0	100.0	64
Northern	16.3	5.1	78.6	0.0	100.0	152
Savannah	30.6	6.0	63.4	0.0	100.0	59
North East	49.9	2.7	47.3	0.0	100.0	25
Upper East	25.5	17.2	57.3	0.0	100.0	93
Upper West	25.8	3.0	71.2	0.0	100.0	43
Marital status						
Never married	33.6	15.4	51.0	0.0	100.0	612
Never ever had intimate partner	27.3	16.7	55.9	0.0	100.0	226
Ever had intimate partner	37.2	14.6	48.2	0.0	100.0	386
Ever married	40.3	8.2	51.6	0.0	100.0	1,574
Married/living together	37.7	7.6	54.6	0.0	100.0	1,248
Divorced/separated/widowed	49.9	10.3	39.8	0.0	100.0	326
Employment						
Employed for cash	40.9	10.1	49.0	0.0	100.0	1,442
Employed not for cash	37.5	9.3	53.2	0.0	100.0	356
Not employed	29.7	11.4	58.9	0.0	100.0	388
Education						
No education	30.6	4.5	64.9	0.0	100.0	378
Primary	44.4	5.3	50.2	0.0	100.0	380
Secondary	40.2	12.1	47.7	0.0	100.0	1,263
More than secondary	28.4	19.7	51.9	0.0	100.0	165

Continued...

Table 17.17—*Continued*

Type of violence/ background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Don't know	Total	Number of women who have ever experienced any physical or sexual violence
Wealth quintile						
Lowest	31.7	6.5	61.8	0.0	100.0	337
Second	43.9	8.5	47.6	0.0	100.0	405
Middle	41.6	11.1	47.2	0.0	100.0	520
Fourth	37.8	11.8	50.4	0.0	100.0	523
Highest	35.0	11.6	53.3	0.0	100.0	401
Total	38.4	10.2	51.4	0.0	100.0	2,186

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 17.18 Sources for help to stop the violence

Percentage of women age 15–49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Ghana DHS 2022

	Type of violence experienced			Physical or sexual violence
Source	Physical only	Sexual only	Both physical and sexual	
Own family	71.9	77.1	68.5	71.3
Husband/intimate partner's family	25.9	7.2	22.7	23.1
Current/former husband/intimate partner	1.2	2.3	1.9	1.5
Current/former boyfriend	0.3	5.5	0.3	0.8
Friend	7.5	13.0	12.9	9.7
Neighbour	3.1	4.9	7.3	4.6
Religious leader	4.2	0.9	6.0	4.5
Doctor/medical personnel	1.2	1.0	1.7	1.3
Police	5.2	7.7	9.1	6.7
Lawyer	0.2	0.0	1.5	0.6
Social work organisation	0.6	0.0	1.1	0.7
Other	3.7	0.6	3.7	3.4
Number of women who have sought help	497	80	263	839

Note: Women can report more than one source from which they sought help.

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SAMPLE DESIGN

Appendix A

A.1 INTRODUCTION

The 2022 Ghana Demographic and Health Survey (2022 GDHS) is the seventh of its kind and follows those implemented in 1988, 1993, 1998, 2003, 2008, and 2014. The country's number of administrative regions has increased from 10 to 16 since the 2014 survey, requiring a substantial increase in sample size. A nationally representative sample of 618 clusters and 18,540 households was selected. All women age 15–49 who were usual residents of the selected households or who slept in the households the night before the survey were eligible to be interviewed. The survey resulted in 13,517 interviews with women age 15–49. As with the previous surveys, the main objective of the 2022 GDHS was to provide up-to-date information on fertility and childhood mortality levels; fertility preferences; awareness, approval, and use of family planning methods; maternal and child health; knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STIs); and the prevalence of HIV among the adult population.

A male survey was conducted at the same time in every second household selected for the female survey. All men age 15–59 who were usual residents of the selected households or who slept in the households the night before the survey were eligible for the male survey. The survey resulted in 7,044 interviews with men age 15–59. The survey collected information on their basic demographic and social status, their knowledge and use of family planning methods, and their knowledge of and attitudes toward HIV/AIDS and other sexually transmitted infections. Also in this subsample, all women age 15–49 who were eligible for the survey and all children under age 5 were measured for height and weight and tested for anaemia.

The survey was designed to provide representative estimates for the main demographic and health indictors for Ghana, for urban and rural areas separately, and for each of the 16 administrative regions.

A.2 SAMPLING FRAME

The sampling frame used for the 2022 GDHS is the frame of the 2021 Ghana Population and Housing Census (PHC), provided by the Ghana Statistical Service (GSS). The census frame is a complete list of all census enumeration areas (EAs) created for the 2021 PHC, with a total number of 51,917 EAs. Ghana is administratively divided into 16 geographical regions, and each region is subdivided into districts. There are 261 districts in total.

Table A.1 gives the population distribution by region and by type of residence. The regional distribution of the population varies greatly, from 1.8% in Ahafo to 17.9% in Greater Accra. The urbanisation of the regions also varies greatly; Greater Accra is 91.6% urban, while Upper East is only 24.6% urban. In Ghana, 56.0% of the population lives in urban areas.

Table A.2 shows the household distribution by region and residence. The household distribution is slightly different from the population distribution because the average urban household size is smaller than the average rural household size. In Ghana, 60.7% of households are located in urban areas.

Table A.3 gives the distribution of EAs and their average size in number of households by region and residence. There are in total 51,917 EAs, 26,295 in urban areas and 25,622 in rural areas. The average EA size is 161 households; urban EAs are larger on average (193 households) than rural EAs (128 households). The EA size is adequate for a primary sampling unit (PSU) with a sample take of 30 households per EA. The census frame includes some nonresidential EAs, most of which comprise temporary residents who may not have been present during the GDHS data collection; these EAs were excluded from sample selection for the 2022 GDHS.

Table A.1 Distribution of the household population by region and type of residence

Region	Household population			Urban %	Region %
	Urban	Rural	Total		
Western	1,030,916	991,900	2,022,816	51.0	6.7
Central	1,587,750	1,183,736	2,771,486	57.3	9.2
Greater Accra	4,933,620	450,648	5,384,268	91.6	17.9
Volta	660,996	939,943	1,600,939	41.3	5.3
Eastern	1,416,406	1,404,354	2,820,760	50.2	9.4
Ashanti	3,181,537	2,066,333	5,247,870	60.6	17.4
Western North	254,206	615,550	869,756	29.2	2.9
Ahafo	261,735	287,354	549,089	47.7	1.8
Bono	678,376	496,454	1,174,830	57.7	3.9
Bono East	616,477	568,157	1,184,634	52.0	3.9
Oti	233,329	499,418	732,747	31.8	2.4
Northern	1,063,664	1,211,533	2,275,197	46.8	7.6
Savannah	188,512	458,269	646,781	29.1	2.2
North East	207,881	443,202	651,083	31.9	2.2
Upper East	313,325	958,747	1,272,072	24.6	4.2
Upper West	220,020	655,454	875,474	25.1	2.9
Ghana	16,848,750	13,231,052	30,079,802	56.0	100.0

Source: 2021 Population and Housing Census

Table A.2 Distribution of residential households by region and type of residence

Region	Households			Urban %	Region %
	Urban	Rural	Total		
Western	328,507	292,842	621,349	52.9	7.4
Central	493,729	344,764	838,493	58.9	10.0
Greater Accra	1,578,935	123,225	1,702,160	92.8	20.3
Volta	213,475	277,898	491,373	43.4	5.9
Eastern	467,958	413,370	881,328	53.1	10.5
Ashanti	957,058	566,043	1,523,101	62.8	18.2
Western North	77,168	162,918	240,086	32.1	2.9
Ahafo	79,497	73,304	152,801	52.0	1.8
Bono	197,788	120,206	317,994	62.2	3.8
Bono East	165,563	123,162	288,725	57.3	3.5
Oti	61,312	112,719	174,031	35.2	2.1
Northern	236,207	201,727	437,934	53.9	5.2
Savannah	43,558	89,556	133,114	32.7	1.6
North East	38,166	69,922	108,088	35.3	1.3
Upper East	75,114	189,290	264,404	28.4	3.2
Upper West	61,045	129,148	190,193	32.1	2.3
Ghana	5,075,080	3,290,094	8,365,174	60.7	100.0

Source: 2021 Population and Housing Census

Table A.3 Distribution of enumeration areas and their average size in number of households

Region	Number of EAs			Average EA size		
	Urban	Rural	Total	Urban	Rural	Total
Western	1,603	1,555	3,158	205	188	197
Central	2,255	2,023	4,278	219	170	196
Greater Accra	6,352	597	6,949	249	206	245
Volta	1,016	1,885	2,901	210	147	169
Eastern	2,148	2,773	4,921	218	149	179
Ashanti	6,157	4,126	10,283	155	137	148
Western North	392	1,231	1,623	197	132	148
Ahafo	461	707	1,168	172	104	131
Bono	1,094	955	2,049	181	126	155
Bono East	969	1,192	2,161	171	103	134
Oti	401	1,105	1,506	153	102	116
Northern	1,830	2,402	4,232	129	84	103
Savannah	285	852	1,137	153	105	117
North East	365	848	1,213	105	82	89
Upper East	557	1,936	2,493	135	98	106
Upper West	410	1,435	1,845	149	90	103
Ghana	26,295	25,622	51,917	193	128	161

Source: 2021 Population and Housing Census

A.3 STRUCTURE OF THE SAMPLE AND SAMPLING PROCEDURE

The sample for the 2022 GDHS was a stratified sample selected in two stages from the sampling frame. Stratification was achieved by separating each region into urban and rural areas; in total, 32 sampling strata were created. Samples were selected independently in each sampling stratum via two-stage selection. In the first stage, 618 EAs were selected with a probability proportional to size selection procedure according to the sample allocation given in **Table A.4**. EA size is the number of residential households in the EA censured in the 2021 PHC. Implicit stratification with proportional allocation was achieved at each of the lower administrative unit levels by sorting the EA frame within the explicit stratum according to lower administrative units before sample selection and by using a probability proportional to size selection procedure.

After the selection of EAs and before the main survey, a household listing operation was carried out in all of the selected EAs. The household listing operation consisted of visiting each of the 618 selected EAs, drawing a location map and a detailed sketch map, and recording on the household listing forms all occupied residential households found in the EA with the address and the name of the head of the household. The resulting list of households served as the sampling frame for the selection of households in the second stage. Some of the selected EAs were large in size. In order to limit the workload during the household listing, selected EAs with more than 300 households (estimated by the listing team in the field) were segmented by the listing team in the field before the household listing. Only one segment was selected for the survey with probability proportional to segment size. Household listing was conducted only in the selected segment (see detailed instructions for segmentation in the *Manual for Household Listing*). Therefore, a 2022 GDHS cluster was either an EA or a segment of an EA.

In the second stage of selection, a fixed number of 30 households were selected in every urban cluster and rural cluster through equal probability systematic sampling based on the newly updated household listing. A spreadsheet indicating the selected household numbers for each cluster was prepared. The survey interviewers interviewed only the preselected households. No replacements and no changes of the preselected households were allowed in the implementing stages in order to prevent bias.

Table A.4 shows the sample allocation of EAs and households by region and type of residence. Among the 618 EAs selected, 304 were from urban areas and 314 were from rural areas. The survey selected 30 households per cluster, and the total sample size in number of households was 18,540 (9,120 in urban areas and 9,420 in rural areas). The sample allocation for the 2022 GDHS featured a power allocation with adjustments because of the large disparity in region size; there was a minimum sample size of 1,080 households per region, resulting in about 800 interviews with women age 15–49. Greater Accra and Ashanti, the two largest and mainly urban regions, were undersampled because of the tight total sample

size. This resulted in undersampling of urban areas. Rural areas were oversampled because of the oversampling in small regions, which are mainly rural. However, this undersampling and oversampling will not pose any concerns with respect to bias because sampling weights were calculated by taking undersampling and oversampling into account.

Table A.5 shows the sample allocation of expected numbers of interviews with women and men by region and according to type of residence. The survey was expected to include interviews with 13,537 women age 15–49 (6,536 from urban areas and 7,001 from rural areas) and 6,639 interviews with men age 15–59.

The parameters used in the sample calculations came from the previous DHS conducted in Ghana in 2014. In that survey, the results showed that there were on average 0.805 women age 15–49 per household in urban areas and 0.827 per household in rural areas, with small variations across regions; the response rates among women were 96.8% in urban areas and 97.7% in rural areas. The household response rate was 92% in both urban and rural areas. On average, there were 0.82 men age 15–49 per household, and the response rate among men was 95%.

Table A.4 Sample allocation of clusters and households by region and type of residence

	Allocation of cluster			Allocation of households		
Region	Urban	Rural	Total	Urban	Rural	Total
Western	19	18	37	570	540	1,110
Central	22	18	40	660	540	1,200
Greater Accra	39	9	48	1,170	270	1,440
Volta	17	20	37	510	600	1,110
Eastern	21	20	41	630	600	1,230
Ashanti	28	20	48	840	600	1,440
Western North	14	23	37	420	690	1,110
Ahafo	18	18	36	540	540	1,080
Bono	20	16	36	600	480	1,080
Bono East	19	17	36	570	510	1,080
Oti	14	22	36	420	660	1,080
Northern	19	20	39	570	600	1,170
Savannah	14	23	37	420	690	1,110
North East	14	22	36	420	660	1,080
Upper East	13	24	37	390	720	1,110
Upper West	13	24	37	390	720	1,110
Ghana	304	314	618	9,120	9,420	18,540

Table A.5 Sample allocation of expected numbers of interviews with women and men by region and type of residence

	Women age 15–49 interviewed			Men age 15–59 interviewed		
Region	Urban	Rural	Total	Urban	Rural	Total
Western	408	402	810	204	193	397
Central	473	402	875	237	193	430
Greater Accra	838	200	1,038	419	97	516
Volta	366	446	812	183	215	398
Eastern	452	446	898	226	215	441
Ashanti	602	446	1,048	301	215	516
Western North	301	513	814	150	247	397
Ahafo	387	402	789	193	193	386
Bono	430	358	788	215	172	387
Bono East	408	379	787	204	183	387
Oti	301	490	791	150	237	387
Northern	408	446	854	204	215	419
Savannah	301	513	814	150	247	397
North East	301	490	791	150	237	387
Upper East	280	534	814	139	258	397
Upper West	280	534	814	139	258	397
Ghana	6,536	7,001	13,537	3,264	3,375	6,639

Note: The male survey was conducted in every second household selected for the female survey.

A.4 SELECTION PROBABILITY AND SAMPLING WEIGHTS

Due to the nonproportional allocation of the sample to the different regions and the possible differences in response rates, sampling weights will be required for any analysis using the 2022 GDHS data to ensure the actual representation of the survey results at the national level as well as at the domain level. Since the 2022 GDHS sample was a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster. The following notations were used:

P_{1hi}: first-stage sampling probability of the i^{th} EA in stratum h from the sampling frame
P_{2hi}: second-stage sampling probability within the i^{th} EA (household selection)

Let n_h be the number of EAs selected in stratum h, M_{hi} the measure of size (number of residential households) according to the sampling frame in the i^{th} EA, and $\sum M_{hi}$ the total measure of size (total number of residential households) in stratum h. The probability of selecting the i^{th} EA in stratum h from the sampling frame is calculated as follows:

$$P_{1hi} = \frac{n_h M_{hi}}{\sum M_{hi}}$$

Let s_{hi} be the proportion of households in the selected segment compared to the total number of households in EA i in stratum h if the EA is segmented; otherwise, $s_{hi} = 1$. Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h, and let m_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{m_{hi}}{L_{hi}} \times s_{hi}$$

The overall selection probability of each household in cluster i of stratum h is therefore the product of the selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

Therefore, the design weight for each household in cluster *i* of stratum *h* is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

A spreadsheet containing all of the sampling parameters and selection probabilities was prepared to facilitate the calculation of design weights. Design weights were adjusted for household nonresponse and for individual nonresponse to obtain the sampling weights for households and for women, respectively. The differences between the household sampling weights and the individual sampling weights are introduced by individual nonresponse. The final sampling weights were normalized so that the total number of unweighted cases was equal to the total number of weighted cases at the national level for both household weights and individual weights. The normalized weights are relative weights that are valid for estimating means, proportions, and ratios but are not valid for estimating population totals or for pooled data.

Sampling errors were calculated for selected indicators for the national sample, for urban and rural areas separately, and for each of the 16 regions.

A.5 SURVEY IMPLEMENTATION

Table A.6 and **Table A.7** present response rates for women and men, respectively, by urban and rural areas and by region. The male subsample constituted one in three of the households selected for the women's sample.

Table A.6 Sample implementation: Women

Percent distribution of households and eligible women age 15–49 by results of the household and individual interviews, and household, eligible women, and overall women response rates, according to residence and region (unweighted), Ghana DHS 2022

	Residence		Region																
Result	Urban	Rural	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Western North	Ahafo	Bono	Bono East	Oti	Northern	Savan-nah	North East	Upper East	Upper West	Total
Selected households																			
Completed (C)	96.4	97.0	97.9	96.7	96.3	97.5	98.9	97.0	95.6	98.3	95.4	97.6	97.0	97.2	94.3	95.7	96.4	95.6	96.7
Household present but no competent respondent at home (HP)	0.2	0.2	0.1	0.3	0.3	0.0	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.1	0.5	0.6	0.4	0.0	0.2
Refused (R)	0.6	0.3	0.2	1.3	0.9	0.2	0.5	0.6	0.3	0.2	0.2	0.5	0.1	0.6	0.6	0.4	0.3	0.2	0.4
Dwelling not found (DNF)	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.2	0.2	0.0	0.0	0.4	0.2	0.1	0.0	0.1	0.1
Household absent (HA)	1.9	1.6	0.9	1.3	1.2	1.7	0.2	1.5	3.2	0.6	3.1	1.2	1.8	1.1	2.8	1.9	2.4	3.9	1.8
Dwelling vacant/address not a dwelling (DV)	0.7	0.6	0.7	0.4	1.0	0.5	0.2	0.9	0.8	0.6	0.6	0.6	0.9	0.6	0.9	1.2	0.5	0.3	0.7
Dwelling destroyed (DD)	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.6	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.1
Other (O)	0.1	0.0	0.2	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	9,120	9,420	1,110	1,200	1,440	1,110	1,230	1,440	1,110	1,080	1,080	1,080	1,080	1,170	1,110	1,080	1,110	1,110	18,540
Household response rate (HRR)[1]	99.2	99.4	99.7	98.5	98.7	99.8	99.3	99.4	99.6	99.5	99.5	99.4	99.7	98.9	98.6	98.9	99.4	99.7	99.3
Eligible women																			
Completed (EWC)	98.1	97.9	99.5	98.4	97.2	99.3	99.4	98.0	97.8	98.8	99.5	97.2	98.8	98.6	97.7	94.3	96.9	98.1	98.0
Not at home (EWNH)	0.9	1.0	0.1	0.1	1.2	0.2	0.0	1.3	1.0	0.5	0.2	1.7	0.4	0.5	1.2	4.2	1.4	0.7	1.0
Refused (EWR)	0.8	0.4	0.2	1.2	1.2	0.1	0.2	0.5	0.7	0.5	0.1	0.6	0.2	0.2	0.7	1.3	1.1	0.4	0.6
Partly completed (EWPC)	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Incapacitated (EWI)	0.2	0.6	0.1	0.3	0.2	0.4	0.3	0.2	0.5	0.2	0.1	0.5	0.4	0.8	0.4	0.1	0.7	0.8	0.4
Other (EWO)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	7,502	7,815	801	995	997	843	859	1,154	810	859	839	1,002	932	1,186	1,023	1,021	1,019	977	15,317
Eligible women response rate (EWRR)[2]	98.1	97.9	99.5	98.4	97.2	99.3	99.4	98.0	97.8	98.8	99.5	97.2	98.8	98.6	97.7	94.3	96.9	98.1	98.0
Overall women response rate (OWRR)[3]	97.3	97.3	99.2	96.9	95.9	99.1	98.7	97.4	97.4	98.4	99.0	96.7	98.5	97.5	96.3	93.2	96.2	97.8	97.3

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).

[3] The overall women response rate (OWRR) is calculated as:

$$OWRR = HRR * EWRR/100$$

Table A.7 Sample implementation: Men

Percent distribution of households and eligible men age 15–59 by results of the household and individual interviews, and household, eligible men, and overall men response rates, according to residence and region (unweighted), Ghana DHS 2022

	Residence		Region																
Result	Urban	Rural	Western	Central	Greater Accra	Volta	Eastern	Ashanti	Western North	Ahafo	Bono	Bono East	Oti	Northern	Savan-nah	North East	Upper East	Upper West	Total
Selected households																			
Completed (C)	96.5	97.0	97.8	97.3	96.3	98.2	99.2	96.7	95.1	98.1	95.0	97.2	96.9	95.7	95.1	95.7	97.3	96.2	96.8
Household present but no competent respondent at home (HP)	0.2	0.1	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.5	0.4	0.4	0.0	0.1
Refused (R)	0.7	0.4	0.2	1.2	1.1	0.4	0.3	1.0	0.4	0.4	0.2	0.6	0.2	0.7	0.4	0.6	0.4	0.4	0.5
Dwelling not found (DNF)	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.2	0.0	0.2	0.1
Household absent (HA)	1.9	1.5	0.7	1.0	1.3	1.1	0.0	1.7	3.6	0.4	3.3	0.9	2.2	1.7	2.7	1.9	1.6	3.2	1.7
Dwelling vacant/address not a dwelling (DV)	0.6	0.7	0.9	0.2	1.0	0.2	0.2	0.7	0.9	0.7	0.6	1.1	0.6	1.0	0.9	1.3	0.4	0.0	0.7
Dwelling destroyed (DD)	0.0	0.1	0.0	0.2	0.1	0.0	0.2	0.0	0.0	0.0	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Other (O)	0.1	0.0	0.4	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	4,560	4,709	555	600	720	555	615	720	554	540	540	540	540	585	555	540	555	555	9,269
Household response rate (HRR)[1]	99.1	99.4	99.8	98.6	98.7	99.6	99.5	99.0	99.6	99.3	99.8	99.4	99.6	98.4	99.1	98.9	99.3	99.4	99.2
Eligible men																			
Completed (EMC)	96.5	97.4	98.7	97.1	95.7	98.0	99.0	95.2	97.3	97.5	97.5	96.9	97.9	98.0	97.3	94.3	95.3	97.2	97.0
Not at home (EMNH)	1.9	1.7	0.5	1.1	1.9	1.8	0.0	2.9	1.7	1.4	1.7	2.3	1.3	1.7	1.2	5.0	2.7	1.7	1.8
Refused (EMR)	1.2	0.5	0.5	1.5	2.1	0.3	0.8	1.4	0.7	0.7	0.0	0.6	0.0	0.2	1.1	0.2	1.2	1.2	0.8
Incapacitated (EMI)	0.4	0.4	0.3	0.2	0.2	0.0	0.3	0.6	0.2	0.5	0.8	0.2	0.8	0.2	0.4	0.5	0.8	0.0	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	3,369	3,894	387	455	515	342	393	516	413	433	360	516	477	542	563	441	487	423	7,263
Eligible men response rate (EMRR)[2]	96.5	97.4	98.7	97.1	95.7	98.0	99.0	95.2	97.3	97.5	97.5	96.9	97.9	98.0	97.3	94.3	95.3	97.2	97.0
Overall men response rate (OMRR)[3]	95.6	96.8	98.5	95.8	94.5	97.6	98.5	94.2	97.0	96.7	97.3	96.3	97.5	96.4	96.4	93.2	94.6	96.6	96.2

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC).
[3] The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR/100$$

ESTIMATES OF SAMPLING ERRORS

Appendix B

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors and (2) sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2022 Ghana Demographic and Health Survey (2022 GDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2022 GDHS is only one of many samples that could have been selected from the same population, using the same design and identical size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results. A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2022 GDHS sample was the result of a multistage stratified design, and, consequently, it was necessary to use more complex formulas. The computer software used to calculate sampling errors for the GDHS 2022 is an SAS program. This program used the Taylor linearization method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1}{x^2}\sum_{h=1}^{H}\left[(1-f_h)\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi} \text{ and } z_h = y_h - rx_h$$

where h represents the stratum, which varies from 1 to H;
m_h is the total number of clusters selected in the h^{th} stratum;
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum;
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum; and
f_h is the sampling fraction of PSU in the h^{th} stratum.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2022 GDHS, there were 618 non-empty clusters. Hence, 618 replications were created. The variance of a ratio r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 618 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 617 clusters (i^{th} cluster excluded),
and
k is the total number of clusters.

In addition to the standard error, the program computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design such as multistage or cluster sampling. The program also computes the relative standard error and the confidence limits for the estimates.

Sampling errors for the 2022 GDHS are calculated for selected variables considered to be of primary interest for the survey. The results are presented in this appendix for Ghana as a whole, for urban and rural areas separately, and for each of the 16 administrative regions of the country. For each variable, the type of statistic (mean, proportion, ratio, or rate) and the base population are given in **Table B.1**. **Tables B.2** to **B.20** present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95% confidence limits (R±2SE) for each variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *mean number of children ever born to women age 15–49*) can be interpreted as follows: the sample estimate from the national sample is 2.190 (R), and its standard error is 0.028 (SE). Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is, R ± 2 × SE. There is a high probability (95%) that the *true* mean number of children ever born to women age 15–49 is between 2.134 and 2.245.

For the total sample, the value of the design effect (DEFT), averaged over all variables for the women's survey, is 1.52. This means that, due to multistage clustering of the sample, the average standard error is increased by a factor of 1.52 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Ghana DHS 2022

Variable	Estimate	Base population	Table number
HOUSEHOLDS AND POPULATION			
Electricity primary source of lighting	Proportion	De jure household population	2.3
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	Proportion	De jure household population	2.4
Births registered with civil authority	Proportion	De jure household population under 5	2.10
Ownership of at least one ITN	Proportion	Households	12.1
Ownership of at least one ITN for every two persons	Proportion	Households (with at least one person who stayed in the household the night before the survey)	12.1
Improved drinking water source	Proportion	De jure household population	16.1
At least basic drinking water service	Proportion	De jure household population	16.2
Water available when needed	Proportion	De jure household population	16.4
Improved sanitation facility	Proportion	De jure household population	16.6
At least basic sanitation service	Proportion	De jure household population	16.7
Using open defecation	Proportion	De jure household population	16.7
Using a handwashing facility with soap and water	Proportion	De jure household population for whom handwashing place was observed or with no on-site place for handwashing	16.11
WOMEN			
Urban residence	Proportion	Women 15–49	3.1
No education	Proportion	Women 15–49	3.2.1
Secondary education or higher	Proportion	Women 15–49	3.2.1
Literacy	Proportion	Women 15–49	3.3.1
Use of the internet in last 12 months	Proportion	Women 15–49	3.5.1
Current tobacco use	Proportion	Women 15–49	3.13.1
Currently married/in union	Proportion	Women 15–49	4.1
Married before age 15	Proportion	Women 20–49	4.4
Married before age 18	Proportion	Women 20–49	4.4
Had sexual intercourse before age 18	Proportion	Women 20–49	4.6
Age-specific fertility rate 15–19	Rate	Woman-years of exposure to childbearing at age 15–19 in the 3 years preceding the survey	5.1
Total fertility rate (3 years)	Rate	Woman-years of exposure to childbearing	5.2
Currently pregnant	Proportion	Women 15–49	5.2
Mean number of children ever born to women age 40–49	Mean	Women 40–49	5.2
Mean number of children ever born to women age 15–49	Mean	Women 15–49	5.4
Mean number of living children among women age 15–49	Mean	Women 15–49	5.4
Median birth interval	Median	Non-first births in the 5 years preceding the survey	5.5
First birth before age 18	Proportion	Women 20–49	5.10
Want to delay next birth at least 2 years	Proportion	Currently married women 15–49	6.1
Want no more children	Proportion	Currently married women 15–49	6.2.1
Ideal number of children	Mean	Women 15–49 with numeric responses	6.3
Total wanted fertility rate (3 years)	Rate	Woman-years of exposure to childbearing	6.6
Currently using any contraceptive method	Proportion	Currently married women 15–49	7.4.1
Currently using any modern method	Proportion	Currently married women 15–49	7.4.1
Currently using pill	Proportion	Currently married women 15–49	7.4.1
Currently using injectables	Proportion	Currently married women 15–49	7.4.1
Currently using implants	Proportion	Currently married women 15–49	7.4.1
Currently using male condoms	Proportion	Currently married women 15–49	7.4.1
Currently using any traditional method	Proportion	Currently married women 15–49	7.4.1
12-month discontinuation rate due to method failure	Rate	Women 15–49	7.13
12-month discontinuation rate due to any reason	Rate	Women 15–49	7.13
12-month discontinuation rate due to switching to another method	Rate	Women 15–49	7.13
Unmet need for spacing	Proportion	Currently married women 15–49	7.15.1
Unmet need for limiting	Proportion	Currently married women 15–49	7.15.1
Unmet need total	Proportion	Currently married women 15–49	7.15.1
Demand satisfied by modern methods	Proportion	Currently married women 15–49	7.15.1
Demand satisfied by modern methods (all women)	Proportion	Women 15–49	7.15.2
Participation in decision making about family planning	Proportion	Currently married women 15–49	7.17
Not exposed to any of the eight media sources	Proportion	Women 15–49	7.20.1
Neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality	8.1
Postneonatal mortality rate[1]	Rate	Children exposed to the risk of mortality	8.1
Infant mortality rate[1]	Rate	Children exposed to the risk of mortality	8.1
Child mortality rate[1]	Rate	Children exposed to the risk of mortality	8.1
Under-5 mortality rate[1]	Rate	Children exposed to the risk of mortality	8.1
Perinatal mortality rate	Rate	Pregnancies of 28 or more weeks' duration to women 15–49 in the 5 years preceding the survey	8.4
Stillbirth rate	Rate	Pregnancies of 28 or more weeks' duration to women 15–49 in the 5 years preceding the survey	8.4
Early neonatal mortality rate	Rate	Pregnancies of 28 or more weeks' duration to women 15–49 in the 5 years preceding the survey	8.4
In any avoidable high-risk category	Proportion	Children born in the 5 years preceding the survey to women 15–49	8.5
Received ANC from a skilled provider	Proportion	Women 15–49 who had a live birth in the 2 years preceding the survey	9.1
4+ ANC visits	Proportion	Women 15–49 who had a live birth in the 2 years preceding the survey	9.2
8+ ANC visits	Proportion	Women 15–49 who had a live birth in the 2 years preceding the survey	9.2

Continued...

Table B.1—*Continued*

Variable	Estimate	Base population	Table number
	WOMEN *(Continued)*		
Took any iron-containing supplements	Proportion	Women 15–49 who had a live birth in the 2 years preceding the survey	9.4
Mothers protected against tetanus for last birth	Proportion	Women 15–49 with a live birth in the 2 years preceding the survey	9.6
Delivered in a health facility (live births)	Proportion	Live births in the 2 years preceding the survey	9.7
Delivered by a skilled provider (live births)	Proportion	Live births in the 2 years preceding the survey	9.9
Delivered by C-section (live births)	Proportion	Live births in the 2 years preceding the survey	9.8
Women with postnatal check during first 2 days	Proportion	Women 15–49 with a live birth in the 2 years preceding the survey	9.11
Newborns with postnatal check during first 2 days	Proportion	Most recent live births in the 2 years preceding the survey	9.14
Any problem accessing health care	Proportion	Women 15–49	9.20
Ever had vaccination card	Proportion	Children 12–23 months	10.2
Received BCG vaccination	Proportion	Children 12–23 months	10.4
Received DPT-HepB-Hib vaccination (3 doses)	Proportion	Children 12–23 months	10.4
Received pneumococcal vaccination (3 doses)	Proportion	Children 12–23 months	10.4
Received measles and rubella 1 vaccination	Proportion	Children 12–23 months	10.4
Fully vaccinated according to national schedule (12–23 months)	Proportion	Children 12–23 months	10.4
Received measles and rubella 2 vaccination	Proportion	Children 24–35 months	10.4
Fully vaccinated according to national schedule (24–35 months)	Proportion	Children 24–35 months	10.4
Sought treatment for diarrhoea	Proportion	Children under 5 with diarrhoea in last 2 weeks	10.9
Treated with ORS	Proportion	Children under 5 with diarrhoea in last 2 weeks	10.11
Height-for-age (−3 SD)	Proportion	Children under 5 who were measured	11.1
Height-for-age (−2 SD)	Proportion	Children under 5 who were measured	11.1
Weight-for-height (−2 SD)	Proportion	Children under 5 who were measured	11.1
Weight-for-height (+2 SD)	Proportion	Children under 5 who were measured	11.1
Weight-for-age (−2 SD)	Proportion	Children under 5 who were measured	11.1
Exclusive breastfeeding	Proportion	Youngest children 0–5 months living with their mother	11.4
Minimum dietary diversity (children 6–23 months)	Proportion	Youngest children 6–23 months living with their mother	11.8
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	Proportion	Children 6–59 months who were tested	11.12
Body mass index (BMI) <18.5	Proportion	Women 20–49 who were measured	11.14.1
Body mass index (BMI) ≥25	Proportion	Women 20–49 who were measured	11.14.1
Body mass index-for-age (−2 SD)	Proportion	Adolescent women 15–19 who were measured	11.14.2
Body mass index-for-age (+1 SD)	Proportion	Adolescent women 15–19 who were measured	11.14.2
Minimum dietary diversity (women 15–49)	Proportion	Women 15–49	11.16
Prevalence of any anaemia (women 15–49)	Proportion	Women 15–49 who were tested	11.17.1
Prevalence of any anaemia (nonpregnant women 15–49) (haemoglobin <12.0 g/dl)	Proportion	Nonpregnant women 15–49 who were tested	11.17.1
Prevalence of any anaemia (pregnant women 15–49) (haemoglobin <11.0 g/dl)	Proportion	Pregnant women 15–49 who were tested	11.17.1
Child slept under an ITN last night	Proportion	Children under 5 in households	12.6
Pregnant women slept under an ITN last night	Proportion	Pregnant women 15–49	12.7
Received 3+ doses of SP/Fansidar	Proportion	Women 15–49 with a live birth in the 2 years preceding the survey	12.9
Child had fever in last 2 weeks	Proportion	Child under 5	12.10
Child had blood taken from finger/heel	Proportion	Child under 5 who had a fever in the last 2 weeks	12.10
Child took ACT	Proportion	Child under 5 with a fever in the last 2 weeks who received any antimalarial medications	12.12
Child has malaria (based on rapid test)	Proportion	Children 6–59 tested (rapid test) for malaria	12.15
Child has malaria (based on microscopy test)	Proportion	Children 6–59 tested (on microscopy) for malaria	12.15
Discriminatory attitudes towards people with HIV	Proportion	Women 15–49 who have heard of HIV/AIDS	13.2
Condom use at last sex	Proportion	Women 15–49 with nonmarital, noncohabiting partner in last 12 months	13.3.1
Tested for HIV in the past 12 months and received the results of the last test	Proportion	Women 15–49	13.5.1
Employed in last 12 months	Proportion	Currently married women 15–49	15.1
Employed in last 12 months but not paid	Proportion	Currently married women 15–49 employed in last 12 months	15.1
Mobile phone ownership	Proportion	Women 15–49	15.6.1
Have and use a bank account or mobile phone for financial transactions	Proportion	Women 15–49	15.6.1
Participate in decision making (all three decisions)	Proportion	Currently married women 15–49	15.8.1
Agree with at least one specified reason a husband is justified in wife beating	Proportion	Women 15–49	15.9.1
Make own decisions about sexual relations, contraceptive use, and reproductive care	Proportion	Currently married women 15–49	15.12
Experienced physical violence since age 15 by any perpetrator	Proportion	All women 15–49	17.1
Experienced sexual violence by any perpetrator ever	Proportion	All women 15–49	17.4
Experienced sexual violence by any non-intimate partner	Proportion	All women 15–49	17.6
Experienced emotional/physical/sexual violence by any husband or intimate partner ever	Proportion	Ever-married women 15–49	17.11
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	Proportion	Ever-married women 15–49	17.11
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	Proportion	Ever-married women 15–49	17.13

Continued...

Table B.1—*Continued*

Variable	Estimate	Base population	Table number
	MEN		
Urban residence	Proportion	Men 15–49	3.1
No education	Proportion	Men 15–49	3.2.2
Secondary education or higher	Proportion	Men 15–49	3.2.2
Literacy	Proportion	Men 15–49	3.3.2
Use of the internet in last 12 months	Proportion	Men 15–49	3.5.2
Current tobacco use	Proportion	Men 15–49	3.13.2
Currently married/in union	Proportion	Men 15–49	4.1
Had sexual intercourse before age 18	Proportion	Men 20–49	4.6
Want to delay next birth at least 2 years	Proportion	Currently married men 15–49	6.1
Want no more children	Proportion	Currently married men 15–49	6.2.2
Ideal number of children	Mean	Men 15–49 with numeric responses	6.3
Discriminatory attitudes towards people with HIV	Proportion	Men 15–49 who have heard of HIV/AIDS	13.2
Condom use at last sex	Proportion	Men 15–49 with nonmarital, noncohabiting partner in last 12 months	13.3.2
Tested for HIV in the past 12 months and received the results of the last test	Proportion	Men 15–49	13.5.2
Male circumcision	Proportion	Men 15–49	13.9
Mobile phone ownership	Proportion	Men 15–49	15.6.2
Have and use a bank account or mobile phone for financial transactions	Proportion	Men 15–49	15.6.2
Agree with at least one specified reason a husband is justified in wife beating	Proportion	Men 15–49	15.9.2

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
[1] Mortality rates are calculated for 5 years before the survey for the national sample, urban, and rural samples and for the 10 years before the survey for the regional samples.

Table B.2 Sampling errors: Total sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Electricity primary source of lighting	0.820	0.013	68,887	63,611	3.453	0.015	0.795	0.845
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.236	0.009	68,887	63,611	2.654	0.039	0.217	0.254
Births registered with civil authority	0.745	0.009	9,779	8,508	1.676	0.012	0.727	0.763
Ownership of at least one ITN	0.667	0.007	17,933	17,933	2.034	0.011	0.652	0.681
Ownership of at least one ITN for every two persons	0.474	0.007	17,836	17,818	1.922	0.015	0.460	0.489
Improved drinking water source	0.879	0.010	68,887	63,611	3.163	0.012	0.859	0.900
At least basic drinking water service	0.838	0.010	68,887	63,611	2.805	0.012	0.818	0.858
Water available when needed	0.809	0.008	68,887	63,611	2.294	0.010	0.792	0.826
Improved sanitation facility	0.632	0.013	68,887	63,611	2.964	0.021	0.605	0.658
At least basic sanitation service	0.243	0.011	68,887	63,611	2.876	0.045	0.221	0.265
Using open defecation	0.246	0.012	68,887	63,611	2.818	0.048	0.223	0.270
Using a handwashing facility with soap and water	0.435	0.011	67,662	62,264	2.543	0.026	0.413	0.458
WOMEN								
Urban residence	0.570	0.008	15,014	15,014	2.069	0.015	0.553	0.587
No education	0.161	0.006	15,014	15,014	1.841	0.034	0.150	0.172
Secondary education or higher	0.702	0.008	15,014	15,014	2.009	0.011	0.687	0.717
Literacy	0.608	0.008	15,014	15,014	2.027	0.013	0.592	0.624
Use of the internet in last 12 months	0.433	0.009	15,014	15,014	2.299	0.021	0.415	0.452
Current tobacco use	0.009	0.002	15,014	15,014	1.909	0.160	0.006	0.012
Currently married/in union	0.546	0.006	15,014	15,014	1.564	0.012	0.534	0.559
Married before age 15	0.052	0.003	12,179	12,332	1.386	0.054	0.046	0.057
Married before age 18	0.217	0.006	12,179	12,332	1.547	0.027	0.205	0.228
Had sexual intercourse before age 18	0.488	0.008	12,179	12,332	1.810	0.017	0.472	0.505
Age-specific fertility rate 15–19	62.915	3.257	8,140	7,798	1.200	0.052	56.401	69.429
Total fertility rate (3 years)	3.902	0.085	42,155	42,292	1.416	0.022	3.732	4.071
Currently pregnant	0.068	0.003	15,014	15,014	1.356	0.041	0.063	0.074
Mean number of children ever born to women age 40–49	4.501	0.069	2,875	2,987	1.643	0.015	4.362	4.639
Mean number of children ever born to women age 15–49	2.190	0.028	15,014	15,014	1.518	0.013	2.134	2.245
Mean number of living children among women age 15–49	2.053	0.025	15,014	15,014	1.477	0.012	2.002	2.103
Median birth interval	40.619	0.474	6,930	6,247	1.550	0.012	39.671	41.567
First birth before age 18	0.157	0.005	12,179	12,332	1.461	0.031	0.147	0.166
Want to delay next birth at least 2 years	0.298	0.007	8,811	8,205	1.487	0.024	0.284	0.313
Want no more children	0.328	0.008	8,811	8,205	1.529	0.023	0.313	0.344
Ideal number of children	4.504	0.032	14,840	14,798	1.937	0.007	4.441	4.567
Total wanted fertility rate (3 years)	3.427	0.080	42,155	42,292	1.438	0.023	3.267	3.587
Currently using any contraceptive method	0.363	0.008	8,811	8,205	1.572	0.022	0.347	0.379
Currently using any modern method	0.278	0.007	8,811	8,205	1.468	0.025	0.264	0.292
Currently using pill	0.041	0.003	8,811	8,205	1.494	0.077	0.035	0.047
Currently using injectables	0.079	0.004	8,811	8,205	1.477	0.054	0.071	0.088
Currently using implants	0.079	0.004	8,811	8,205	1.391	0.051	0.071	0.087
Currently using male condoms	0.014	0.002	8,811	8,205	1.434	0.127	0.011	0.018
Currently using any traditional method	0.085	0.005	8,811	8,205	1.549	0.054	0.076	0.094
12-month discontinuation rate due to method failure	3.055	1.018	7,879	8,457	1.440	0.333	1.019	5.090
12-month discontinuation rate due to any reason	45.370	0.330	7,879	8,457	1.832	0.007	44.711	46.029
12-month discontinuation rate due to switching to another method	6.118	0.464	7,879	8,457	1.409	0.076	5.190	7.045
Unmet need for spacing	0.142	0.005	8,811	8,205	1.470	0.038	0.131	0.153
Unmet need for limiting	0.092	0.004	8,811	8,205	1.393	0.047	0.083	0.100
Unmet need total	0.234	0.006	8,811	8,205	1.409	0.027	0.221	0.247
Demand satisfied by modern methods	0.465	0.010	5,011	4,902	1.432	0.021	0.446	0.485
Demand satisfied by modern methods (all women)	0.495	0.008	7,031	7,113	1.411	0.017	0.478	0.511
Participation in decision making about family planning	0.842	0.008	8,811	8,205	1.976	0.009	0.826	0.857
Not exposed to any of the eight media sources	0.296	0.008	15,014	15,014	2.182	0.027	0.280	0.312
Neonatal mortality (last 0–4 years)	17.164	1.826	9,355	8,572	1.246	0.106	13.511	20.816
Postneonatal mortality (last 0–4 years)	10.830	1.319	9,339	8,557	1.180	0.122	8.191	13.469
Infant mortality (last 0–4 years)	27.994	2.149	9,359	8,575	1.174	0.077	23.695	32.292
Child mortality (last 0–4 years)	11.863	1.379	9,158	8,425	1.177	0.116	9.104	14.622
Under-5 mortality (last 0–4 years)	39.525	2.453	9,403	8,614	1.155	0.062	34.619	44.431
Perinatal mortality rate	28.306	2.212	9,484	8,708	1.214	0.078	23.882	32.729
Stillbirth rate	15.158	1.764	9,484	8,708	1.340	0.116	11.630	18.687
Early neonatal mortality rate	13.343	1.644	9,353	8,581	1.265	0.123	10.056	16.630
In any avoidable high-risk category	0.477	0.008	9,353	8,581	1.398	0.017	0.460	0.493
Received ANC from a skilled provider	0.978	0.004	3,850	3,491	1.503	0.004	0.971	0.985
4+ ANC visits	0.878	0.009	3,850	3,491	1.761	0.011	0.859	0.896
8+ ANC visits	0.386	0.013	3,850	3,491	1.627	0.033	0.360	0.412
Took any iron-containing supplements	0.923	0.006	3,850	3,491	1.461	0.007	0.910	0.935
Mothers protected against tetanus for last birth	0.738	0.012	3,850	3,491	1.669	0.016	0.714	0.762
Delivered in a health facility (live births)	0.862	0.010	4,011	3,638	1.796	0.012	0.842	0.883
Delivered by a skilled provider (live births)	0.876	0.010	4,011	3,638	1.816	0.011	0.855	0.896
Delivered by C-section (live births)	0.208	0.010	4,011	3,638	1.431	0.049	0.187	0.228
Women with postnatal check during first 2 days	0.873	0.009	3,850	3,491	1.657	0.010	0.855	0.891
Newborns with postnatal check during first 2 days	0.869	0.009	3,850	3,491	1.611	0.010	0.851	0.886
Any problem accessing health care	0.536	0.010	15,014	15,014	2.413	0.018	0.517	0.556

Continued...

Table B.2—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Ever had vaccination card	0.981	0.004	1,973	1,823	1.218	0.004	0.973	0.989
Received BCG vaccination	0.953	0.006	1,973	1,823	1.171	0.006	0.942	0.965
Received DPT-HepB-Hib vaccination (3 doses)	0.890	0.010	1,973	1,823	1.298	0.011	0.871	0.909
Received pneumococcal vaccination (3 doses)	0.882	0.010	1,973	1,823	1.271	0.011	0.863	0.902
Received measles and rubella 1 vaccination	0.870	0.011	1,973	1,823	1.318	0.012	0.849	0.891
Fully vaccinated according to national schedule (12–23 months)	0.564	0.016	1,973	1,823	1.375	0.029	0.532	0.597
Received measles and rubella 2 vaccination	0.725	0.016	1,702	1,546	1.426	0.023	0.692	0.757
Fully vaccinated according to national schedule (24–35 months)	0.424	0.018	1,702	1,546	1.396	0.042	0.389	0.460
Sought treatment for diarrhoea	0.505	0.019	1,207	1,054	1.217	0.038	0.467	0.544
Treated with ORS	0.398	0.024	1,207	1,054	1.570	0.061	0.350	0.447
Height-for-age (−3 SD)	0.042	0.004	4,928	4,293	1.158	0.089	0.034	0.049
Height-for-age (−2 SD)	0.174	0.008	4,928	4,293	1.289	0.046	0.158	0.190
Weight-for-height (−2 SD)	0.060	0.005	4,931	4,291	1.295	0.081	0.050	0.069
Weight-for-height (+2 SD)	0.020	0.003	4,931	4,291	1.238	0.133	0.014	0.025
Weight-for-age (−2 SD)	0.123	0.007	4,935	4,299	1.304	0.056	0.109	0.137
Exclusive breastfeeding	0.526	0.022	958	826	1.361	0.042	0.482	0.570
Minimum dietary diversity (children 6–23 months)	0.414	0.015	2,786	2,562	1.623	0.037	0.384	0.445
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.489	0.011	4,395	3,837	1.262	0.022	0.468	0.511
Body mass index (BMI) <18.5	0.046	0.003	5,501	5,704	1.229	0.076	0.039	0.053
Body mass index (BMI) ≥25.0	0.502	0.010	5,501	5,704	1.490	0.020	0.482	0.522
Body mass index-for-age (−2 SD)	0.024	0.005	1,374	1,338	1.224	0.211	0.014	0.034
Body mass index-for-age (+1 SD)	0.136	0.012	1,374	1,338	1.347	0.092	0.111	0.161
Minimum dietary diversity (women 15–49)	0.499	0.008	15,014	15,014	1.939	0.016	0.484	0.515
Prevalence of any anaemia (women 15–49)	0.411	0.008	7,557	7,655	1.368	0.019	0.396	0.427
Prevalence of any anaemia (nonpregnant women 15–49) (haemoglobin <12.0 g/dl)	0.404	0.008	7,004	7,141	1.369	0.020	0.388	0.420
Prevalence of any anaemia (pregnant women 15–49) (haemoglobin <11.0 g/dl)	0.514	0.025	553	514	1.160	0.048	0.465	0.564
Child slept under an ITN last night	0.490	0.011	9,850	8,580	1.675	0.022	0.468	0.512
Pregnant women slept under an ITN last night	0.477	0.020	1,111	984	1.219	0.041	0.438	0.516
Received 3+ doses of SP/Fansidar	0.602	0.013	3,850	3,491	1.633	0.021	0.577	0.628
Child had fever in last 2 weeks	0.151	0.006	9,062	8,315	1.554	0.042	0.138	0.163
Child had blood taken from finger/heel	0.400	0.020	1,451	1,252	1.422	0.051	0.360	0.440
Child took ACT	0.783	0.023	707	560	1.272	0.029	0.737	0.828
Child has malaria (based on rapid test)	0.165	0.008	4,397	3,838	1.297	0.051	0.148	0.182
Child has malaria (based on microscopy test)	0.086	0.006	4,397	3,838	1.212	0.069	0.074	0.098
Discriminatory attitudes towards people with HIV	0.784	0.007	13,980	14,280	1.933	0.009	0.771	0.798
Condom use at last sex	0.106	0.007	3,131	3,458	1.190	0.062	0.093	0.119
Tested for HIV in the past 12 months and received the results of the last test	0.150	0.004	15,014	15,014	1.442	0.028	0.142	0.159
Employed in last 12 months	0.880	0.006	8,811	8,205	1.633	0.006	0.868	0.891
Employed in last 12 months but not paid	0.142	0.008	7,623	7,218	2.102	0.059	0.125	0.158
Mobile phone ownership	0.796	0.005	15,014	15,014	1.544	0.006	0.786	0.806
Have and use a bank account or mobile phone for financial transactions	0.729	0.008	15,014	15,014	2.078	0.010	0.714	0.744
Participate in decision making (all three decisions)	0.556	0.010	8,811	8,205	1.920	0.018	0.536	0.576
Agree with at least one specified reason a husband is justified in wife beating	0.193	0.006	15,014	15,014	1.949	0.033	0.180	0.205
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.517	0.010	8,811	8,205	1.854	0.019	0.498	0.537
Experienced physical violence since age 15 by any perpetrator	0.332	0.010	5,737	5,737	1.674	0.031	0.311	0.352
Experienced sexual violence by any perpetrator ever	0.141	0.007	5,737	5,737	1.565	0.051	0.127	0.156
Experienced sexual violence by any non-intimate partner	0.062	0.005	5,737	5,737	1.476	0.076	0.052	0.071
Experienced emotional/physical/sexual violence by any husband or intimate partner ever	0.416	0.012	5,137	4,919	1.677	0.028	0.393	0.439
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.206	0.008	5,137	4,919	1.469	0.040	0.189	0.223
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.284	0.010	5,137	4,919	1.536	0.034	0.264	0.303
	MEN							
Urban residence	0.548	0.011	6,293	6,277	1.784	0.020	0.526	0.571
No education	0.100	0.006	6,293	6,277	1.569	0.059	0.088	0.112
Secondary education or higher	0.785	0.009	6,293	6,277	1.771	0.012	0.766	0.803
Literacy	0.738	0.010	6,293	6,277	1.737	0.013	0.719	0.758
Use of the internet in last 12 months	0.616	0.010	6,293	6,277	1.654	0.016	0.595	0.636
Current tobacco use	0.043	0.004	6,293	6,277	1.535	0.091	0.035	0.051
Currently married/in union	0.450	0.008	6,293	6,277	1.225	0.017	0.435	0.466
Had sexual intercourse before age 18	0.260	0.010	4,863	4,853	1.559	0.038	0.240	0.280
Want no more children	0.276	0.012	3,020	2,828	1.473	0.043	0.252	0.300
Want to delay next birth at least 2 years	0.379	0.015	3,020	2,828	1.649	0.038	0.350	0.408
Ideal number of children	4.971	0.071	6,184	6,153	1.620	0.014	4.830	5.113
Discriminatory attitudes towards people with HIV	0.721	0.010	6,031	6,093	1.817	0.015	0.700	0.742
Condom use at last sex	0.281	0.015	1,997	2,164	1.519	0.054	0.250	0.311
Ever tested for HIV and received results of last test	0.067	0.004	6,293	6,277	1.404	0.066	0.058	0.076
Male circumcision	0.952	0.005	6,293	6,277	1.881	0.005	0.942	0.962
Mobile phone ownership	0.875	0.006	6,293	6,277	1.395	0.007	0.863	0.886
Have and use a bank account or mobile phone for financial transactions	0.791	0.008	6,293	6,277	1.559	0.010	0.775	0.807
Agree with at least one specified reason a husband is justified in wife beating	0.158	0.007	6,293	6,277	1.567	0.046	0.144	0.173

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.3 Sampling errors: Urban sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Electricity primary source of lighting	0.946	0.006	30,760	33,294	2.156	0.007	0.933	0.958
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.378	0.016	30,760	33,294	2.616	0.042	0.347	0.410
Births registered with civil authority	0.775	0.012	4,021	4,093	1.509	0.015	0.752	0.799
Ownership of at least one ITN	0.582	0.010	8,795	10,320	1.886	0.017	0.562	0.602
Ownership of at least one ITN for every two persons	0.415	0.009	8,746	10,256	1.798	0.023	0.396	0.434
Improved drinking water source	0.975	0.004	30,760	33,294	1.904	0.005	0.966	0.984
At least basic drinking water service	0.949	0.006	30,760	33,294	1.811	0.006	0.937	0.961
Water available when needed	0.802	0.011	30,760	33,294	2.150	0.014	0.779	0.825
Improved sanitation facility	0.810	0.016	30,760	33,294	3.009	0.020	0.777	0.842
At least basic sanitation service	0.335	0.019	30,760	33,294	3.112	0.057	0.297	0.373
Using open defecation	0.117	0.013	30,760	33,294	2.986	0.115	0.090	0.143
Using a handwashing facility with soap and water	0.528	0.017	30,192	32,643	2.600	0.032	0.494	0.561
WOMEN								
No education	0.092	0.005	7,362	8,557	1.616	0.059	0.081	0.103
Secondary education or higher	0.795	0.008	7,362	8,557	1.803	0.011	0.778	0.812
Literacy	0.715	0.010	7,362	8,557	1.841	0.014	0.695	0.734
Use of the internet in last 12 months	0.578	0.013	7,362	8,557	2.203	0.022	0.553	0.604
Current tobacco use	0.011	0.002	7,362	8,557	1.928	0.209	0.007	0.016
Age-specific fertility rate 15–19	42.616	4.081	3,910	4,305	1.214	0.096	34.454	50.778
Total fertility rate (3 years)	3.213	0.093	20,748	24,171	1.370	0.029	3.027	3.399
Currently pregnant	0.062	0.004	7,362	8,557	1.448	0.066	0.053	0.070
Mean number of children ever born to women age 40–49	3.878	0.084	1,390	1,681	1.534	0.022	3.710	4.047
Median birth interval	42.262	0.717	2,732	2,910	1.373	0.017	40.829	43.696
Want no more children	0.347	0.011	3,884	4,248	1.454	0.032	0.325	0.369
Ideal number of children	4.171	0.038	7,278	8,441	1.807	0.009	4.096	4.246
Total wanted fertility rate (3 years)	2.820	0.086	20,748	24,171	1.370	0.031	2.647	2.993
Currently using any contraceptive method	0.371	0.013	3,884	4,248	1.630	0.034	0.346	0.396
Currently using any modern method	0.266	0.010	3,884	4,248	1.416	0.038	0.246	0.286
Currently using pill	0.040	0.004	3,884	4,248	1.158	0.091	0.033	0.047
Currently using injectables	0.066	0.006	3,884	4,248	1.433	0.087	0.054	0.077
Currently using implants	0.065	0.005	3,884	4,248	1.235	0.075	0.056	0.075
Currently using male condoms	0.020	0.003	3,884	4,248	1.409	0.157	0.014	0.027
Currently using any traditional method	0.104	0.007	3,884	4,248	1.491	0.070	0.090	0.119
Unmet need for spacing	0.128	0.008	3,884	4,248	1.534	0.064	0.111	0.144
Unmet need for limiting	0.096	0.006	3,884	4,248	1.357	0.067	0.083	0.109
Unmet need total	0.223	0.009	3,884	4,248	1.374	0.041	0.205	0.242
Demand satisfied by modern methods	0.448	0.014	2,236	2,524	1.341	0.031	0.421	0.476
Demand satisfied by modern methods (all women)	0.490	0.011	3,376	3,877	1.290	0.023	0.468	0.513
Participation in decision making about family planning	0.868	0.010	3,884	4,248	1.886	0.012	0.848	0.889
Not exposed to any of the eight media sources	0.241	0.010	7,362	8,557	1.965	0.041	0.222	0.261
Neonatal mortality (last 0–4 years)	16.889	3.042	3,859	4,161	1.325	0.180	10.805	22.973
Postneonatal mortality (last 0–4 years)	10.356	2.025	3,867	4,165	1.182	0.196	6.305	14.407
Infant mortality (last 0–4 years)	27.245	3.400	3,861	4,163	1.188	0.125	20.445	34.046
Child mortality (last 0–4 years)	9.787	1.860	3,822	4,135	1.161	0.190	6.067	13.506
Under-5 mortality (last 0–4 years)	36.765	3.732	3,874	4,175	1.156	0.102	29.302	44.229
Perinatal mortality rate	27.588	3.368	3,902	4,226	1.206	0.122	20.852	34.323
Stillbirth rate	13.332	2.510	3,902	4,226	1.323	0.188	8.313	18.351
Early neonatal mortality rate	14.438	2.778	3,857	4,172	1.314	0.192	8.882	19.995
Received ANC from a skilled provider	0.986	0.005	1,561	1,623	1.538	0.005	0.977	0.995
4+ ANC visits	0.912	0.010	1,561	1,623	1.459	0.011	0.892	0.933
8+ ANC visits	0.462	0.018	1,561	1,623	1.401	0.038	0.427	0.497
Took any iron-containing supplements	0.944	0.008	1,561	1,623	1.323	0.008	0.928	0.959
Mothers protected against tetanus for last birth	0.792	0.015	1,561	1,623	1.500	0.020	0.761	0.822
Delivered in a health facility (live births)	0.943	0.008	1,628	1,700	1.295	0.008	0.928	0.959
Delivered by a skilled provider (live births)	0.953	0.007	1,628	1,700	1.310	0.008	0.938	0.967
Delivered by C-section (live births)	0.270	0.017	1,628	1,700	1.368	0.062	0.237	0.304
Women with postnatal check during first 2 days	0.924	0.009	1,561	1,623	1.404	0.010	0.905	0.942
Newborns with postnatal check during first 2 days	0.905	0.010	1,561	1,623	1.359	0.011	0.885	0.926
Any problem accessing health care	0.467	0.012	7,362	8,557	2.120	0.026	0.443	0.492
Ever had vaccination card	0.994	0.002	827	858	0.851	0.003	0.989	0.999
Received BCG vaccination	0.979	0.007	827	858	1.195	0.007	0.966	0.992
Received DPT-HepB-Hib vaccination (3 doses)	0.914	0.012	827	858	1.160	0.013	0.890	0.938
Received pneumococcal vaccination (3 doses)	0.888	0.014	827	858	1.211	0.016	0.859	0.917
Received measles and rubella 1 vaccination	0.880	0.016	827	858	1.283	0.018	0.849	0.911
Fully vaccinated according to national schedule (12–23 months)	0.633	0.022	827	858	1.203	0.034	0.589	0.676
Received measles and rubella 2 vaccination	0.693	0.026	716	786	1.450	0.038	0.641	0.746
Fully vaccinated according to national schedule (24–35 months)	0.437	0.027	716	786	1.430	0.063	0.382	0.492
Sought treatment for diarrhoea	0.473	0.030	470	443	1.139	0.063	0.413	0.532
Treated with ORS	0.332	0.031	470	443	1.278	0.094	0.270	0.395
Height-for-age (−3 SD)	0.034	0.005	2,024	2,096	1.183	0.154	0.023	0.044
Height-for-age (−2 SD)	0.151	0.012	2,024	2,096	1.364	0.082	0.126	0.175
Weight-for-height (−2 SD)	0.058	0.008	2,023	2,092	1.374	0.133	0.043	0.074
Weight-for-height (+2 SD)	0.023	0.004	2,023	2,092	1.236	0.192	0.014	0.032
Weight-for-age (−2 SD)	0.112	0.011	2,028	2,101	1.406	0.099	0.090	0.135

Continued...

Table B.3—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.489	0.036	352	367	1.360	0.074	0.416	0.562
Minimum dietary diversity (children 6–23 months)	0.459	0.025	1,159	1,206	1.737	0.055	0.408	0.510
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.414	0.015	1,819	1,881	1.192	0.037	0.383	0.445
Body mass index (BMI) <18.5	0.035	0.004	2,776	3,342	1.238	0.124	0.026	0.043
Body mass index (BMI) ≥25.0	0.597	0.013	2,776	3,342	1.415	0.022	0.571	0.623
Body mass index-for-age (−2 SD)	0.014	0.005	672	748	1.182	0.384	0.003	0.025
Body mass index-for-age (+1 SD)	0.180	0.020	672	748	1.338	0.110	0.140	0.220
Minimum dietary diversity (women 15–49)	0.524	0.010	7,362	8,557	1.772	0.020	0.503	0.544
Prevalence of any anaemia (women 15–49)	0.394	0.011	3,708	4,377	1.331	0.027	0.373	0.415
Child slept under an ITN last night	0.360	0.014	4,047	4,141	1.491	0.040	0.331	0.388
Pregnant women slept under an ITN last night	0.328	0.025	464	505	1.092	0.076	0.278	0.378
Received 3+ doses of SP/Fansidar	0.628	0.017	1,561	1,623	1.421	0.028	0.593	0.663
Child had fever in last 2 weeks	0.121	0.008	3,740	4,048	1.381	0.067	0.105	0.137
Child had blood taken from finger/heel	0.339	0.033	509	490	1.392	0.097	0.274	0.404
Child took ACT	0.749	0.044	227	190	1.297	0.059	0.661	0.837
Child has malaria (based on rapid test)	0.075	0.010	1,819	1,881	1.481	0.134	0.055	0.095
Child has malaria (based on microscopy test)	0.043	0.007	1,819	1,881	1.326	0.161	0.029	0.057
Discriminatory attitudes towards people with HIV	0.734	0.010	7,124	8,383	1.861	0.013	0.715	0.754
Condom use at last sex	0.117	0.009	1,776	2,159	1.166	0.076	0.099	0.135
Tested for HIV in the past 12 months and received the results of the last test	0.157	0.006	7,362	8,557	1.473	0.040	0.144	0.169
Mobile phone ownership	0.866	0.006	7,362	8,557	1.437	0.007	0.854	0.877
Have and use a bank account or mobile phone for financial transactions	0.823	0.008	7,362	8,557	1.883	0.010	0.807	0.840
Participate in decision making (all three decisions)	0.611	0.014	3,884	4,248	1.803	0.023	0.583	0.639
Agree with at least one specified reason a husband is justified in wife beating	0.143	0.007	7,362	8,557	1.763	0.050	0.128	0.157
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.593	0.015	3,884	4,248	1.852	0.025	0.564	0.622
Experienced physical violence since age 15 by any perpetrator	0.320	0.015	2,803	3,296	1.681	0.046	0.291	0.350
Experienced sexual violence by any perpetrator ever	0.148	0.010	2,803	3,296	1.539	0.070	0.128	0.169
Experienced sexual violence by any non-intimate partner	0.070	0.007	2,803	3,296	1.406	0.097	0.057	0.084
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.186	0.012	2,470	2,772	1.503	0.063	0.162	0.209
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.266	0.013	2,470	2,772	1.506	0.050	0.239	0.293
	MEN							
No education	0.047	0.005	2,925	3,442	1.323	0.110	0.037	0.058
Secondary education or higher	0.874	0.010	2,925	3,442	1.656	0.012	0.854	0.895
Literacy	0.852	0.010	2,925	3,442	1.546	0.012	0.832	0.872
Use of the internet in last 12 months	0.744	0.013	2,925	3,442	1.582	0.017	0.718	0.769
Current tobacco use	0.036	0.006	2,925	3,442	1.699	0.162	0.024	0.048
Want no more children	0.302	0.019	1,297	1,479	1.478	0.062	0.264	0.340
Discriminatory attitudes towards people with HIV	0.673	0.015	2,863	3,393	1.727	0.023	0.643	0.703
Condom use at last sex	0.332	0.022	1,050	1,286	1.504	0.066	0.288	0.375
Ever tested for HIV and received results of last test	0.085	0.007	2,925	3,442	1.316	0.080	0.072	0.099
Male circumcision	0.978	0.004	2,925	3,442	1.419	0.004	0.970	0.985
Mobile phone ownership	0.913	0.007	2,925	3,442	1.400	0.008	0.898	0.928
Have and use a bank account or mobile phone for financial transactions	0.856	0.010	2,925	3,442	1.517	0.011	0.837	0.876
Agree with at least one specified reason a husband is justified in wife beating	0.102	0.008	2,925	3,442	1.490	0.082	0.085	0.119

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.4 Sampling errors: Rural sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Electricity primary source of lighting	0.681	0.025	38,127	30,317	4.150	0.036	0.632	0.731
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.079	0.007	38,127	30,317	2.426	0.083	0.066	0.093
Births registered with civil authority	0.717	0.014	5,758	4,415	1.870	0.019	0.689	0.745
Ownership of at least one ITN	0.781	0.009	9,138	7,613	2.175	0.012	0.763	0.800
Ownership of at least one ITN for every two persons	0.554	0.011	9,090	7,562	2.067	0.019	0.533	0.576
Improved drinking water source	0.774	0.020	38,127	30,317	3.759	0.026	0.733	0.815
At least basic drinking water service	0.716	0.020	38,127	30,317	3.418	0.028	0.677	0.756
Water available when needed	0.817	0.012	38,127	30,317	2.481	0.015	0.792	0.842
Improved sanitation facility	0.436	0.020	38,127	30,317	3.210	0.045	0.397	0.476
At least basic sanitation service	0.142	0.009	38,127	30,317	2.054	0.063	0.124	0.159
Using open defecation	0.388	0.019	38,127	30,317	2.960	0.048	0.351	0.425
Using a handwashing facility with soap and water	0.333	0.014	37,470	29,622	2.495	0.043	0.304	0.362
WOMEN								
No education	0.252	0.010	7,652	6,457	1.933	0.038	0.233	0.271
Secondary education or higher	0.577	0.012	7,652	6,457	2.141	0.021	0.553	0.602
Literacy	0.466	0.012	7,652	6,457	2.100	0.026	0.442	0.490
Use of the internet in last 12 months	0.241	0.011	7,652	6,457	2.285	0.046	0.218	0.263
Current tobacco use	0.007	0.001	7,652	6,457	1.595	0.222	0.004	0.010
Age-specific fertility rate 15–19	87.930	4.864	4,230	3,493	1.153	0.055	78.203	97.658
Total fertility rate (3 years)	4.828	0.114	21,407	18,120	1.361	0.024	4.601	5.055
Currently pregnant	0.077	0.004	7,652	6,457	1.206	0.048	0.070	0.085
Mean number of children ever born to women age 40–49	5.302	0.099	1,485	1,306	1.669	0.019	5.104	5.499
Median birth interval	39.280	0.600	4,198	3,337	1.665	0.015	38.081	40.479
Want no more children	0.308	0.010	4,927	3,956	1.568	0.033	0.288	0.329
Ideal number of children	4.947	0.048	7,562	6,357	1.956	0.010	4.850	5.043
Total wanted fertility rate (3 years)	4.239	0.111	21,407	18,120	1.387	0.026	4.017	4.460
Currently using any contraceptive method	0.355	0.010	4,927	3,956	1.422	0.027	0.336	0.375
Currently using any modern method	0.291	0.010	4,927	3,956	1.503	0.033	0.271	0.310
Currently using pill	0.043	0.005	4,927	3,956	1.830	0.124	0.032	0.053
Currently using injectables	0.094	0.006	4,927	3,956	1.551	0.069	0.081	0.107
Currently using implants	0.094	0.006	4,927	3,956	1.516	0.067	0.082	0.107
Currently using male condoms	0.008	0.002	4,927	3,956	1.246	0.199	0.005	0.011
Currently using any traditional method	0.065	0.005	4,927	3,956	1.478	0.080	0.054	0.075
Unmet need for spacing	0.158	0.007	4,927	3,956	1.339	0.044	0.144	0.172
Unmet need for limiting	0.088	0.006	4,927	3,956	1.393	0.064	0.076	0.099
Unmet need total	0.246	0.009	4,927	3,956	1.413	0.035	0.228	0.263
Demand satisfied by modern methods	0.483	0.014	2,775	2,378	1.518	0.029	0.456	0.511
Demand satisfied by modern methods (all women)	0.500	0.013	3,655	3,236	1.558	0.025	0.475	0.525
Participation in decision making about family planning	0.813	0.011	4,927	3,956	2.054	0.014	0.791	0.836
Not exposed to any of the eight media sources	0.368	0.013	7,652	6,457	2.348	0.035	0.342	0.394
Neonatal mortality (last 0–4 years)	17.424	2.111	5,496	4,411	1.136	0.121	13.202	21.645
Postneonatal mortality (last 0–4 years)	11.291	1.711	5,472	4,392	1.185	0.152	7.868	14.713
Infant mortality (last 0–4 years)	28.714	2.695	5,498	4,412	1.157	0.094	23.324	34.104
Child mortality (last 0–4 years)	13.949	2.023	5,336	4,290	1.219	0.145	9.903	17.995
Under-5 mortality (last 0–4 years)	42.263	3.208	5,529	4,438	1.161	0.076	35.847	48.679
Perinatal mortality rate	28.982	2.900	5,582	4,483	1.233	0.100	23.182	34.782
Stillbirth rate	16.880	2.478	5,582	4,483	1.385	0.147	11.924	21.836
Early neonatal mortality rate	12.306	1.809	5,496	4,409	1.148	0.147	8.687	15.925
Received ANC from a skilled provider	0.971	0.005	2,289	1,868	1.526	0.006	0.960	0.981
4+ ANC visits	0.848	0.015	2,289	1,868	1.973	0.017	0.818	0.877
8+ ANC visits	0.320	0.018	2,289	1,868	1.850	0.056	0.284	0.356
Took any iron-containing supplements	0.905	0.010	2,289	1,868	1.574	0.011	0.885	0.924
Mothers protected against tetanus for last birth	0.692	0.017	2,289	1,868	1.796	0.025	0.657	0.726
Delivered in a health facility (live births)	0.791	0.018	2,383	1,938	2.047	0.022	0.756	0.827
Delivered by a skilled provider (live births)	0.808	0.017	2,383	1,938	2.058	0.021	0.773	0.842
Delivered by C-section (live births)	0.153	0.011	2,383	1,938	1.428	0.074	0.130	0.175
Women with postnatal check during first 2 days	0.829	0.014	2,289	1,868	1.786	0.017	0.801	0.857
Newborns with postnatal check during first 2 days	0.837	0.014	2,289	1,868	1.770	0.016	0.810	0.865
Any problem accessing health care	0.628	0.016	7,652	6,457	2.842	0.025	0.596	0.659
Ever had vaccination card	0.970	0.007	1,146	965	1.369	0.007	0.956	0.985
Received BCG vaccination	0.930	0.009	1,146	965	1.231	0.010	0.911	0.949
Received DPT-HepB-Hib vaccination (3 doses)	0.869	0.014	1,146	965	1.416	0.017	0.840	0.897
Received pneumococcal vaccination (3 doses)	0.877	0.013	1,146	965	1.338	0.015	0.851	0.904
Received measles and rubella 1 vaccination	0.861	0.014	1,146	965	1.359	0.016	0.833	0.890
Fully vaccinated according to national schedule (12–23 months)	0.504	0.023	1,146	965	1.501	0.045	0.458	0.549
Received measles and rubella 2 vaccination	0.757	0.019	986	760	1.320	0.025	0.719	0.795
Fully vaccinated according to national schedule (24–35 months)	0.411	0.022	986	760	1.322	0.054	0.367	0.456
Sought treatment for diarrhoea	0.529	0.024	737	611	1.275	0.046	0.480	0.578
Treated with ORS	0.446	0.036	737	611	1.842	0.080	0.375	0.518
Height-for-age (−3 SD)	0.050	0.005	2,904	2,197	1.179	0.106	0.039	0.060
Height-for-age (−2 SD)	0.196	0.010	2,904	2,197	1.230	0.051	0.176	0.216
Weight-for-height (−2 SD)	0.061	0.006	2,908	2,199	1.202	0.096	0.049	0.072
Weight-for-height (+2 SD)	0.017	0.003	2,908	2,199	1.198	0.179	0.011	0.022
Weight-for-age (−2 SD)	0.133	0.008	2,907	2,198	1.197	0.063	0.116	0.149

Continued...

Table B.4—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.555	0.027	606	459	1.330	0.048	0.501	0.609
Minimum dietary diversity (children 6–23 months)	0.374	0.017	1,627	1,356	1.446	0.046	0.340	0.409
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.562	0.014	2,576	1,956	1.313	0.025	0.534	0.591
Body mass index (BMI) <18.5	0.061	0.006	2,725	2,362	1.217	0.091	0.050	0.072
Body mass index (BMI) ≥25.0	0.367	0.015	2,725	2,362	1.585	0.040	0.338	0.397
Body mass index-for-age (−2 SD)	0.037	0.009	702	591	1.281	0.247	0.019	0.055
Body mass index-for-age (+1 SD)	0.080	0.012	702	591	1.187	0.152	0.056	0.105
Minimum dietary diversity (women 15–49)	0.467	0.012	7,652	6,457	2.163	0.026	0.443	0.492
Prevalence of any anaemia (women 15–49)	0.434	0.011	3,849	3,278	1.380	0.025	0.412	0.456
Child slept under an ITN last night	0.611	0.015	5,803	4,439	1.834	0.024	0.581	0.641
Pregnant women slept under an ITN last night	0.633	0.026	647	479	1.303	0.042	0.581	0.686
Received 3+ doses of SP/Fansidar	0.580	0.019	2,289	1,868	1.810	0.032	0.543	0.617
Child had fever in last 2 weeks	0.179	0.010	5,322	4,267	1.708	0.054	0.159	0.198
Child had blood taken from finger/heel	0.439	0.025	942	762	1.482	0.058	0.388	0.490
Child took ACT	0.800	0.026	480	370	1.285	0.032	0.748	0.851
Child has malaria (based on rapid test)	0.252	0.013	2,578	1,957	1.338	0.051	0.226	0.277
Child has malaria (based on microscopy test)	0.128	0.009	2,578	1,957	1.261	0.074	0.109	0.147
Discriminatory attitudes towards people with HIV	0.855	0.008	6,856	5,898	1.907	0.009	0.839	0.871
Condom use at last sex	0.087	0.009	1,355	1,300	1.173	0.103	0.069	0.105
Tested for HIV in the past 12 months and received the results of the last test	0.142	0.005	7,652	6,457	1.304	0.037	0.131	0.152
Mobile phone ownership	0.704	0.008	7,652	6,457	1.600	0.012	0.688	0.721
Have and use a bank account or mobile phone for financial transactions	0.604	0.013	7,652	6,457	2.243	0.021	0.579	0.629
Participate in decision making (all three decisions)	0.497	0.015	4,927	3,956	2.038	0.029	0.468	0.526
Agree with at least one specified reason a husband is justified in wife beating	0.259	0.011	7,652	6,457	2.126	0.041	0.238	0.280
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.436	0.012	4,927	3,956	1.750	0.028	0.412	0.461
Experienced physical violence since age 15 by any perpetrator	0.347	0.014	2,934	2,441	1.612	0.041	0.318	0.375
Experienced sexual violence by any perpetrator ever	0.131	0.010	2,934	2,441	1.533	0.073	0.112	0.150
Experienced sexual violence by any non-intimate partner	0.050	0.006	2,934	2,441	1.523	0.122	0.038	0.063
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.232	0.011	2,667	2,148	1.405	0.050	0.209	0.255
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.307	0.014	2,667	2,148	1.554	0.045	0.279	0.334
	MEN							
No education	0.164	0.011	3,368	2,835	1.655	0.064	0.143	0.185
Secondary education or higher	0.676	0.014	3,368	2,835	1.796	0.021	0.647	0.705
Literacy	0.600	0.015	3,368	2,835	1.736	0.024	0.571	0.629
Use of the internet in last 12 months	0.460	0.015	3,368	2,835	1.725	0.032	0.430	0.490
Current tobacco use	0.051	0.005	3,368	2,835	1.315	0.097	0.041	0.061
Want no more children	0.248	0.014	1,723	1,349	1.352	0.057	0.220	0.276
Discriminatory attitudes towards people with HIV	0.781	0.014	3,168	2,700	1.859	0.017	0.754	0.808
Condom use at last sex	0.206	0.018	947	878	1.364	0.087	0.170	0.242
Ever tested for HIV and received results of last test	0.046	0.005	3,368	2,835	1.468	0.116	0.035	0.056
Male circumcision	0.920	0.010	3,368	2,835	2.169	0.011	0.900	0.940
Mobile phone ownership	0.828	0.009	3,368	2,835	1.374	0.011	0.810	0.846
Have and use a bank account or mobile phone for financial transactions	0.712	0.012	3,368	2,835	1.528	0.017	0.689	0.736
Agree with at least one specified reason a husband is justified in wife beating	0.227	0.011	3,368	2,835	1.580	0.050	0.204	0.249

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.5 Sampling errors: Western sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.309	0.036	3,390	3,944	2.295	0.118	0.236	0.381
Births registered with civil authority	0.856	0.021	459	526	1.083	0.025	0.814	0.898
Ownership of at least one ITN	0.640	0.021	1,087	1,282	1.413	0.032	0.599	0.681
Ownership of at least one ITN for every two persons	0.494	0.020	1,073	1,265	1.341	0.041	0.453	0.535
At least basic drinking water service	0.904	0.035	3,390	3,944	3.036	0.039	0.834	0.975
Water available when needed	0.854	0.022	3,390	3,944	1.689	0.026	0.809	0.898
At least basic sanitation service	0.241	0.038	3,390	3,944	2.420	0.157	0.165	0.316
Using open defecation	0.096	0.026	3,390	3,944	2.399	0.268	0.045	0.148
Using a handwashing facility with soap and water	0.836	0.028	3,380	3,930	1.994	0.033	0.780	0.891
WOMEN								
No education	0.097	0.013	797	955	1.219	0.132	0.072	0.123
Secondary education or higher	0.769	0.024	797	955	1.619	0.032	0.720	0.817
Literacy	0.654	0.030	797	955	1.758	0.045	0.594	0.713
Use of the internet in last 12 months	0.477	0.032	797	955	1.828	0.068	0.412	0.541
Current tobacco use	0.004	0.002	797	955	0.984	0.581	0.000	0.008
Total fertility rate (3 years)	3.596	0.280	2,239	2,681	1.296	0.078	3.037	4.155
Currently pregnant	0.071	0.008	797	955	0.902	0.116	0.054	0.087
Mean number of children ever born to women age 40–49	4.477	0.229	133	163	1.293	0.051	4.018	4.936
Median birth interval	39.166	1.727	335	394	1.184	0.044	35.712	42.620
Ideal number of children	4.145	0.065	794	951	1.188	0.016	4.015	4.275
Total wanted fertility rate (3 years)	3.042	0.213	2,239	2,681	1.160	0.070	2.617	3.468
Currently using any contraceptive method	0.448	0.029	408	487	1.184	0.065	0.390	0.507
Currently using any modern method	0.355	0.028	408	487	1.168	0.078	0.300	0.411
Currently using pill	0.036	0.010	408	487	1.048	0.269	0.017	0.055
Currently using injectables	0.098	0.017	408	487	1.144	0.172	0.064	0.132
Currently using implants	0.113	0.017	408	487	1.091	0.151	0.079	0.147
Currently using male condoms	0.026	0.009	408	487	1.186	0.360	0.007	0.045
Currently using any traditional method	0.093	0.015	408	487	1.041	0.161	0.063	0.123
Unmet need for spacing	0.084	0.015	408	487	1.112	0.183	0.053	0.114
Unmet need for limiting	0.102	0.020	408	487	1.306	0.193	0.063	0.141
Unmet need total	0.185	0.025	408	487	1.271	0.132	0.136	0.234
Demand satisfied by modern methods	0.561	0.036	259	309	1.162	0.064	0.489	0.633
Demand satisfied by modern methods (all women)	0.554	0.029	410	484	1.159	0.052	0.497	0.611
Participation in decision making about family planning	0.907	0.018	408	487	1.277	0.020	0.870	0.944
Not exposed to any of the eight media sources	0.140	0.018	797	955	1.489	0.131	0.104	0.177
Neonatal mortality (last 0–9 years)	24.763	5.265	871	1,036	0.955	0.213	14.234	35.292
Postneonatal mortality (last 0–9 years)	11.368	3.945	872	1,038	1.030	0.347	3.478	19.258
Infant mortality (last 0–9 years)	36.131	5.502	872	1,038	0.772	0.152	25.127	47.134
Child mortality (last 0–9 years)	12.109	3.493	886	1,056	0.947	0.288	5.123	19.095
Under-5 mortality (last 0–9 years)	47.802	5.865	873	1,039	0.792	0.123	36.072	59.532
Perinatal mortality rate	33.832	8.629	460	542	1.033	0.255	16.574	51.091
Stillbirth rate	15.915	6.343	460	542	1.084	0.399	3.228	28.602
Early neonatal mortality rate	18.158	6.431	454	535	1.029	0.354	5.297	31.020
Received ANC from a skilled provider	0.929	0.024	176	208	1.242	0.026	0.881	0.977
4+ ANC visits	0.894	0.028	176	208	1.217	0.032	0.837	0.950
8+ ANC visits	0.465	0.041	176	208	1.077	0.087	0.384	0.547
Took any iron-containing supplements	0.912	0.025	176	208	1.182	0.028	0.862	0.963
Mothers protected against tetanus for last birth	0.729	0.039	176	208	1.163	0.054	0.651	0.808
Delivered in a health facility (live births)	0.850	0.027	179	212	1.019	0.032	0.795	0.905
Delivered by a skilled provider (live births)	0.868	0.027	179	212	1.076	0.032	0.813	0.923
Delivered by C-section (live births)	0.196	0.032	179	212	1.066	0.165	0.131	0.260
Women with postnatal check during first 2 days	0.873	0.032	176	208	1.269	0.037	0.809	0.937
Newborns with postnatal check during first 2 days	0.891	0.025	176	208	1.078	0.028	0.840	0.942
Any problem accessing health care	0.529	0.037	797	955	2.072	0.069	0.456	0.602
Ever had vaccination card	0.947	0.025	95	112	0.924	0.027	0.896	0.998
Received BCG vaccination	0.932	0.027	95	112	0.892	0.028	0.879	0.985
Received DPT-HepB-Hib vaccination (3 doses)	0.828	0.041	95	112	1.007	0.050	0.746	0.911
Received pneumococcal vaccination (3 doses)	0.789	0.041	95	112	0.928	0.052	0.707	0.871
Received measles and rubella 1 vaccination	0.773	0.048	95	112	1.032	0.062	0.677	0.869
Fully vaccinated according to national schedule (12–23 months)	0.424	0.069	95	112	1.315	0.162	0.287	0.562
Received measles and rubella 2 vaccination	0.549	0.062	85	102	1.142	0.113	0.425	0.673
Fully vaccinated according to national schedule (24–35 months)	0.315	0.063	85	102	1.217	0.200	0.189	0.440
Sought treatment for diarrhoea	0.691	0.104	23	25	1.037	0.151	0.483	0.899
Treated with ORS	0.500	0.092	23	25	0.851	0.185	0.315	0.684
Height-for-age (−3 SD)	0.031	0.010	229	262	0.788	0.324	0.011	0.050
Height-for-age (−2 SD)	0.135	0.023	229	262	0.951	0.174	0.088	0.182
Weight-for-height (−2 SD)	0.053	0.013	230	264	0.870	0.239	0.028	0.078
Weight-for-height (+2 SD)	0.021	0.010	230	264	1.027	0.459	0.002	0.041
Weight-for-age (−2 SD)	0.099	0.021	230	264	1.018	0.212	0.057	0.141

Continued...

Table B.5—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.376	0.082	34	42	0.971	0.218	0.212	0.540
Minimum dietary diversity (children 6–23 months)	0.447	0.053	134	157	1.226	0.118	0.341	0.553
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.461	0.040	212	241	1.168	0.086	0.382	0.541
Body mass index (BMI) <18.5	0.048	0.013	296	355	1.080	0.280	0.021	0.075
Body mass index (BMI) ≥25.0	0.530	0.033	296	355	1.121	0.061	0.465	0.595
Body mass index-for-age (−2 SD)	0.000	0.000	80	96	na	na	0.000	0.000
Body mass index-for-age (+1 SD)	0.146	0.049	80	96	1.224	0.334	0.049	0.244
Minimum dietary diversity (women 15–49)	0.608	0.028	797	955	1.638	0.047	0.551	0.665
Prevalence of any anaemia (women 15–49)	0.459	0.028	409	487	1.151	0.062	0.402	0.516
Child slept under an ITN last night	0.460	0.033	466	533	1.182	0.071	0.394	0.526
Pregnant women slept under an ITN last night	0.473	0.072	58	66	1.073	0.152	0.329	0.616
Received 3+ doses of SP/Fansidar	0.619	0.045	176	208	1.235	0.073	0.528	0.709
Child had fever in last 2 weeks	0.123	0.020	438	515	1.229	0.162	0.083	0.162
Child had blood taken from finger/heel	0.373	0.075	59	63	1.095	0.200	0.224	0.522
Child took ACT	0.867	0.072	22	25	0.971	0.083	0.723	1.010
Child has malaria (based on rapid test)	0.225	0.043	212	241	1.401	0.191	0.139	0.311
Child has malaria (based on microscopy test)	0.097	0.026	212	241	1.163	0.272	0.044	0.149
Discriminatory attitudes towards people with HIV	0.792	0.023	784	940	1.609	0.030	0.745	0.838
Condom use at last sex	0.091	0.022	208	244	1.081	0.238	0.048	0.134
Tested for HIV in the past 12 months and received the results of the last test	0.164	0.012	797	955	0.951	0.076	0.139	0.189
Mobile phone ownership	0.820	0.020	797	955	1.473	0.024	0.780	0.860
Have and use a bank account or mobile phone for financial transactions	0.819	0.020	797	955	1.461	0.024	0.779	0.858
Participate in decision making (all three decisions)	0.689	0.038	408	487	1.634	0.055	0.614	0.764
Agree with at least one specified reason a husband is justified in wife beating	0.126	0.014	797	955	1.213	0.114	0.097	0.154
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.690	0.032	408	487	1.405	0.047	0.626	0.754
Experienced physical violence since age 15 by any perpetrator	0.305	0.027	329	373	1.055	0.088	0.252	0.359
Experienced sexual violence by any perpetrator ever	0.114	0.020	329	373	1.135	0.175	0.074	0.153
Experienced sexual violence by any non-intimate partner	0.039	0.009	329	373	0.875	0.239	0.020	0.058
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.243	0.039	293	317	1.532	0.159	0.166	0.320
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.282	0.031	293	317	1.158	0.108	0.221	0.343
	MEN							
No education	0.050	0.012	345	414	1.030	0.242	0.026	0.074
Secondary education or higher	0.835	0.024	345	414	1.212	0.029	0.786	0.883
Literacy	0.760	0.029	345	414	1.255	0.038	0.703	0.818
Use of the internet in last 12 months	0.664	0.034	345	414	1.320	0.051	0.596	0.731
Current tobacco use	0.024	0.011	345	414	1.364	0.470	0.001	0.046
Want no more children	0.355	0.032	160	190	0.855	0.091	0.290	0.419
Discriminatory attitudes towards people with HIV	0.769	0.029	342	411	1.285	0.038	0.710	0.827
Condom use at last sex	0.305	0.041	143	171	1.067	0.135	0.222	0.387
Ever tested for HIV and received results of last test	0.097	0.023	345	414	1.459	0.240	0.051	0.144
Male circumcision	0.986	0.006	345	414	0.948	0.006	0.973	0.998
Mobile phone ownership	0.903	0.019	345	414	1.178	0.021	0.866	0.941
Have and use a bank account or mobile phone for financial transactions	0.833	0.026	345	414	1.286	0.031	0.782	0.885
Agree with at least one specified reason a husband is justified in wife beating	0.242	0.026	345	414	1.142	0.109	0.189	0.295

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.6 Sampling errors: Central sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.221	0.028	4,162	6,957	2.027	0.125	0.166	0.276
Births registered with civil authority	0.762	0.029	530	887	1.407	0.038	0.704	0.820
Ownership of at least one ITN	0.673	0.024	1,160	1,950	1.759	0.036	0.625	0.722
Ownership of at least one ITN for every two persons	0.490	0.027	1,148	1,929	1.821	0.055	0.436	0.544
At least basic drinking water service	0.850	0.038	4,162	6,957	2.948	0.045	0.773	0.927
Water available when needed	0.814	0.023	4,162	6,957	1.627	0.028	0.767	0.860
At least basic sanitation service	0.217	0.030	4,162	6,957	2.019	0.139	0.157	0.277
Using open defecation	0.127	0.043	4,162	6,957	3.575	0.338	0.041	0.213
Using a handwashing facility with soap and water	0.331	0.025	4,154	6,943	1.531	0.076	0.281	0.381
WOMEN								
No education	0.074	0.010	979	1,703	1.225	0.138	0.054	0.095
Secondary education or higher	0.766	0.022	979	1,703	1.603	0.028	0.722	0.809
Literacy	0.729	0.023	979	1,703	1.590	0.031	0.683	0.774
Use of the internet in last 12 months	0.467	0.033	979	1,703	2.064	0.071	0.401	0.533
Current tobacco use	0.008	0.003	979	1,703	1.015	0.352	0.002	0.014
Total fertility rate (3 years)	3.613	0.182	2,708	4,705	0.929	0.050	3.249	3.977
Currently pregnant	0.062	0.007	979	1,703	0.908	0.113	0.048	0.076
Mean number of children ever born to women age 40–49	4.627	0.196	193	334	1.234	0.042	4.235	5.019
Median birth interval	40.887	2.209	376	646	1.095	0.054	36.468	45.306
Ideal number of children	4.046	0.069	971	1,690	1.359	0.017	3.908	4.184
Total wanted fertility rate (3 years)	2.810	0.164	2,708	4,705	0.956	0.058	2.482	3.139
Currently using any contraceptive method	0.508	0.020	469	816	0.881	0.040	0.467	0.549
Currently using any modern method	0.345	0.023	469	816	1.026	0.065	0.300	0.390
Currently using pill	0.038	0.010	469	816	1.185	0.276	0.017	0.059
Currently using injectables	0.097	0.017	469	816	1.226	0.173	0.064	0.131
Currently using implants	0.082	0.011	469	816	0.860	0.133	0.060	0.104
Currently using male condoms	0.015	0.006	469	816	1.128	0.429	0.002	0.027
Currently using any traditional method	0.163	0.016	469	816	0.937	0.098	0.131	0.194
Unmet need for spacing	0.117	0.017	469	816	1.157	0.147	0.082	0.151
Unmet need for limiting	0.096	0.012	469	816	0.876	0.124	0.073	0.120
Unmet need total	0.213	0.019	469	816	1.026	0.091	0.174	0.252
Demand satisfied by modern methods	0.479	0.028	338	588	1.019	0.058	0.424	0.534
Demand satisfied by modern methods (all women)	0.502	0.024	533	921	1.117	0.048	0.453	0.550
Participation in decision making about family planning	0.904	0.013	469	816	0.970	0.015	0.878	0.930
Not exposed to any of the eight media sources	0.190	0.016	979	1,703	1.314	0.087	0.157	0.223
Neonatal mortality (last 0–9 years)	14.109	3.666	981	1,676	0.988	0.260	6.777	21.442
Postneonatal mortality (last 0–9 years)	19.898	4.079	981	1,676	0.873	0.205	11.740	28.055
Infant mortality (last 0–9 years)	34.007	5.650	982	1,678	0.979	0.166	22.708	45.306
Child mortality (last 0–9 years)	12.575	3.855	997	1,713	1.078	0.307	4.865	20.285
Under-5 mortality (last 0–9 years)	46.155	6.665	986	1,686	0.985	0.144	32.825	59.485
Perinatal mortality rate	32.565	7.985	520	894	1.028	0.245	16.594	48.536
Stillbirth rate	20.156	7.953	520	894	1.286	0.395	4.250	36.063
Early neonatal mortality rate	12.664	4.431	510	876	0.893	0.350	3.802	21.525
Received ANC from a skilled provider	0.982	0.013	209	357	1.427	0.014	0.955	1.008
4+ ANC visits	0.880	0.028	209	357	1.243	0.032	0.824	0.936
8+ ANC visits	0.447	0.044	209	357	1.269	0.098	0.359	0.535
Took any iron-containing supplements	0.959	0.017	209	357	1.253	0.018	0.924	0.993
Mothers protected against tetanus for last birth	0.800	0.036	209	357	1.312	0.046	0.727	0.873
Delivered in a health facility (live births)	0.829	0.033	222	380	1.263	0.040	0.762	0.896
Delivered by a skilled provider (live births)	0.850	0.032	222	380	1.283	0.038	0.785	0.915
Delivered by C-section (live births)	0.189	0.028	222	380	0.954	0.147	0.134	0.245
Women with postnatal check during first 2 days	0.858	0.025	209	357	1.036	0.029	0.808	0.908
Newborns with postnatal check during first 2 days	0.892	0.022	209	357	1.038	0.025	0.848	0.937
Any problem accessing health care	0.569	0.031	979	1,703	1.955	0.055	0.507	0.631
Ever had vaccination card	1.000	0.000	111	193	na	0.000	1.000	1.000
Received BCG vaccination	0.991	0.009	111	193	1.001	0.009	0.974	1.009
Received DPT-HepB-Hib vaccination (3 doses)	0.934	0.022	111	193	0.923	0.023	0.891	0.978
Received pneumococcal vaccination (3 doses)	0.880	0.037	111	193	1.060	0.042	0.806	0.953
Received measles and rubella 1 vaccination	0.853	0.050	111	193	1.418	0.058	0.754	0.953
Fully vaccinated according to national schedule (12–23 months)	0.549	0.050	111	193	0.999	0.090	0.450	0.648
Received measles and rubella 2 vaccination	0.714	0.063	89	152	1.287	0.088	0.589	0.839
Fully vaccinated according to national schedule (24–35 months)	0.369	0.061	89	152	1.165	0.166	0.247	0.492
Sought treatment for diarrhoea	0.354	0.051	75	128	0.872	0.145	0.252	0.457
Treated with ORS	0.297	0.060	75	128	1.139	0.201	0.178	0.417
Height-for-age (−3 SD)	0.045	0.016	265	440	1.261	0.356	0.013	0.077
Height-for-age (−2 SD)	0.165	0.029	265	440	1.206	0.173	0.108	0.222
Weight-for-height (−2 SD)	0.068	0.016	265	440	0.998	0.236	0.036	0.100
Weight-for-height (+2 SD)	0.027	0.010	265	440	1.053	0.392	0.006	0.047
Weight-for-age (−2 SD)	0.120	0.024	265	440	1.142	0.197	0.073	0.167

Continued...

Table B.6—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.405	0.081	46	79	1.106	0.200	0.243	0.568
Minimum dietary diversity (children 6–23 months)	0.461	0.043	155	268	1.076	0.094	0.374	0.547
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.447	0.038	238	397	1.148	0.084	0.372	0.522
Body mass index (BMI) <18.5	0.056	0.010	375	648	0.874	0.185	0.035	0.077
Body mass index (BMI) ≥25.0	0.564	0.030	375	648	1.164	0.053	0.504	0.624
Body mass index-for-age (−2 SD)	0.018	0.012	116	206	1.000	0.693	0.000	0.042
Body mass index-for-age (+1 SD)	0.129	0.030	116	206	0.969	0.235	0.068	0.189
Minimum dietary diversity (women 15–49)	0.557	0.020	979	1,703	1.231	0.035	0.518	0.596
Prevalence of any anaemia (women 15–49)	0.444	0.027	514	894	1.214	0.060	0.390	0.497
Child slept under an ITN last night	0.490	0.036	537	901	1.361	0.074	0.418	0.563
Pregnant women slept under an ITN last night	0.482	0.064	60	101	0.970	0.132	0.354	0.609
Received 3+ doses of SP/Fansidar	0.656	0.034	209	357	1.033	0.052	0.588	0.724
Child had fever in last 2 weeks	0.180	0.018	488	841	0.951	0.098	0.145	0.215
Child had blood taken from finger/heel	0.337	0.060	89	151	1.213	0.179	0.216	0.458
Child took ACT	0.887	0.052	34	54	0.918	0.059	0.783	0.991
Child has malaria (based on rapid test)	0.161	0.031	238	397	1.198	0.192	0.099	0.223
Child has malaria (based on microscopy test)	0.096	0.018	238	397	0.957	0.191	0.059	0.132
Discriminatory attitudes towards people with HIV	0.795	0.024	963	1,675	1.837	0.030	0.747	0.843
Condom use at last sex	0.114	0.017	280	482	0.892	0.149	0.080	0.147
Tested for HIV in the past 12 months and received the results of the last test	0.160	0.012	979	1,703	1.051	0.077	0.135	0.185
Mobile phone ownership	0.804	0.017	979	1,703	1.302	0.021	0.771	0.837
Have and use a bank account or mobile phone for financial transactions	0.789	0.026	979	1,703	2.010	0.033	0.736	0.841
Participate in decision making (all three decisions)	0.569	0.029	469	816	1.278	0.051	0.510	0.627
Agree with at least one specified reason a husband is justified in wife beating	0.193	0.015	979	1,703	1.222	0.080	0.163	0.224
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.594	0.025	469	816	1.086	0.041	0.545	0.643
Experienced physical violence since age 15 by any perpetrator	0.446	0.037	354	665	1.383	0.082	0.373	0.520
Experienced sexual violence by any perpetrator ever	0.196	0.027	354	665	1.290	0.139	0.141	0.251
Experienced sexual violence by any non-intimate partner	0.087	0.019	354	665	1.246	0.215	0.050	0.124
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.255	0.026	311	558	1.061	0.103	0.203	0.308
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.348	0.037	311	558	1.368	0.107	0.274	0.422
	MEN							
No education	0.037	0.011	396	686	1.182	0.305	0.014	0.059
Secondary education or higher	0.847	0.030	396	686	1.660	0.036	0.787	0.907
Literacy	0.741	0.042	396	686	1.887	0.056	0.658	0.825
Use of the internet in last 12 months	0.579	0.035	396	686	1.423	0.061	0.509	0.650
Current tobacco use	0.030	0.008	396	686	0.963	0.276	0.013	0.046
Want no more children	0.307	0.045	147	256	1.179	0.147	0.217	0.397
Discriminatory attitudes towards people with HIV	0.733	0.036	378	657	1.596	0.050	0.660	0.806
Condom use at last sex	0.293	0.042	157	273	1.161	0.145	0.208	0.378
Ever tested for HIV and received results of last test	0.046	0.012	396	686	1.157	0.265	0.022	0.071
Male circumcision	0.983	0.012	396	686	1.815	0.012	0.959	1.007
Mobile phone ownership	0.890	0.017	396	686	1.056	0.019	0.856	0.923
Have and use a bank account or mobile phone for financial transactions	0.820	0.023	396	686	1.212	0.029	0.773	0.867
Agree with at least one specified reason a husband is justified in wife beating	0.156	0.021	396	686	1.127	0.132	0.115	0.197

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.7 Sampling errors: Greater Accra sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.573	0.035	4,080	9,217	2.238	0.062	0.502	0.643
Births registered with civil authority	0.723	0.027	473	1,063	1.173	0.038	0.668	0.778
Ownership of at least one ITN	0.488	0.022	1,387	3,183	1.611	0.044	0.444	0.531
Ownership of at least one ITN for every two persons	0.341	0.020	1,379	3,168	1.563	0.059	0.301	0.381
At least basic drinking water service	0.977	0.014	4,080	9,217	2.776	0.015	0.949	1.005
Water available when needed	0.820	0.028	4,080	9,217	2.239	0.034	0.764	0.875
At least basic sanitation service	0.400	0.045	4,080	9,217	2.875	0.112	0.311	0.490
Using open defecation	0.049	0.016	4,080	9,217	2.290	0.330	0.017	0.081
Using a handwashing facility with soap and water	0.685	0.037	4,063	9,180	2.515	0.054	0.611	0.760
WOMEN								
No education	0.044	0.008	969	2,327	1.186	0.177	0.029	0.060
Secondary education or higher	0.846	0.017	969	2,327	1.436	0.020	0.812	0.879
Literacy	0.792	0.018	969	2,327	1.357	0.022	0.756	0.827
Use of the internet in last 12 months	0.678	0.027	969	2,327	1.784	0.040	0.624	0.732
Current tobacco use	0.006	0.003	969	2,327	1.119	0.478	0.000	0.011
Total fertility rate (3 years)	2.946	0.202	2,744	6,593	1.131	0.069	2.542	3.351
Currently pregnant	0.062	0.009	969	2,327	1.211	0.152	0.043	0.080
Mean number of children ever born to women age 40–49	3.461	0.195	197	461	1.311	0.056	3.072	3.850
Median birth interval	42.335	2.344	319	745	1.203	0.055	37.647	47.023
Ideal number of children	3.770	0.064	962	2,306	1.376	0.017	3.642	3.897
Total wanted fertility rate (3 years)	2.559	0.178	2,744	6,593	1.141	0.070	2.203	2.915
Currently using any contraceptive method	0.320	0.029	491	1,144	1.363	0.090	0.263	0.378
Currently using any modern method	0.238	0.023	491	1,144	1.219	0.099	0.191	0.285
Currently using pill	0.024	0.007	491	1,144	0.987	0.287	0.010	0.037
Currently using injectables	0.045	0.012	491	1,144	1.249	0.261	0.021	0.068
Currently using implants	0.050	0.012	491	1,144	1.201	0.235	0.027	0.074
Currently using male condoms	0.020	0.006	491	1,144	1.005	0.314	0.008	0.033
Currently using any traditional method	0.083	0.015	491	1,144	1.181	0.178	0.053	0.112
Unmet need for spacing	0.129	0.019	491	1,144	1.258	0.147	0.091	0.168
Unmet need for limiting	0.131	0.016	491	1,144	1.040	0.121	0.099	0.163
Unmet need total	0.260	0.018	491	1,144	0.891	0.068	0.225	0.296
Demand satisfied by modern methods	0.410	0.032	288	664	1.096	0.078	0.346	0.474
Demand satisfied by modern methods (all women)	0.468	0.025	403	945	1.005	0.054	0.417	0.518
Participation in decision making about family planning	0.910	0.014	491	1,144	1.062	0.015	0.883	0.938
Not exposed to any of the eight media sources	0.193	0.015	969	2,327	1.177	0.077	0.163	0.223
Neonatal mortality (last 0–9 years)	9.554	4.341	892	2,104	1.303	0.454	0.871	18.237
Postneonatal mortality (last 0–9 years)	6.473	2.825	886	2,089	1.028	0.436	0.822	12.124
Infant mortality (last 0–9 years)	16.027	4.749	892	2,104	1.116	0.296	6.530	25.524
Child mortality (last 0–9 years)	3.615	2.230	888	2,096	1.083	0.617	0.000	8.074
Under-5 mortality (last 0–9 years)	19.584	5.073	892	2,104	1.079	0.259	9.437	29.730
Perinatal mortality rate	24.838	7.201	463	1,100	1.007	0.290	10.437	39.239
Stillbirth rate	18.161	6.784	463	1,100	1.104	0.374	4.593	31.729
Early neonatal mortality rate	6.801	3.604	455	1,080	0.931	0.530	0.000	14.009
Received ANC from a skilled provider	0.957	0.017	174	410	1.089	0.018	0.924	0.991
4+ ANC visits	0.901	0.026	174	410	1.162	0.029	0.848	0.954
8+ ANC visits	0.493	0.042	174	410	1.111	0.086	0.409	0.577
Took any iron-containing supplements	0.964	0.015	174	410	1.056	0.016	0.934	0.994
Mothers protected against tetanus for last birth	0.784	0.038	174	410	1.204	0.048	0.708	0.859
Delivered in a health facility (live births)	0.923	0.023	183	427	1.134	0.024	0.877	0.968
Delivered by a skilled provider (live births)	0.940	0.021	183	427	1.178	0.022	0.898	0.982
Delivered by C-section (live births)	0.342	0.048	183	427	1.304	0.140	0.246	0.437
Women with postnatal check during first 2 days	0.954	0.018	174	410	1.137	0.019	0.918	0.990
Newborns with postnatal check during first 2 days	0.932	0.023	174	410	1.178	0.024	0.887	0.977
Any problem accessing health care	0.427	0.030	969	2,327	1.879	0.070	0.367	0.487
Ever had vaccination card	1.000	0.000	89	207	na	0.000	1.000	1.000
Received BCG vaccination	0.988	0.012	89	207	1.040	0.012	0.964	1.012
Received DPT-HepB-Hib vaccination (3 doses)	0.940	0.023	89	207	0.889	0.024	0.895	0.985
Received pneumococcal vaccination (3 doses)	0.932	0.026	89	207	0.972	0.028	0.879	0.984
Received measles and rubella 1 vaccination	0.947	0.019	89	207	0.800	0.020	0.908	0.985
Fully vaccinated according to national schedule (12–23 months)	0.720	0.050	89	207	1.028	0.069	0.620	0.819
Received measles and rubella 2 vaccination	0.855	0.040	88	210	1.074	0.047	0.774	0.935
Fully vaccinated according to national schedule (24–35 months)	0.596	0.057	88	210	1.099	0.096	0.481	0.710
Sought treatment for diarrhoea	0.156	0.070	30	74	1.076	0.448	0.016	0.295
Treated with ORS	0.167	0.076	30	74	1.141	0.456	0.015	0.319
Height-for-age (−3 SD)	0.016	0.009	234	528	1.053	0.551	0.000	0.033
Height-for-age (−2 SD)	0.114	0.023	234	528	1.040	0.203	0.068	0.160
Weight-for-height (−2 SD)	0.047	0.021	233	525	1.454	0.454	0.004	0.089
Weight-for-height (+2 SD)	0.018	0.008	233	525	0.965	0.478	0.001	0.035
Weight-for-age (−2 SD)	0.085	0.025	235	530	1.241	0.295	0.035	0.134

Continued...

Table B.7—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.429	0.080	49	110	1.115	0.186	0.269	0.588
Minimum dietary diversity (children 6–23 months)	0.447	0.069	120	289	1.501	0.154	0.310	0.585
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.362	0.040	202	462	1.151	0.111	0.282	0.443
Body mass index (BMI) <18.5	0.026	0.008	390	970	0.950	0.293	0.011	0.042
Body mass index (BMI) ≥25.0	0.613	0.033	390	970	1.324	0.053	0.548	0.679
Body mass index-for-age (−2 SD)	0.010	0.008	84	193	0.728	0.777	0.000	0.027
Body mass index-for-age (+1 SD)	0.232	0.047	84	193	1.013	0.203	0.138	0.326
Minimum dietary diversity (women 15–49)	0.526	0.019	969	2,327	1.213	0.037	0.487	0.565
Prevalence of any anaemia (women 15–49)	0.388	0.022	508	1,246	1.017	0.057	0.344	0.432
Child slept under an ITN last night	0.306	0.036	475	1,068	1.451	0.119	0.234	0.379
Pregnant women slept under an ITN last night	0.235	0.051	60	136	0.934	0.219	0.132	0.337
Received 3+ doses of SP/Fansidar	0.648	0.042	174	410	1.156	0.065	0.564	0.732
Child had fever in last 2 weeks	0.087	0.019	445	1,057	1.337	0.217	0.049	0.125
Child had blood taken from finger/heel	0.120	0.043	42	92	0.861	0.362	0.033	0.207
Child took ACT	1.000	0.000	9	21	na	0.000	1.000	1.000
Child has malaria (based on rapid test)	0.034	0.014	202	462	1.073	0.402	0.007	0.062
Child has malaria (based on microscopy test)	0.020	0.012	202	462	1.196	0.588	0.000	0.044
Discriminatory attitudes towards people with HIV	0.705	0.022	962	2,308	1.478	0.031	0.662	0.749
Condom use at last sex	0.097	0.017	221	559	0.843	0.173	0.064	0.131
Tested for HIV in the past 12 months and received the results of the last test	0.168	0.014	969	2,327	1.147	0.082	0.140	0.195
Mobile phone ownership	0.898	0.011	969	2,327	1.153	0.012	0.876	0.920
Have and use a bank account or mobile phone for financial transactions	0.872	0.013	969	2,327	1.173	0.014	0.847	0.897
Participate in decision making (all three decisions)	0.689	0.025	491	1,144	1.182	0.036	0.640	0.739
Agree with at least one specified reason a husband is justified in wife beating	0.058	0.009	969	2,327	1.179	0.153	0.040	0.075
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.690	0.031	491	1,144	1.503	0.046	0.627	0.753
Experienced physical violence since age 15 by any perpetrator	0.293	0.032	418	937	1.432	0.109	0.229	0.357
Experienced sexual violence by any perpetrator ever	0.144	0.020	418	937	1.175	0.140	0.104	0.185
Experienced sexual violence by any non-intimate partner	0.084	0.014	418	937	1.018	0.165	0.056	0.112
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.150	0.017	366	784	0.903	0.112	0.116	0.184
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.240	0.021	366	784	0.924	0.086	0.199	0.282
	MEN							
No education	0.018	0.006	438	1,076	0.947	0.334	0.006	0.030
Secondary education or higher	0.910	0.019	438	1,076	1.372	0.021	0.872	0.948
Literacy	0.939	0.011	438	1,076	0.999	0.012	0.916	0.962
Use of the internet in last 12 months	0.821	0.022	438	1,076	1.212	0.027	0.777	0.865
Current tobacco use	0.057	0.016	438	1,076	1.464	0.285	0.025	0.090
Want no more children	0.342	0.037	205	509	1.113	0.108	0.268	0.416
Discriminatory attitudes towards people with HIV	0.697	0.033	435	1,071	1.515	0.048	0.630	0.764
Condom use at last sex	0.399	0.049	162	414	1.260	0.122	0.302	0.497
Ever tested for HIV and received results of last test	0.091	0.015	438	1,076	1.112	0.168	0.060	0.122
Male circumcision	0.986	0.006	438	1,076	1.066	0.006	0.974	0.998
Mobile phone ownership	0.928	0.013	438	1,076	1.026	0.014	0.902	0.953
Have and use a bank account or mobile phone for financial transactions	0.895	0.017	438	1,076	1.142	0.019	0.861	0.928
Agree with at least one specified reason a husband is justified in wife beating	0.035	0.012	438	1,076	1.363	0.341	0.011	0.059

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.8 Sampling errors: Volta sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.230	0.031	3,536	2,902	2.168	0.133	0.169	0.292
Births registered with civil authority	0.709	0.027	395	320	1.051	0.038	0.654	0.763
Ownership of at least one ITN	0.818	0.016	1,082	888	1.399	0.020	0.785	0.850
Ownership of at least one ITN for every two persons	0.646	0.020	1,079	885	1.372	0.031	0.606	0.686
At least basic drinking water service	0.848	0.038	3,536	2,902	2.789	0.045	0.772	0.924
Water available when needed	0.770	0.028	3,536	2,902	1.812	0.036	0.715	0.826
At least basic sanitation service	0.281	0.040	3,536	2,902	2.412	0.142	0.202	0.361
Using open defecation	0.217	0.040	3,536	2,902	2.567	0.183	0.138	0.297
Using a handwashing facility with soap and water	0.546	0.054	3,536	2,902	2.954	0.098	0.439	0.653
WOMEN								
No education	0.067	0.011	837	713	1.285	0.166	0.045	0.089
Secondary education or higher	0.764	0.027	837	713	1.821	0.035	0.710	0.817
Literacy	0.720	0.029	837	713	1.850	0.040	0.663	0.778
Use of the internet in last 12 months	0.364	0.032	837	713	1.893	0.087	0.301	0.427
Current tobacco use	0.004	0.002	837	713	0.904	0.474	0.000	0.008
Total fertility rate (3 years)	3.180	0.182	2,314	1,967	0.975	0.057	2.816	3.543
Currently pregnant	0.062	0.008	837	713	0.908	0.122	0.047	0.077
Mean number of children ever born to women age 40–49	4.149	0.153	178	151	1.026	0.037	3.843	4.455
Median birth interval	43.393	2.785	286	233	1.309	0.064	37.824	48.963
Ideal number of children	3.786	0.073	827	705	1.307	0.019	3.640	3.933
Total wanted fertility rate (3 years)	2.676	0.163	2,314	1,967	0.922	0.061	2.350	3.002
Currently using any contraceptive method	0.356	0.020	446	375	0.899	0.057	0.315	0.397
Currently using any modern method	0.293	0.025	446	375	1.158	0.085	0.243	0.343
Currently using pill	0.033	0.010	446	375	1.180	0.303	0.013	0.053
Currently using injectables	0.080	0.015	446	375	1.190	0.191	0.049	0.110
Currently using implants	0.110	0.018	446	375	1.188	0.160	0.075	0.145
Currently using male condoms	0.019	0.007	446	375	1.036	0.352	0.006	0.033
Currently using any traditional method	0.063	0.013	446	375	1.102	0.202	0.038	0.088
Unmet need for spacing	0.167	0.016	446	375	0.901	0.095	0.135	0.199
Unmet need for limiting	0.114	0.019	446	375	1.250	0.165	0.076	0.152
Unmet need total	0.281	0.021	446	375	0.986	0.075	0.239	0.323
Demand satisfied by modern methods	0.460	0.036	285	239	1.207	0.078	0.388	0.531
Demand satisfied by modern methods (all women)	0.499	0.030	403	339	1.201	0.060	0.438	0.559
Participation in decision making about family planning	0.827	0.020	446	375	1.102	0.024	0.788	0.867
Not exposed to any of the eight media sources	0.330	0.034	837	713	2.088	0.103	0.262	0.398
Neonatal mortality (last 0–9 years)	29.205	7.143	794	666	1.132	0.245	14.919	43.491
Postneonatal mortality (last 0–9 years)	8.708	3.720	794	664	0.938	0.427	1.269	16.148
Infant mortality (last 0–9 years)	37.913	7.861	794	666	1.091	0.207	22.191	53.636
Child mortality (last 0–9 years)	9.839	3.294	802	673	0.878	0.335	3.252	16.427
Under-5 mortality (last 0–9 years)	47.380	7.766	794	666	0.968	0.164	31.847	62.912
Perinatal mortality rate	26.681	7.013	390	324	0.852	0.263	12.656	40.707
Stillbirth rate	21.158	6.747	390	324	0.915	0.319	7.665	34.652
Early neonatal mortality rate	5.642	4.051	383	317	1.046	0.718	0.000	13.745
Received ANC from a skilled provider	0.992	0.008	155	130	1.096	0.008	0.977	1.008
4+ ANC visits	0.940	0.020	155	130	1.059	0.022	0.899	0.980
8+ ANC visits	0.453	0.045	155	130	1.121	0.099	0.363	0.543
Took any iron-containing supplements	0.973	0.013	155	130	0.959	0.013	0.948	0.998
Mothers protected against tetanus for last birth	0.833	0.040	155	130	1.341	0.048	0.752	0.914
Delivered in a health facility (live births)	0.909	0.027	160	135	1.178	0.030	0.855	0.963
Delivered by a skilled provider (live births)	0.935	0.020	160	135	1.042	0.022	0.894	0.976
Delivered by C-section (live births)	0.284	0.033	160	135	0.898	0.116	0.218	0.349
Women with postnatal check during first 2 days	0.895	0.028	155	130	1.117	0.031	0.839	0.950
Newborns with postnatal check during first 2 days	0.885	0.029	155	130	1.142	0.033	0.826	0.944
Any problem accessing health care	0.466	0.022	837	713	1.293	0.048	0.421	0.510
Ever had vaccination card	0.970	0.020	89	75	1.085	0.020	0.930	1.009
Received BCG vaccination	0.991	0.009	89	75	0.901	0.009	0.973	1.009
Received DPT-HepB-Hib vaccination (3 doses)	0.876	0.030	89	75	0.817	0.035	0.815	0.936
Received pneumococcal vaccination (3 doses)	0.899	0.032	89	75	0.924	0.035	0.835	0.962
Received measles and rubella 1 vaccination	0.907	0.036	89	75	1.090	0.040	0.835	0.980
Fully vaccinated according to national schedule (12–23 months)	0.706	0.060	89	75	1.225	0.086	0.585	0.827
Received measles and rubella 2 vaccination	0.886	0.040	72	60	1.042	0.045	0.807	0.965
Fully vaccinated according to national schedule (24–35 months)	0.733	0.067	72	60	1.265	0.092	0.599	0.867
Sought treatment for diarrhoea	0.746	0.093	35	29	1.180	0.125	0.560	0.932
Treated with ORS	0.522	0.088	35	29	0.926	0.168	0.347	0.698
Height-for-age (−3 SD)	0.018	0.008	206	165	0.908	0.465	0.001	0.035
Height-for-age (−2 SD)	0.144	0.024	206	165	0.916	0.169	0.096	0.193
Weight-for-height (−2 SD)	0.074	0.020	206	165	1.079	0.267	0.034	0.113
Weight-for-height (+2 SD)	0.025	0.011	206	165	0.984	0.434	0.003	0.046
Weight-for-age (−2 SD)	0.131	0.022	206	165	0.888	0.165	0.088	0.175

Continued...

Table B.8—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.780	0.073	28	23	0.919	0.094	0.633	0.926
Minimum dietary diversity (children 6–23 months)	0.401	0.044	127	107	0.997	0.108	0.314	0.488
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.513	0.044	192	154	1.181	0.086	0.424	0.601
Body mass index (BMI) <18.5	0.049	0.015	291	245	1.180	0.307	0.019	0.079
Body mass index (BMI) ≥25.0	0.508	0.037	291	245	1.244	0.072	0.435	0.582
Body mass index-for-age (−2 SD)	0.000	0.000	77	66	na	na	0.000	0.000
Body mass index-for-age (+1 SD)	0.080	0.035	77	66	1.114	0.435	0.010	0.149
Minimum dietary diversity (women 15–49)	0.461	0.027	837	713	1.554	0.058	0.408	0.515
Prevalence of any anaemia (women 15–49)	0.430	0.028	398	337	1.135	0.066	0.374	0.487
Child slept under an ITN last night	0.578	0.039	402	325	1.353	0.068	0.500	0.656
Pregnant women slept under an ITN last night	0.567	0.076	55	43	1.109	0.134	0.415	0.719
Received 3+ doses of SP/Fansidar	0.707	0.040	155	130	1.089	0.057	0.627	0.787
Child had fever in last 2 weeks	0.146	0.022	378	313	1.159	0.154	0.101	0.191
Child had blood taken from finger/heel	0.546	0.075	57	46	1.091	0.138	0.395	0.697
Child took ACT	0.759	0.080	30	25	1.011	0.106	0.599	0.920
Child has malaria (based on rapid test)	0.115	0.032	192	154	1.281	0.281	0.050	0.179
Child has malaria (based on microscopy test)	0.064	0.029	192	154	1.500	0.454	0.006	0.121
Discriminatory attitudes towards people with HIV	0.769	0.021	830	707	1.412	0.027	0.728	0.810
Condom use at last sex	0.175	0.031	187	160	1.106	0.176	0.113	0.236
Tested for HIV in the past 12 months and received the results of the last test	0.151	0.018	837	713	1.415	0.116	0.115	0.186
Mobile phone ownership	0.757	0.016	837	713	1.099	0.022	0.724	0.789
Have and use a bank account or mobile phone for financial transactions	0.736	0.019	837	713	1.226	0.025	0.699	0.774
Participate in decision making (all three decisions)	0.568	0.031	446	375	1.303	0.054	0.507	0.629
Agree with at least one specified reason a husband is justified in wife beating	0.127	0.021	837	713	1.819	0.165	0.085	0.169
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.545	0.030	446	375	1.282	0.056	0.484	0.605
Experienced physical violence since age 15 by any perpetrator	0.402	0.037	319	252	1.357	0.093	0.327	0.477
Experienced sexual violence by any perpetrator ever	0.223	0.025	319	252	1.065	0.111	0.173	0.273
Experienced sexual violence by any non-intimate partner	0.105	0.019	319	252	1.081	0.177	0.068	0.143
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.250	0.031	288	225	1.224	0.125	0.188	0.313
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.363	0.033	288	225	1.166	0.091	0.296	0.429
	MEN							
No education	0.035	0.010	285	235	0.951	0.295	0.015	0.056
Secondary education or higher	0.846	0.024	285	235	1.129	0.029	0.797	0.894
Literacy	0.868	0.025	285	235	1.223	0.028	0.819	0.917
Use of the internet in last 12 months	0.663	0.033	285	235	1.173	0.050	0.597	0.729
Current tobacco use	0.024	0.009	285	235	0.952	0.363	0.006	0.041
Want no more children	0.370	0.038	135	113	0.921	0.104	0.293	0.447
Discriminatory attitudes towards people with HIV	0.619	0.040	284	234	1.371	0.064	0.540	0.698
Condom use at last sex	0.380	0.053	118	98	1.188	0.140	0.273	0.487
Ever tested for HIV and received results of last test	0.094	0.020	285	235	1.152	0.213	0.054	0.133
Male circumcision	1.000	0.000	285	235	na	0.000	1.000	1.000
Mobile phone ownership	0.864	0.022	285	235	1.059	0.025	0.821	0.907
Have and use a bank account or mobile phone for financial transactions	0.807	0.029	285	235	1.246	0.036	0.749	0.866
Agree with at least one specified reason a husband is justified in wife beating	0.060	0.013	285	235	0.954	0.224	0.033	0.087

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.9 Sampling errors: Eastern sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.226	0.026	3,750	5,234	1.935	0.114	0.174	0.277
Births registered with civil authority	0.656	0.039	439	616	1.556	0.059	0.579	0.733
Ownership of at least one ITN	0.702	0.020	1,216	1,701	1.545	0.029	0.661	0.743
Ownership of at least one ITN for every two persons	0.533	0.023	1,214	1,698	1.575	0.042	0.488	0.578
At least basic drinking water service	0.855	0.035	3,750	5,234	2.865	0.041	0.785	0.926
Water available when needed	0.816	0.022	3,750	5,234	1.633	0.027	0.773	0.860
At least basic sanitation service	0.251	0.025	3,750	5,234	1.676	0.101	0.200	0.302
Using open defecation	0.057	0.026	3,750	5,234	3.333	0.449	0.006	0.108
Using a handwashing facility with soap and water	0.538	0.033	3,641	5,066	1.924	0.062	0.472	0.605
WOMEN								
No education	0.078	0.011	854	1,220	1.199	0.141	0.056	0.100
Secondary education or higher	0.755	0.018	854	1,220	1.193	0.023	0.720	0.791
Literacy	0.667	0.022	854	1,220	1.335	0.032	0.623	0.710
Use of the internet in last 12 months	0.400	0.027	854	1,220	1.598	0.067	0.347	0.454
Current tobacco use	0.004	0.003	854	1,220	1.158	0.604	0.000	0.009
Total fertility rate (3 years)	3.507	0.234	2,403	3,427	1.114	0.067	3.038	3.976
Currently pregnant	0.077	0.008	854	1,220	0.916	0.109	0.060	0.094
Mean number of children ever born to women age 40–49	4.162	0.156	203	287	1.027	0.037	3.850	4.473
Median birth interval	42.105	1.486	313	456	1.307	0.035	39.132	45.077
Ideal number of children	4.121	0.068	841	1,201	1.145	0.016	3.985	4.256
Total wanted fertility rate (3 years)	2.994	0.209	2,403	3,427	1.177	0.070	2.576	3.412
Currently using any contraceptive method	0.353	0.024	445	633	1.080	0.069	0.304	0.402
Currently using any modern method	0.286	0.021	445	633	1.001	0.075	0.243	0.329
Currently using pill	0.050	0.010	445	633	0.983	0.203	0.030	0.070
Currently using injectables	0.054	0.012	445	633	1.108	0.221	0.030	0.077
Currently using implants	0.092	0.017	445	633	1.223	0.182	0.059	0.126
Currently using male condoms	0.023	0.006	445	633	0.865	0.269	0.011	0.035
Currently using any traditional method	0.067	0.013	445	633	1.130	0.199	0.041	0.094
Unmet need for spacing	0.143	0.018	445	633	1.078	0.125	0.107	0.178
Unmet need for limiting	0.131	0.017	445	633	1.071	0.131	0.096	0.165
Unmet need total	0.273	0.024	445	633	1.135	0.088	0.225	0.321
Demand satisfied by modern methods	0.456	0.030	277	396	1.001	0.066	0.396	0.516
Demand satisfied by modern methods (all women)	0.498	0.022	420	603	0.910	0.044	0.454	0.543
Participation in decision making about family planning	0.751	0.039	445	633	1.899	0.052	0.672	0.829
Not exposed to any of the eight media sources	0.210	0.021	854	1,220	1.472	0.098	0.169	0.251
Neonatal mortality (last 0–9 years)	14.939	4.197	841	1,205	0.941	0.281	6.545	23.333
Postneonatal mortality (last 0–9 years)	11.142	3.598	848	1,216	0.984	0.323	3.947	18.338
Infant mortality (last 0–9 years)	26.081	4.959	842	1,207	0.840	0.190	16.164	35.999
Child mortality (last 0–9 years)	16.340	4.199	837	1,196	0.957	0.257	7.943	24.738
Under-5 mortality (last 0–9 years)	41.996	6.411	844	1,210	0.885	0.153	29.173	54.818
Perinatal mortality rate	22.912	7.139	440	637	1.025	0.312	8.633	37.190
Stillbirth rate	10.426	4.497	440	637	0.940	0.431	1.432	19.421
Early neonatal mortality rate	12.586	6.334	436	631	1.207	0.503	0.000	25.254
Received ANC from a skilled provider	0.995	0.005	167	246	0.904	0.005	0.986	1.005
4+ ANC visits	0.887	0.028	167	246	1.126	0.031	0.831	0.942
8+ ANC visits	0.448	0.049	167	246	1.277	0.110	0.349	0.546
Took any iron-containing supplements	0.959	0.021	167	246	1.367	0.022	0.917	1.001
Mothers protected against tetanus for last birth	0.819	0.044	167	246	1.459	0.053	0.732	0.907
Delivered in a health facility (live births)	0.895	0.032	171	252	1.374	0.036	0.831	0.958
Delivered by a skilled provider (live births)	0.903	0.028	171	252	1.248	0.031	0.848	0.959
Delivered by C-section (live births)	0.255	0.028	171	252	0.849	0.111	0.198	0.312
Women with postnatal check during first 2 days	0.950	0.018	167	246	1.056	0.019	0.914	0.986
Newborns with postnatal check during first 2 days	0.943	0.016	167	246	0.902	0.017	0.910	0.975
Any problem accessing health care	0.518	0.028	854	1,220	1.615	0.053	0.463	0.574
Ever had vaccination card	0.989	0.011	79	115	0.941	0.011	0.967	1.011
Received BCG vaccination	0.905	0.032	79	115	0.965	0.035	0.841	0.968
Received DPT-HepB-Hib vaccination (3 doses)	0.854	0.038	79	115	0.958	0.045	0.778	0.930
Received pneumococcal vaccination (3 doses)	0.854	0.038	79	115	0.958	0.045	0.778	0.930
Received measles and rubella 1 vaccination	0.815	0.038	79	115	0.878	0.047	0.738	0.892
Fully vaccinated according to national schedule (12–23 months)	0.619	0.058	79	115	1.049	0.094	0.503	0.734
Received measles and rubella 2 vaccination	0.703	0.059	79	115	1.158	0.084	0.585	0.822
Fully vaccinated according to national schedule (24–35 months)	0.446	0.079	79	115	1.434	0.177	0.288	0.604
Sought treatment for diarrhoea	0.529	0.083	37	56	0.979	0.157	0.363	0.695
Treated with ORS	0.456	0.085	37	56	1.009	0.187	0.285	0.626
Height-for-age (−3 SD)	0.030	0.012	238	334	1.093	0.401	0.006	0.054
Height-for-age (−2 SD)	0.104	0.015	238	334	0.744	0.143	0.075	0.134
Weight-for-height (−2 SD)	0.043	0.015	238	334	1.115	0.341	0.014	0.072
Weight-for-height (+2 SD)	0.023	0.010	238	334	1.011	0.422	0.004	0.042
Weight-for-age (−2 SD)	0.110	0.025	238	334	1.165	0.228	0.060	0.161

Continued...

Table B.9—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.401	0.084	43	64	1.109	0.210	0.232	0.569
Minimum dietary diversity (children 6–23 months)	0.320	0.046	119	175	1.069	0.143	0.229	0.412
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.383	0.029	210	294	0.860	0.076	0.324	0.441
Body mass index (BMI) <18.5	0.034	0.011	320	455	1.035	0.309	0.013	0.055
Body mass index (BMI) ≥25.0	0.558	0.033	320	455	1.176	0.059	0.493	0.624
Body mass index-for-age (−2 SD)	0.000	0.000	81	120	na	na	0.000	0.000
Body mass index-for-age (+1 SD)	0.167	0.041	81	120	0.991	0.248	0.084	0.249
Minimum dietary diversity (women 15–49)	0.534	0.018	854	1,220	1.075	0.034	0.497	0.571
Prevalence of any anaemia (women 15–49)	0.375	0.029	441	630	1.241	0.076	0.318	0.432
Child slept under an ITN last night	0.447	0.039	455	639	1.431	0.087	0.369	0.525
Pregnant women slept under an ITN last night	0.476	0.078	67	91	1.256	0.163	0.321	0.632
Received 3+ doses of SP/Fansidar	0.731	0.032	167	246	0.930	0.044	0.666	0.795
Child had fever in last 2 weeks	0.063	0.010	422	611	0.845	0.161	0.043	0.083
Child had blood taken from finger/heel	0.642	0.101	26	38	1.038	0.158	0.439	0.845
Child took ACT	0.796	0.136	15	22	1.311	0.171	0.524	1.067
Child has malaria (based on rapid test)	0.148	0.030	210	294	1.216	0.201	0.089	0.208
Child has malaria (based on microscopy test)	0.067	0.018	210	294	1.024	0.263	0.032	0.102
Discriminatory attitudes towards people with HIV	0.791	0.019	846	1,208	1.361	0.024	0.753	0.829
Condom use at last sex	0.100	0.017	218	311	0.851	0.173	0.066	0.135
Tested for HIV in the past 12 months and received the results of the last test	0.176	0.017	854	1,220	1.309	0.097	0.142	0.210
Mobile phone ownership	0.829	0.012	854	1,220	0.962	0.015	0.804	0.854
Have and use a bank account or mobile phone for financial transactions	0.734	0.019	854	1,220	1.278	0.026	0.695	0.773
Participate in decision making (all three decisions)	0.432	0.029	445	633	1.229	0.067	0.374	0.490
Agree with at least one specified reason a husband is justified in wife beating	0.075	0.011	854	1,220	1.199	0.144	0.054	0.097
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.421	0.033	445	633	1.413	0.079	0.354	0.487
Experienced physical violence since age 15 by any perpetrator	0.295	0.033	358	479	1.359	0.111	0.229	0.360
Experienced sexual violence by any perpetrator ever	0.129	0.023	358	479	1.315	0.181	0.083	0.176
Experienced sexual violence by any non-intimate partner	0.062	0.015	358	479	1.159	0.240	0.032	0.091
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.195	0.028	313	403	1.237	0.142	0.139	0.250
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.270	0.035	313	403	1.402	0.131	0.199	0.340
	MEN							
No education	0.037	0.014	325	466	1.292	0.367	0.010	0.064
Secondary education or higher	0.826	0.032	325	466	1.531	0.039	0.762	0.891
Literacy	0.728	0.029	325	466	1.185	0.040	0.669	0.786
Use of the internet in last 12 months	0.592	0.037	325	466	1.361	0.063	0.518	0.667
Current tobacco use	0.022	0.010	325	466	1.200	0.441	0.003	0.042
Want no more children	0.427	0.046	133	192	1.078	0.109	0.334	0.520
Discriminatory attitudes towards people with HIV	0.680	0.029	322	461	1.105	0.042	0.622	0.737
Condom use at last sex	0.260	0.035	108	158	0.828	0.135	0.190	0.330
Ever tested for HIV and received results of last test	0.077	0.019	325	466	1.301	0.251	0.038	0.115
Male circumcision	0.992	0.005	325	466	0.924	0.005	0.983	1.001
Mobile phone ownership	0.868	0.019	325	466	1.014	0.022	0.830	0.907
Have and use a bank account or mobile phone for financial transactions	0.784	0.029	325	466	1.268	0.037	0.726	0.842
Agree with at least one specified reason a husband is justified in wife beating	0.158	0.034	325	466	1.693	0.218	0.089	0.226

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.10 Sampling errors: Ashanti sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.279	0.028	4,761	11,844	2.022	0.099	0.224	0.334
Births registered with civil authority	0.747	0.023	608	1,518	1.203	0.031	0.701	0.793
Ownership of at least one ITN	0.660	0.019	1,397	3,469	1.521	0.029	0.621	0.698
Ownership of at least one ITN for every two persons	0.487	0.020	1,378	3,429	1.503	0.042	0.447	0.528
At least basic drinking water service	0.948	0.024	4,761	11,844	3.361	0.026	0.900	0.997
Water available when needed	0.855	0.025	4,761	11,844	2.073	0.029	0.805	0.904
At least basic sanitation service	0.292	0.034	4,761	11,844	2.322	0.118	0.223	0.361
Using open defecation	0.093	0.037	4,761	11,844	3.542	0.396	0.019	0.167
Using a handwashing facility with soap and water	0.429	0.039	4,453	11,066	2.409	0.091	0.351	0.508
WOMEN								
No education	0.090	0.012	1,131	2,928	1.450	0.137	0.066	0.115
Secondary education or higher	0.798	0.018	1,131	2,928	1.471	0.022	0.763	0.833
Literacy	0.615	0.022	1,131	2,928	1.503	0.035	0.572	0.659
Use of the internet in last 12 months	0.520	0.023	1,131	2,928	1.540	0.044	0.474	0.566
Current tobacco use	0.018	0.006	1,131	2,928	1.570	0.341	0.006	0.031
Total fertility rate (3 years)	3.516	0.241	3,238	8,381	1.147	0.068	3.035	3.997
Currently pregnant	0.058	0.008	1,131	2,928	1.207	0.145	0.041	0.075
Mean number of children ever born to women age 40–49	4.350	0.171	240	633	1.233	0.039	4.008	4.692
Median birth interval	41.346	1.376	412	1,077	1.068	0.033	38.594	44.099
Ideal number of children	4.381	0.084	1,097	2,835	1.567	0.019	4.213	4.549
Total wanted fertility rate (3 years)	3.028	0.229	3,238	8,381	1.214	0.076	2.570	3.485
Currently using any contraceptive method	0.444	0.025	550	1,426	1.159	0.055	0.395	0.493
Currently using any modern method	0.321	0.022	550	1,426	1.095	0.068	0.278	0.365
Currently using pill	0.063	0.013	550	1,426	1.240	0.204	0.037	0.089
Currently using injectables	0.099	0.015	550	1,426	1.191	0.154	0.068	0.129
Currently using implants	0.070	0.011	550	1,426	0.975	0.152	0.049	0.091
Currently using male condoms	0.014	0.006	550	1,426	1.286	0.468	0.001	0.026
Currently using any traditional method	0.123	0.014	550	1,426	1.010	0.115	0.095	0.151
Unmet need for spacing	0.148	0.019	550	1,426	1.224	0.126	0.111	0.185
Unmet need for limiting	0.082	0.012	550	1,426	1.037	0.148	0.058	0.106
Unmet need total	0.230	0.023	550	1,426	1.258	0.098	0.184	0.275
Demand satisfied by modern methods	0.477	0.030	375	961	1.142	0.062	0.417	0.536
Demand satisfied by modern methods (all women)	0.524	0.025	586	1,503	1.186	0.047	0.475	0.573
Participation in decision making about family planning	0.905	0.016	550	1,426	1.285	0.018	0.872	0.937
Not exposed to any of the eight media sources	0.386	0.025	1,131	2,928	1.757	0.066	0.335	0.437
Neonatal mortality (last 0–9 years)	22.848	5.657	1,161	3,017	1.198	0.248	11.535	34.162
Postneonatal mortality (last 0–9 years)	11.500	2.733	1,159	3,007	0.877	0.238	6.034	16.966
Infant mortality (last 0–9 years)	34.348	5.848	1,162	3,020	1.058	0.170	22.653	46.044
Child mortality (last 0–9 years)	11.231	2.955	1,152	3,002	0.947	0.263	5.320	17.141
Under-5 mortality (last 0–9 years)	45.193	6.767	1,163	3,022	1.102	0.150	31.658	58.728
Perinatal mortality rate	31.029	7.333	600	1,572	0.980	0.236	16.363	45.694
Stillbirth rate	13.741	4.899	600	1,572	1.044	0.357	3.942	23.540
Early neonatal mortality rate	17.528	6.492	592	1,551	1.069	0.370	4.543	30.513
Received ANC from a skilled provider	1.000	0.000	246	631	na	0.000	1.000	1.000
4+ ANC visits	0.897	0.025	246	631	1.259	0.027	0.848	0.946
8+ ANC visits	0.388	0.037	246	631	1.185	0.095	0.314	0.462
Took any iron-containing supplements	0.942	0.016	246	631	1.070	0.017	0.910	0.974
Mothers protected against tetanus for last birth	0.808	0.035	246	631	1.394	0.043	0.738	0.878
Delivered in a health facility (live births)	0.924	0.019	259	666	1.146	0.021	0.886	0.962
Delivered by a skilled provider (live births)	0.936	0.017	259	666	1.123	0.018	0.902	0.970
Delivered by C-section (live births)	0.231	0.031	259	666	1.068	0.135	0.169	0.293
Women with postnatal check during first 2 days	0.879	0.024	246	631	1.147	0.027	0.831	0.927
Newborns with postnatal check during first 2 days	0.858	0.022	246	631	0.986	0.026	0.814	0.902
Any problem accessing health care	0.527	0.025	1,131	2,928	1.678	0.047	0.477	0.577
Ever had vaccination card	1.000	0.000	140	359	na	0.000	1.000	1.000
Received BCG vaccination	0.972	0.015	140	359	1.098	0.016	0.942	1.003
Received DPT-HepB-Hib vaccination (3 doses)	0.927	0.026	140	359	1.182	0.028	0.874	0.979
Received pneumococcal vaccination (3 doses)	0.948	0.019	140	359	1.009	0.020	0.910	0.986
Received measles and rubella 1 vaccination	0.919	0.023	140	359	0.991	0.025	0.873	0.965
Fully vaccinated according to national schedule (12–23 months)	0.638	0.051	140	359	1.176	0.079	0.537	0.739
Received measles and rubella 2 vaccination	0.668	0.060	95	255	1.212	0.090	0.547	0.789
Fully vaccinated according to national schedule (24–35 months)	0.409	0.058	95	255	1.103	0.141	0.294	0.524
Sought treatment for diarrhoea	0.445	0.049	94	240	0.971	0.111	0.346	0.544
Treated with ORS	0.419	0.077	94	240	1.474	0.183	0.266	0.572
Height-for-age (−3 SD)	0.042	0.011	315	784	0.963	0.252	0.021	0.063
Height-for-age (−2 SD)	0.172	0.027	315	784	1.177	0.159	0.118	0.227
Weight-for-height (−2 SD)	0.077	0.015	314	782	0.938	0.193	0.047	0.106
Weight-for-height (+2 SD)	0.024	0.008	314	782	0.983	0.355	0.007	0.040
Weight-for-age (−2 SD)	0.109	0.020	315	784	1.067	0.186	0.069	0.150

Continued...

Table B.10—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.436	0.076	49	127	1.064	0.175	0.283	0.588
Minimum dietary diversity (children 6–23 months)	0.427	0.048	187	476	1.309	0.111	0.332	0.522
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.406	0.030	285	705	0.961	0.074	0.346	0.466
Body mass index (BMI) <18.5	0.026	0.008	445	1,152	1.115	0.321	0.009	0.043
Body mass index (BMI) ≥25.0	0.595	0.026	445	1,152	1.098	0.043	0.544	0.646
Body mass index-for-age (−2 SD)	0.049	0.022	86	223	0.956	0.455	0.004	0.094
Body mass index-for-age (+1 SD)	0.170	0.039	86	223	0.956	0.229	0.092	0.248
Minimum dietary diversity (women 15–49)	0.456	0.025	1,131	2,928	1.678	0.055	0.406	0.505
Prevalence of any anaemia (women 15–49)	0.375	0.021	576	1,486	1.017	0.055	0.334	0.416
Child slept under an ITN last night	0.445	0.031	610	1,523	1.330	0.071	0.382	0.508
Pregnant women slept under an ITN last night	0.369	0.050	68	163	0.833	0.135	0.270	0.468
Received 3+ doses of SP/Fansidar	0.499	0.040	246	631	1.249	0.080	0.419	0.579
Child had fever in last 2 weeks	0.171	0.016	571	1,495	0.986	0.095	0.138	0.203
Child had blood taken from finger/heel	0.339	0.057	95	255	1.097	0.168	0.225	0.453
Child took ACT	0.750	0.070	43	117	1.069	0.093	0.610	0.889
Child has malaria (based on rapid test)	0.111	0.023	285	705	1.208	0.208	0.065	0.157
Child has malaria (based on microscopy test)	0.075	0.019	285	705	1.174	0.256	0.036	0.113
Discriminatory attitudes towards people with HIV	0.796	0.015	1,116	2,891	1.251	0.019	0.766	0.826
Condom use at last sex	0.081	0.018	310	800	1.150	0.220	0.046	0.117
Tested for HIV in the past 12 months and received the results of the last test	0.164	0.012	1,131	2,928	1.062	0.071	0.140	0.187
Mobile phone ownership	0.846	0.013	1,131	2,928	1.248	0.016	0.819	0.873
Have and use a bank account or mobile phone for financial transactions	0.782	0.023	1,131	2,928	1.868	0.029	0.736	0.828
Participate in decision making (all three decisions)	0.552	0.027	550	1,426	1.284	0.049	0.498	0.607
Agree with at least one specified reason a husband is justified in wife beating	0.160	0.020	1,131	2,928	1.852	0.126	0.120	0.201
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.478	0.029	550	1,426	1.338	0.060	0.421	0.535
Experienced physical violence since age 15 by any perpetrator	0.338	0.028	443	1,124	1.256	0.084	0.281	0.394
Experienced sexual violence by any perpetrator ever	0.168	0.022	443	1,124	1.256	0.133	0.124	0.213
Experienced sexual violence by any non-intimate partner	0.064	0.014	443	1,124	1.170	0.213	0.037	0.091
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.199	0.027	405	986	1.374	0.137	0.145	0.254
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.241	0.029	405	986	1.349	0.119	0.184	0.299
	MEN							
No education	0.041	0.014	438	1,179	1.463	0.337	0.014	0.069
Secondary education or higher	0.877	0.023	438	1,179	1.460	0.026	0.831	0.923
Literacy	0.768	0.027	438	1,179	1.334	0.035	0.715	0.822
Use of the internet in last 12 months	0.686	0.030	438	1,179	1.353	0.044	0.626	0.746
Current tobacco use	0.041	0.009	438	1,179	0.968	0.225	0.022	0.059
Want no more children	0.347	0.043	166	442	1.170	0.125	0.260	0.433
Discriminatory attitudes towards people with HIV	0.702	0.032	433	1,168	1.460	0.046	0.637	0.766
Condom use at last sex	0.136	0.030	161	429	1.112	0.222	0.076	0.196
Ever tested for HIV and received results of last test	0.045	0.009	438	1,179	0.903	0.198	0.027	0.063
Male circumcision	0.977	0.009	438	1,179	1.206	0.009	0.959	0.994
Mobile phone ownership	0.880	0.019	438	1,179	1.204	0.021	0.843	0.917
Have and use a bank account or mobile phone for financial transactions	0.811	0.022	438	1,179	1.184	0.027	0.766	0.855
Agree with at least one specified reason a husband is justified in wife beating	0.113	0.018	438	1,179	1.172	0.157	0.077	0.148

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.11 Sampling errors: Western North sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.107	0.020	3,558	1,775	2.131	0.191	0.066	0.148
Births registered with civil authority	0.702	0.044	457	227	1.654	0.062	0.614	0.789
Ownership of at least one ITN	0.770	0.017	1,061	521	1.310	0.022	0.736	0.804
Ownership of at least one ITN for every two persons	0.586	0.022	1,053	517	1.430	0.037	0.542	0.629
At least basic drinking water service	0.750	0.048	3,558	1,775	2.834	0.063	0.655	0.846
Water available when needed	0.808	0.024	3,558	1,775	1.663	0.030	0.759	0.857
At least basic sanitation service	0.184	0.026	3,558	1,775	1.719	0.140	0.133	0.236
Using open defecation	0.063	0.024	3,558	1,775	2.718	0.385	0.014	0.111
Using a handwashing facility with soap and water	0.201	0.033	3,492	1,736	2.268	0.165	0.134	0.267
WOMEN								
No education	0.140	0.019	792	411	1.551	0.137	0.101	0.178
Secondary education or higher	0.711	0.025	792	411	1.561	0.035	0.661	0.761
Literacy	0.478	0.027	792	411	1.496	0.056	0.424	0.531
Use of the internet in last 12 months	0.285	0.028	792	411	1.750	0.099	0.229	0.341
Current tobacco use	0.004	0.002	792	411	0.922	0.494	0.000	0.009
Total fertility rate (3 years)	3.784	0.225	2,222	1,151	1.133	0.060	3.334	4.235
Currently pregnant	0.065	0.010	792	411	1.190	0.160	0.044	0.086
Mean number of children ever born to women age 40–49	4.607	0.187	161	83	1.151	0.041	4.233	4.982
Median birth interval	41.723	1.603	322	169	1.221	0.038	38.518	44.929
Ideal number of children	4.412	0.075	788	408	1.066	0.017	4.263	4.561
Total wanted fertility rate (3 years)	3.308	0.232	2,222	1,151	1.182	0.070	2.843	3.773
Currently using any contraceptive method	0.392	0.025	439	231	1.061	0.063	0.343	0.442
Currently using any modern method	0.291	0.023	439	231	1.046	0.078	0.245	0.336
Currently using pill	0.045	0.013	439	231	1.330	0.292	0.019	0.072
Currently using injectables	0.102	0.015	439	231	1.002	0.142	0.073	0.131
Currently using implants	0.061	0.011	439	231	0.981	0.183	0.039	0.084
Currently using male condoms	0.010	0.005	439	231	0.985	0.462	0.001	0.020
Currently using any traditional method	0.102	0.018	439	231	1.228	0.175	0.066	0.137
Unmet need for spacing	0.149	0.018	439	231	1.069	0.122	0.113	0.186
Unmet need for limiting	0.078	0.013	439	231	1.021	0.168	0.052	0.104
Unmet need total	0.227	0.023	439	231	1.143	0.101	0.182	0.273
Demand satisfied by modern methods	0.469	0.032	274	143	1.068	0.069	0.404	0.534
Demand satisfied by modern methods (all women)	0.493	0.024	406	210	0.955	0.048	0.446	0.541
Participation in decision making about family planning	0.874	0.027	439	231	1.676	0.031	0.820	0.927
Not exposed to any of the eight media sources	0.261	0.033	792	411	2.122	0.127	0.195	0.328
Neonatal mortality (last 0–9 years)	13.317	4.179	863	454	0.936	0.314	4.959	21.674
Postneonatal mortality (last 0–9 years)	9.157	3.587	867	457	1.118	0.392	1.984	16.331
Infant mortality (last 0–9 years)	22.474	5.774	864	455	1.007	0.257	10.927	34.021
Child mortality (last 0–9 years)	15.227	5.511	855	448	1.150	0.362	4.205	26.249
Under-5 mortality (last 0–9 years)	37.359	8.849	868	457	1.228	0.237	19.660	55.058
Perinatal mortality rate	16.594	6.154	437	228	1.012	0.371	4.285	28.902
Stillbirth rate	6.406	3.630	437	228	0.953	0.567	0.000	13.665
Early neonatal mortality rate	10.254	5.396	434	226	1.121	0.526	0.000	21.045
Received ANC from a skilled provider	0.996	0.004	182	96	0.824	0.004	0.989	1.004
4+ ANC visits	0.868	0.033	182	96	1.311	0.038	0.802	0.934
8+ ANC visits	0.301	0.033	182	96	0.965	0.109	0.235	0.367
Took any iron-containing supplements	0.887	0.028	182	96	1.202	0.032	0.831	0.944
Mothers protected against tetanus for last birth	0.765	0.042	182	96	1.316	0.054	0.682	0.848
Delivered in a health facility (live births)	0.889	0.037	192	101	1.507	0.041	0.815	0.962
Delivered by a skilled provider (live births)	0.893	0.036	192	101	1.492	0.040	0.821	0.965
Delivered by C-section (live births)	0.181	0.032	192	101	1.096	0.176	0.118	0.245
Women with postnatal check during first 2 days	0.874	0.027	182	96	1.103	0.031	0.820	0.929
Newborns with postnatal check during first 2 days	0.849	0.037	182	96	1.401	0.044	0.775	0.924
Any problem accessing health care	0.536	0.034	792	411	1.905	0.063	0.468	0.603
Ever had vaccination card	1.000	0.000	98	51	na	0.000	1.000	1.000
Received BCG vaccination	0.977	0.017	98	51	1.099	0.017	0.944	1.010
Received DPT-HepB-Hib vaccination (3 doses)	0.942	0.022	98	51	0.924	0.023	0.898	0.986
Received pneumococcal vaccination (3 doses)	0.942	0.022	98	51	0.924	0.023	0.898	0.986
Received measles and rubella 1 vaccination	0.939	0.022	98	51	0.889	0.023	0.896	0.982
Fully vaccinated according to national schedule (12–23 months)	0.620	0.055	98	51	1.107	0.089	0.509	0.731
Received measles and rubella 2 vaccination	0.806	0.049	78	41	1.075	0.060	0.709	0.904
Fully vaccinated according to national schedule (24–35 months)	0.403	0.070	78	41	1.184	0.174	0.263	0.543
Sought treatment for diarrhoea	0.446	0.072	50	26	1.076	0.163	0.301	0.590
Treated with ORS	0.479	0.087	50	26	1.124	0.182	0.305	0.653
Height-for-age (−3 SD)	0.017	0.008	208	102	0.920	0.485	0.001	0.033
Height-for-age (−2 SD)	0.106	0.021	208	102	0.935	0.197	0.064	0.148
Weight-for-height (−2 SD)	0.018	0.009	209	103	0.953	0.488	0.000	0.035
Weight-for-height (+2 SD)	0.018	0.008	209	103	0.915	0.465	0.001	0.035
Weight-for-age (−2 SD)	0.075	0.020	208	102	1.067	0.265	0.035	0.115

Continued...

Table B.11—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.275	0.061	47	24	0.933	0.223	0.153	0.398
Minimum dietary diversity (children 6–23 months)	0.365	0.051	134	72	1.230	0.141	0.262	0.468
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.451	0.039	182	90	0.965	0.086	0.373	0.529
Body mass index (BMI) <18.5	0.034	0.010	274	141	0.899	0.288	0.015	0.054
Body mass index (BMI) ≥25.0	0.501	0.036	274	141	1.194	0.072	0.429	0.573
Body mass index-for-age (−2 SD)	0.029	0.021	67	33	1.018	0.720	0.000	0.072
Body mass index-for-age (+1 SD)	0.136	0.046	67	33	1.083	0.337	0.044	0.227
Minimum dietary diversity (women 15–49)	0.504	0.025	792	411	1.386	0.049	0.454	0.553
Prevalence of any anaemia (women 15–49)	0.363	0.031	369	189	1.238	0.086	0.301	0.425
Child slept under an ITN last night	0.584	0.033	458	228	1.225	0.056	0.519	0.649
Pregnant women slept under an ITN last night	0.544	0.082	52	26	1.197	0.152	0.379	0.709
Received 3+ doses of SP/Fansidar	0.518	0.046	182	96	1.246	0.089	0.425	0.611
Child had fever in last 2 weeks	0.143	0.026	425	222	1.397	0.184	0.090	0.196
Child had blood taken from finger/heel	0.401	0.084	59	32	1.187	0.209	0.233	0.568
Child took ACT	0.887	0.058	22	11	0.840	0.065	0.771	1.002
Child has malaria (based on rapid test)	0.114	0.024	183	91	0.989	0.210	0.066	0.163
Child has malaria (based on microscopy test)	0.044	0.016	183	91	1.099	0.367	0.012	0.077
Discriminatory attitudes towards people with HIV	0.834	0.016	770	400	1.199	0.019	0.801	0.866
Condom use at last sex	0.107	0.022	217	108	1.051	0.206	0.063	0.152
Tested for HIV in the past 12 months and received the results of the last test	0.143	0.017	792	411	1.364	0.119	0.109	0.177
Mobile phone ownership	0.741	0.026	792	411	1.698	0.036	0.688	0.794
Have and use a bank account or mobile phone for financial transactions	0.704	0.028	792	411	1.750	0.040	0.647	0.761
Participate in decision making (all three decisions)	0.411	0.037	439	231	1.582	0.091	0.337	0.486
Agree with at least one specified reason a husband is justified in wife beating	0.273	0.021	792	411	1.346	0.078	0.230	0.315
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.405	0.036	439	231	1.544	0.090	0.333	0.478
Experienced physical violence since age 15 by any perpetrator	0.317	0.029	281	137	1.043	0.091	0.259	0.375
Experienced sexual violence by any perpetrator ever	0.115	0.019	281	137	0.986	0.163	0.077	0.153
Experienced sexual violence by any non-intimate partner	0.015	0.006	281	137	0.894	0.432	0.002	0.028
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.181	0.026	266	128	1.091	0.143	0.129	0.233
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.258	0.030	266	128	1.127	0.117	0.198	0.319
	MEN							
No education	0.049	0.015	351	181	1.330	0.313	0.018	0.080
Secondary education or higher	0.810	0.032	351	181	1.543	0.040	0.745	0.875
Literacy	0.745	0.037	351	181	1.598	0.050	0.671	0.820
Use of the internet in last 12 months	0.591	0.031	351	181	1.180	0.052	0.529	0.653
Current tobacco use	0.093	0.018	351	181	1.145	0.191	0.057	0.129
Want no more children	0.367	0.044	161	82	1.145	0.119	0.280	0.454
Discriminatory attitudes towards people with HIV	0.707	0.027	347	179	1.124	0.039	0.652	0.762
Condom use at last sex	0.202	0.033	152	76	1.000	0.162	0.137	0.268
Ever tested for HIV and received results of last test	0.056	0.015	351	181	1.233	0.272	0.025	0.086
Male circumcision	0.961	0.014	351	181	1.372	0.015	0.933	0.989
Mobile phone ownership	0.876	0.015	351	181	0.868	0.017	0.845	0.906
Have and use a bank account or mobile phone for financial transactions	0.829	0.026	351	181	1.277	0.031	0.778	0.880
Agree with at least one specified reason a husband is justified in wife beating	0.113	0.015	351	181	0.873	0.131	0.083	0.142

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.12 Sampling errors: Ahafo sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.090	0.014	3,802	1,397	1.639	0.159	0.062	0.119
Births registered with civil authority	0.751	0.036	505	185	1.661	0.048	0.679	0.822
Ownership of at least one ITN	0.798	0.013	1,062	388	1.064	0.016	0.771	0.824
Ownership of at least one ITN for every two persons	0.615	0.017	1,049	384	1.153	0.028	0.580	0.650
At least basic drinking water service	0.758	0.046	3,802	1,397	2.861	0.061	0.665	0.851
Water available when needed	0.799	0.030	3,802	1,397	2.105	0.038	0.739	0.860
At least basic sanitation service	0.191	0.025	3,802	1,397	1.727	0.133	0.140	0.242
Using open defecation	0.118	0.039	3,802	1,397	3.279	0.330	0.040	0.196
Using a handwashing facility with soap and water	0.395	0.053	3,776	1,388	3.021	0.135	0.288	0.502
WOMEN								
No education	0.175	0.021	849	317	1.603	0.120	0.133	0.217
Secondary education or higher	0.707	0.023	849	317	1.467	0.032	0.661	0.753
Literacy	0.483	0.022	849	317	1.275	0.045	0.439	0.527
Use of the internet in last 12 months	0.311	0.036	849	317	2.239	0.115	0.239	0.382
Current tobacco use	0.010	0.004	849	317	1.257	0.426	0.001	0.019
Total fertility rate (3 years)	4.272	0.263	2,376	888	1.160	0.062	3.747	4.798
Currently pregnant	0.064	0.007	849	317	0.890	0.117	0.049	0.079
Mean number of children ever born to women age 40–49	4.757	0.159	169	64	1.006	0.033	4.439	5.076
Median birth interval	41.229	1.964	367	141	1.524	0.048	37.301	45.157
Ideal number of children	4.532	0.081	848	317	1.329	0.018	4.369	4.694
Total wanted fertility rate (3 years)	3.658	0.258	2,376	888	1.172	0.071	3.142	4.175
Currently using any contraceptive method	0.428	0.040	484	183	1.795	0.095	0.347	0.509
Currently using any modern method	0.358	0.035	484	183	1.593	0.097	0.288	0.427
Currently using pill	0.050	0.011	484	183	1.123	0.224	0.027	0.072
Currently using injectables	0.113	0.022	484	183	1.517	0.194	0.069	0.156
Currently using implants	0.088	0.014	484	183	1.052	0.154	0.061	0.115
Currently using male condoms	0.005	0.003	484	183	0.891	0.566	0.000	0.011
Currently using any traditional method	0.070	0.017	484	183	1.451	0.240	0.036	0.104
Unmet need for spacing	0.146	0.021	484	183	1.303	0.144	0.104	0.187
Unmet need for limiting	0.096	0.013	484	183	0.978	0.137	0.069	0.122
Unmet need total	0.241	0.026	484	183	1.346	0.109	0.189	0.294
Demand satisfied by modern methods	0.535	0.040	320	122	1.423	0.074	0.456	0.614
Demand satisfied by modern methods (all women)	0.529	0.028	473	179	1.210	0.052	0.474	0.585
Participation in decision making about family planning	0.759	0.041	484	183	2.110	0.054	0.676	0.841
Not exposed to any of the eight media sources	0.151	0.027	849	317	2.156	0.176	0.098	0.204
Neonatal mortality (last 0–9 years)	12.503	3.337	958	364	0.946	0.267	5.830	19.177
Postneonatal mortality (last 0–9 years)	4.744	2.112	950	361	0.913	0.445	0.520	8.969
Infant mortality (last 0–9 years)	17.248	4.018	959	365	0.976	0.233	9.212	25.284
Child mortality (last 0–9 years)	11.539	3.406	946	359	1.021	0.295	4.726	18.352
Under-5 mortality (last 0–9 years)	28.588	5.745	962	365	1.122	0.201	17.099	40.078
Perinatal mortality rate	19.523	6.079	503	192	1.007	0.311	7.365	31.680
Stillbirth rate	9.975	4.518	503	192	1.035	0.453	0.939	19.010
Early neonatal mortality rate	9.644	4.582	497	190	1.063	0.475	0.480	18.809
Received ANC from a skilled provider	0.977	0.011	205	77	1.058	0.011	0.955	0.999
4+ ANC visits	0.886	0.025	205	77	1.116	0.028	0.836	0.936
8+ ANC visits	0.424	0.046	205	77	1.327	0.109	0.332	0.516
Took any iron-containing supplements	0.958	0.014	205	77	0.988	0.015	0.930	0.985
Mothers protected against tetanus for last birth	0.778	0.030	205	77	1.022	0.038	0.718	0.837
Delivered in a health facility (live births)	0.922	0.020	214	81	1.077	0.021	0.883	0.962
Delivered by a skilled provider (live births)	0.934	0.016	214	81	0.968	0.018	0.901	0.967
Delivered by C-section (live births)	0.194	0.028	214	81	1.039	0.143	0.139	0.250
Women with postnatal check during first 2 days	0.882	0.036	205	77	1.590	0.041	0.810	0.954
Newborns with postnatal check during first 2 days	0.838	0.036	205	77	1.396	0.043	0.766	0.911
Any problem accessing health care	0.641	0.029	849	317	1.747	0.045	0.584	0.699
Ever had vaccination card	0.946	0.028	97	38	1.223	0.029	0.890	1.001
Received BCG vaccination	0.888	0.038	97	38	1.208	0.043	0.812	0.965
Received DPT-HepB-Hib vaccination (3 doses)	0.885	0.041	97	38	1.269	0.046	0.804	0.967
Received pneumococcal vaccination (3 doses)	0.859	0.042	97	38	1.207	0.049	0.774	0.943
Received measles and rubella 1 vaccination	0.841	0.048	97	38	1.315	0.058	0.744	0.937
Fully vaccinated according to national schedule (12–23 months)	0.538	0.061	97	38	1.214	0.114	0.416	0.661
Received measles and rubella 2 vaccination	0.855	0.042	89	36	1.167	0.049	0.771	0.939
Fully vaccinated according to national schedule (24–35 months)	0.494	0.055	89	36	1.036	0.111	0.384	0.604
Sought treatment for diarrhoea	0.557	0.087	50	18	1.152	0.156	0.384	0.730
Treated with ORS	0.427	0.078	50	18	1.020	0.183	0.270	0.583
Height-for-age (−3 SD)	0.047	0.012	269	98	0.922	0.252	0.023	0.070
Height-for-age (−2 SD)	0.165	0.019	269	98	0.804	0.113	0.127	0.202
Weight-for-height (−2 SD)	0.042	0.014	269	98	1.081	0.338	0.013	0.070
Weight-for-height (+2 SD)	0.043	0.013	269	98	1.010	0.305	0.017	0.069
Weight-for-age (−2 SD)	0.080	0.015	269	98	0.892	0.189	0.050	0.110

Continued...

Table B.12—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.474	0.075	58	22	1.132	0.158	0.324	0.624
Minimum dietary diversity (children 6–23 months)	0.447	0.042	141	54	0.995	0.094	0.363	0.531
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.354	0.028	237	87	0.899	0.079	0.299	0.410
Body mass index (BMI) <18.5	0.031	0.013	316	117	1.332	0.423	0.005	0.056
Body mass index (BMI) ≥25.0	0.489	0.032	316	117	1.142	0.066	0.425	0.554
Body mass index-for-age (−2 SD)	0.014	0.014	68	26	0.959	0.991	0.000	0.041
Body mass index-for-age (+1 SD)	0.123	0.049	68	26	1.219	0.398	0.025	0.222
Minimum dietary diversity (women 15–49)	0.568	0.025	849	317	1.474	0.044	0.518	0.618
Prevalence of any anaemia (women 15–49)	0.356	0.022	428	160	0.940	0.061	0.313	0.400
Child slept under an ITN last night	0.683	0.027	511	188	1.142	0.040	0.628	0.738
Pregnant women slept under an ITN last night	0.717	0.057	56	20	0.927	0.080	0.603	0.832
Received 3+ doses of SP/Fansidar	0.583	0.042	205	77	1.205	0.071	0.500	0.666
Child had fever in last 2 weeks	0.121	0.025	487	186	1.526	0.203	0.072	0.170
Child had blood taken from finger/heel	0.536	0.074	61	22	1.073	0.138	0.388	0.685
Child took ACT	0.713	0.105	30	11	1.255	0.148	0.502	0.924
Child has malaria (based on rapid test)	0.214	0.027	237	87	0.973	0.128	0.159	0.268
Child has malaria (based on microscopy test)	0.118	0.020	237	87	0.961	0.172	0.077	0.159
Discriminatory attitudes towards people with HIV	0.870	0.013	822	306	1.125	0.015	0.843	0.896
Condom use at last sex	0.088	0.025	198	71	1.242	0.286	0.038	0.138
Tested for HIV in the past 12 months and received the results of the last test	0.133	0.014	849	317	1.179	0.103	0.106	0.161
Mobile phone ownership	0.756	0.019	849	317	1.303	0.025	0.718	0.795
Have and use a bank account or mobile phone for financial transactions	0.734	0.019	849	317	1.224	0.025	0.697	0.771
Participate in decision making (all three decisions)	0.452	0.054	484	183	2.354	0.119	0.345	0.559
Agree with at least one specified reason a husband is justified in wife beating	0.228	0.021	849	317	1.482	0.094	0.186	0.271
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.374	0.048	484	183	2.163	0.128	0.279	0.470
Experienced physical violence since age 15 by any perpetrator	0.306	0.037	340	123	1.477	0.121	0.232	0.380
Experienced sexual violence by any perpetrator ever	0.110	0.020	340	123	1.202	0.185	0.069	0.151
Experienced sexual violence by any non-intimate partner	0.051	0.012	340	123	1.041	0.244	0.026	0.076
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.259	0.029	307	105	1.174	0.114	0.200	0.318
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.385	0.037	307	105	1.311	0.095	0.312	0.458
	MEN							
No education	0.093	0.018	359	133	1.183	0.195	0.057	0.130
Secondary education or higher	0.806	0.022	359	133	1.065	0.028	0.761	0.850
Literacy	0.701	0.021	359	133	0.876	0.030	0.658	0.743
Use of the internet in last 12 months	0.466	0.031	359	133	1.170	0.066	0.404	0.527
Current tobacco use	0.049	0.012	359	133	1.070	0.249	0.025	0.074
Want no more children	0.241	0.033	184	69	1.053	0.138	0.174	0.307
Discriminatory attitudes towards people with HIV	0.720	0.022	355	132	0.917	0.030	0.676	0.764
Condom use at last sex	0.297	0.046	115	42	1.066	0.154	0.206	0.388
Ever tested for HIV and received results of last test	0.068	0.017	359	133	1.252	0.244	0.035	0.102
Male circumcision	0.983	0.012	359	133	1.709	0.012	0.960	1.007
Mobile phone ownership	0.867	0.018	359	133	1.024	0.021	0.830	0.903
Have and use a bank account or mobile phone for financial transactions	0.791	0.021	359	133	0.988	0.027	0.749	0.834
Agree with at least one specified reason a husband is justified in wife beating	0.170	0.027	359	133	1.365	0.160	0.116	0.224

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.13 Sampling errors: Bono sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.155	0.026	3,456	2,262	2.300	0.170	0.102	0.208
Births registered with civil authority	0.684	0.038	429	279	1.478	0.056	0.608	0.760
Ownership of at least one ITN	0.726	0.019	1,030	668	1.389	0.027	0.687	0.764
Ownership of at least one ITN for every two persons	0.522	0.021	1,028	666	1.324	0.040	0.480	0.563
At least basic drinking water service	0.870	0.041	3,456	2,262	3.007	0.047	0.788	0.951
Water available when needed	0.830	0.032	3,456	2,262	2.201	0.038	0.766	0.893
At least basic sanitation service	0.288	0.031	3,456	2,262	1.785	0.107	0.226	0.349
Using open defecation	0.130	0.022	3,456	2,262	1.804	0.173	0.085	0.175
Using a handwashing facility with soap and water	0.326	0.037	3,424	2,241	2.115	0.112	0.253	0.400
WOMEN								
No education	0.118	0.016	835	567	1.403	0.133	0.086	0.149
Secondary education or higher	0.774	0.026	835	567	1.799	0.034	0.721	0.826
Literacy	0.615	0.031	835	567	1.828	0.050	0.553	0.677
Use of the internet in last 12 months	0.417	0.033	835	567	1.948	0.080	0.351	0.484
Current tobacco use	0.003	0.002	835	567	1.204	0.720	0.000	0.008
Total fertility rate (3 years)	3.697	0.255	2,337	1,589	1.138	0.069	3.187	4.207
Currently pregnant	0.066	0.008	835	567	0.896	0.116	0.051	0.082
Mean number of children ever born to women age 40–49	4.298	0.191	167	113	1.163	0.044	3.916	4.680
Median birth interval	42.599	2.192	301	202	1.149	0.051	38.216	46.982
Ideal number of children	4.193	0.084	833	566	1.530	0.020	4.026	4.360
Total wanted fertility rate (3 years)	3.414	0.256	2,337	1,589	1.164	0.075	2.901	3.927
Currently using any contraceptive method	0.385	0.023	424	284	0.991	0.061	0.339	0.432
Currently using any modern method	0.283	0.023	424	284	1.072	0.083	0.236	0.330
Currently using pill	0.053	0.008	424	284	0.777	0.160	0.036	0.070
Currently using injectables	0.070	0.012	424	284	0.959	0.170	0.046	0.094
Currently using implants	0.089	0.018	424	284	1.309	0.204	0.053	0.125
Currently using male condoms	0.011	0.005	424	284	1.026	0.481	0.000	0.021
Currently using any traditional method	0.103	0.018	424	284	1.217	0.175	0.067	0.139
Unmet need for spacing	0.147	0.018	424	284	1.070	0.125	0.110	0.184
Unmet need for limiting	0.090	0.016	424	284	1.131	0.175	0.058	0.121
Unmet need total	0.237	0.020	424	284	0.962	0.084	0.197	0.277
Demand satisfied by modern methods	0.454	0.033	262	177	1.071	0.072	0.389	0.520
Demand satisfied by modern methods (all women)	0.467	0.030	399	269	1.188	0.064	0.408	0.527
Participation in decision making about family planning	0.917	0.016	424	284	1.197	0.018	0.885	0.949
Not exposed to any of the eight media sources	0.295	0.022	835	567	1.377	0.074	0.251	0.338
Neonatal mortality (last 0–9 years)	12.551	6.262	830	555	1.580	0.499	0.027	25.076
Postneonatal mortality (last 0–9 years)	11.072	3.766	830	555	1.031	0.340	3.541	18.604
Infant mortality (last 0–9 years)	23.624	6.675	830	555	1.277	0.283	10.274	36.973
Child mortality (last 0–9 years)	12.533	3.456	810	542	0.868	0.276	5.620	19.446
Under-5 mortality (last 0–9 years)	35.861	6.862	832	556	1.070	0.191	22.137	49.584
Perinatal mortality rate	25.626	11.036	433	290	1.463	0.431	3.554	47.698
Stillbirth rate	14.407	7.464	433	290	1.306	0.518	0.000	29.336
Early neonatal mortality rate	11.383	8.898	427	286	1.728	0.782	0.000	29.179
Received ANC from a skilled provider	0.988	0.009	167	113	1.034	0.009	0.970	1.005
4+ ANC visits	0.912	0.025	167	113	1.118	0.027	0.862	0.961
8+ ANC visits	0.368	0.052	167	113	1.395	0.142	0.263	0.472
Took any iron-containing supplements	0.983	0.013	167	113	1.268	0.013	0.957	1.008
Mothers protected against tetanus for last birth	0.692	0.048	167	113	1.338	0.069	0.596	0.789
Delivered in a health facility (live births)	0.907	0.037	174	117	1.652	0.040	0.834	0.980
Delivered by a skilled provider (live births)	0.913	0.037	174	117	1.695	0.040	0.839	0.986
Delivered by C-section (live births)	0.212	0.037	174	117	1.107	0.172	0.139	0.286
Women with postnatal check during first 2 days	0.941	0.022	167	113	1.201	0.023	0.897	0.985
Newborns with postnatal check during first 2 days	0.957	0.016	167	113	1.027	0.017	0.925	0.990
Any problem accessing health care	0.415	0.044	835	567	2.583	0.106	0.327	0.504
Ever had vaccination card	1.000	0.000	94	62	na	0.000	1.000	1.000
Received BCG vaccination	0.986	0.014	94	62	1.145	0.014	0.958	1.014
Received DPT-HepB-Hib vaccination (3 doses)	0.933	0.027	94	62	1.048	0.029	0.878	0.988
Received pneumococcal vaccination (3 doses)	0.945	0.025	94	62	1.071	0.027	0.894	0.996
Received measles and rubella 1 vaccination	0.909	0.026	94	62	0.862	0.028	0.858	0.961
Fully vaccinated according to national schedule (12–23 months)	0.652	0.059	94	62	1.177	0.090	0.535	0.769
Received measles and rubella 2 vaccination	0.810	0.044	86	56	1.016	0.054	0.723	0.898
Fully vaccinated according to national schedule (24–35 months)	0.492	0.045	86	56	0.815	0.092	0.402	0.582
Sought treatment for diarrhoea	0.365	0.097	34	23	1.110	0.266	0.171	0.560
Treated with ORS	0.360	0.085	34	23	0.968	0.235	0.191	0.529
Height-for-age (−3 SD)	0.052	0.015	212	136	0.972	0.297	0.021	0.082
Height-for-age (−2 SD)	0.170	0.031	212	136	1.121	0.183	0.107	0.232
Weight-for-height (−2 SD)	0.040	0.018	210	135	1.329	0.457	0.003	0.076
Weight-for-height (+2 SD)	0.039	0.017	210	135	1.250	0.433	0.005	0.072
Weight-for-age (−2 SD)	0.110	0.025	212	136	1.071	0.222	0.061	0.159

Continued...

Table B.13—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.579	0.066	37	25	0.801	0.113	0.447	0.710
Minimum dietary diversity (children 6–23 months)	0.388	0.043	126	85	0.998	0.112	0.302	0.475
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.401	0.043	193	124	1.161	0.108	0.314	0.488
Body mass index (BMI) <18.5	0.041	0.010	318	218	0.939	0.255	0.020	0.062
Body mass index (BMI) ≥25.0	0.500	0.040	318	218	1.422	0.080	0.420	0.580
Body mass index-for-age (−2 SD)	0.041	0.023	83	58	1.044	0.560	0.000	0.086
Body mass index-for-age (+1 SD)	0.082	0.032	83	58	1.045	0.386	0.019	0.146
Minimum dietary diversity (women 15–49)	0.448	0.038	835	567	2.182	0.084	0.373	0.523
Prevalence of any anaemia (women 15–49)	0.301	0.035	432	297	1.585	0.116	0.231	0.371
Child slept under an ITN last night	0.595	0.035	436	282	1.390	0.059	0.525	0.666
Pregnant women slept under an ITN last night	0.561	0.080	56	37	1.209	0.142	0.402	0.721
Received 3+ doses of SP/Fansidar	0.666	0.038	167	113	1.027	0.056	0.591	0.741
Child had fever in last 2 weeks	0.093	0.018	415	277	1.271	0.194	0.057	0.130
Child had blood taken from finger/heel	0.572	0.094	40	26	1.176	0.164	0.384	0.760
Child took ACT	0.802	0.069	26	17	0.880	0.086	0.664	0.941
Child has malaria (based on rapid test)	0.151	0.044	193	124	1.515	0.289	0.064	0.239
Child has malaria (based on microscopy test)	0.099	0.029	193	124	1.159	0.291	0.041	0.157
Discriminatory attitudes towards people with HIV	0.705	0.033	808	549	2.069	0.047	0.638	0.771
Condom use at last sex	0.088	0.017	233	159	0.918	0.194	0.054	0.122
Tested for HIV in the past 12 months and received the results of the last test	0.158	0.016	835	567	1.301	0.104	0.126	0.191
Mobile phone ownership	0.819	0.018	835	567	1.352	0.022	0.783	0.855
Have and use a bank account or mobile phone for financial transactions	0.774	0.023	835	567	1.607	0.030	0.727	0.821
Participate in decision making (all three decisions)	0.713	0.034	424	284	1.548	0.048	0.644	0.781
Agree with at least one specified reason a husband is justified in wife beating	0.172	0.025	835	567	1.913	0.146	0.122	0.222
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.617	0.032	424	284	1.371	0.053	0.553	0.682
Experienced physical violence since age 15 by any perpetrator	0.262	0.033	327	224	1.346	0.125	0.197	0.328
Experienced sexual violence by any perpetrator ever	0.092	0.023	327	224	1.426	0.249	0.046	0.137
Experienced sexual violence by any non-intimate partner	0.067	0.020	327	224	1.457	0.302	0.026	0.107
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.150	0.023	284	184	1.065	0.151	0.104	0.195
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.183	0.026	284	184	1.135	0.143	0.131	0.235
	MEN							
No education	0.076	0.025	324	222	1.667	0.324	0.027	0.125
Secondary education or higher	0.811	0.031	324	222	1.428	0.038	0.749	0.873
Literacy	0.761	0.033	324	222	1.384	0.043	0.696	0.827
Use of the internet in last 12 months	0.620	0.043	324	222	1.577	0.069	0.535	0.706
Current tobacco use	0.033	0.009	324	222	0.918	0.276	0.015	0.051
Want no more children	0.237	0.032	130	87	0.853	0.135	0.173	0.300
Discriminatory attitudes towards people with HIV	0.670	0.023	316	217	0.851	0.034	0.624	0.715
Condom use at last sex	0.260	0.043	123	87	1.081	0.165	0.174	0.346
Ever tested for HIV and received results of last test	0.105	0.017	324	222	0.981	0.159	0.072	0.139
Male circumcision	0.906	0.026	324	222	1.578	0.028	0.855	0.957
Mobile phone ownership	0.841	0.018	324	222	0.879	0.021	0.805	0.877
Have and use a bank account or mobile phone for financial transactions	0.777	0.031	324	222	1.343	0.040	0.715	0.840
Agree with at least one specified reason a husband is justified in wife beating	0.159	0.026	324	222	1.258	0.161	0.108	0.210

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.14 Sampling errors: Bono East sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.074	0.015	4,362	2,831	1.995	0.197	0.045	0.103
Births registered with civil authority	0.827	0.024	657	426	1.354	0.030	0.778	0.876
Ownership of at least one ITN	0.752	0.019	1,054	693	1.422	0.025	0.714	0.789
Ownership of at least one ITN for every two persons	0.507	0.024	1,051	691	1.545	0.047	0.460	0.555
At least basic drinking water service	0.783	0.054	4,362	2,831	3.290	0.069	0.675	0.892
Water available when needed	0.851	0.024	4,362	2,831	1.767	0.028	0.804	0.898
At least basic sanitation service	0.186	0.030	4,362	2,831	2.092	0.163	0.125	0.247
Using open defecation	0.440	0.069	4,362	2,831	3.611	0.156	0.303	0.578
Using a handwashing facility with soap and water	0.325	0.028	4,285	2,784	1.588	0.088	0.268	0.382
WOMEN								
No education	0.240	0.028	974	676	2.067	0.118	0.183	0.296
Secondary education or higher	0.578	0.036	974	676	2.256	0.062	0.507	0.650
Literacy	0.449	0.031	974	676	1.954	0.069	0.387	0.512
Use of the internet in last 12 months	0.305	0.031	974	676	2.072	0.100	0.244	0.366
Current tobacco use	0.005	0.002	974	676	1.120	0.521	0.000	0.010
Total fertility rate (3 years)	4.715	0.303	2,740	1,906	1.322	0.064	4.110	5.320
Currently pregnant	0.062	0.009	974	676	1.160	0.145	0.044	0.080
Mean number of children ever born to women age 40–49	4.894	0.317	174	121	1.766	0.065	4.261	5.528
Median birth interval	39.882	1.588	505	344	1.366	0.040	36.706	43.057
Ideal number of children	4.876	0.138	968	671	2.128	0.028	4.600	5.151
Total wanted fertility rate (3 years)	4.268	0.279	2,740	1,906	1.302	0.065	3.709	4.827
Currently using any contraceptive method	0.221	0.027	548	376	1.500	0.120	0.168	0.274
Currently using any modern method	0.207	0.026	548	376	1.505	0.126	0.155	0.259
Currently using pill	0.045	0.011	548	376	1.252	0.247	0.023	0.067
Currently using injectables	0.070	0.012	548	376	1.063	0.165	0.047	0.093
Currently using implants	0.062	0.013	548	376	1.289	0.215	0.035	0.088
Currently using male condoms	0.005	0.003	548	376	1.088	0.691	0.000	0.011
Currently using any traditional method	0.014	0.006	548	376	1.087	0.384	0.003	0.025
Unmet need for spacing	0.182	0.019	548	376	1.121	0.102	0.145	0.219
Unmet need for limiting	0.114	0.016	548	376	1.157	0.138	0.082	0.145
Unmet need total	0.296	0.024	548	376	1.216	0.080	0.249	0.344
Demand satisfied by modern methods	0.400	0.042	283	194	1.444	0.105	0.315	0.484
Demand satisfied by modern methods (all women)	0.423	0.031	409	282	1.281	0.074	0.360	0.485
Participation in decision making about family planning	0.771	0.042	548	376	2.331	0.054	0.687	0.855
Not exposed to any of the eight media sources	0.455	0.039	974	676	2.426	0.085	0.377	0.533
Neonatal mortality (last 0–9 years)	24.375	4.790	1,220	833	1.049	0.197	14.795	33.954
Postneonatal mortality (last 0–9 years)	12.087	2.526	1,225	836	0.815	0.209	7.034	17.139
Infant mortality (last 0–9 years)	36.461	6.387	1,221	834	1.141	0.175	23.688	49.235
Child mortality (last 0–9 years)	11.695	3.140	1,221	832	0.951	0.268	5.415	17.974
Under-5 mortality (last 0–9 years)	47.729	7.335	1,227	837	1.160	0.154	33.059	62.400
Perinatal mortality rate	23.322	6.293	665	456	1.038	0.270	10.737	35.908
Stillbirth rate	8.036	3.689	665	456	0.941	0.459	0.659	15.413
Early neonatal mortality rate	15.410	5.038	659	452	1.057	0.327	5.334	25.485
Received ANC from a skilled provider	0.992	0.006	278	191	1.014	0.006	0.980	1.003
4+ ANC visits	0.856	0.028	278	191	1.331	0.033	0.799	0.912
8+ ANC visits	0.337	0.038	278	191	1.334	0.112	0.262	0.413
Took any iron-containing supplements	0.866	0.032	278	191	1.548	0.037	0.803	0.930
Mothers protected against tetanus for last birth	0.631	0.055	278	191	1.891	0.087	0.521	0.741
Delivered in a health facility (live births)	0.862	0.034	294	202	1.665	0.039	0.794	0.929
Delivered by a skilled provider (live births)	0.876	0.030	294	202	1.555	0.034	0.815	0.936
Delivered by C-section (live births)	0.228	0.030	294	202	1.167	0.130	0.169	0.288
Women with postnatal check during first 2 days	0.856	0.029	278	191	1.380	0.034	0.797	0.914
Newborns with postnatal check during first 2 days	0.869	0.031	278	191	1.521	0.036	0.808	0.931
Any problem accessing health care	0.590	0.044	974	676	2.798	0.075	0.501	0.678
Ever had vaccination card	0.987	0.009	154	106	0.973	0.009	0.969	1.005
Received BCG vaccination	0.977	0.012	154	106	1.001	0.013	0.952	1.001
Received DPT-HepB-Hib vaccination (3 doses)	0.897	0.025	154	106	0.997	0.027	0.848	0.946
Received pneumococcal vaccination (3 doses)	0.904	0.026	154	106	1.071	0.028	0.853	0.955
Received measles and rubella 1 vaccination	0.919	0.025	154	106	1.146	0.028	0.868	0.969
Fully vaccinated according to national schedule (12–23 months)	0.555	0.045	154	106	1.096	0.081	0.465	0.645
Received measles and rubella 2 vaccination	0.711	0.045	111	77	1.021	0.063	0.620	0.801
Fully vaccinated according to national schedule (24–35 months)	0.417	0.053	111	77	1.104	0.127	0.312	0.523
Sought treatment for diarrhoea	0.482	0.060	99	67	1.168	0.125	0.362	0.603
Treated with ORS	0.399	0.059	99	67	1.152	0.149	0.280	0.518
Height-for-age (−3 SD)	0.026	0.011	323	208	1.170	0.444	0.003	0.048
Height-for-age (−2 SD)	0.139	0.020	323	208	0.951	0.145	0.098	0.179
Weight-for-height (−2 SD)	0.051	0.014	322	207	1.105	0.275	0.023	0.079
Weight-for-height (+2 SD)	0.009	0.005	322	207	0.979	0.586	0.000	0.019
Weight-for-age (−2 SD)	0.111	0.020	323	208	1.060	0.176	0.072	0.151

Continued...

Table B.14—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.656	0.063	65	46	1.064	0.096	0.530	0.783
Minimum dietary diversity (children 6–23 months)	0.322	0.045	202	137	1.356	0.139	0.233	0.412
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.514	0.042	287	185	1.336	0.083	0.429	0.599
Body mass index (BMI) <18.5	0.057	0.012	344	239	0.920	0.202	0.034	0.080
Body mass index (BMI) ≥25.0	0.398	0.028	344	239	1.069	0.071	0.342	0.455
Body mass index-for-age (−2 SD)	0.062	0.027	85	58	1.013	0.430	0.009	0.115
Body mass index-for-age (+1 SD)	0.069	0.026	85	58	0.941	0.377	0.017	0.121
Minimum dietary diversity (women 15–49)	0.373	0.023	974	676	1.493	0.062	0.327	0.419
Prevalence of any anaemia (women 15–49)	0.403	0.027	474	327	1.218	0.068	0.348	0.458
Child slept under an ITN last night	0.629	0.028	662	429	1.159	0.045	0.572	0.685
Pregnant women slept under an ITN last night	0.634	0.071	62	40	1.110	0.111	0.493	0.775
Received 3+ doses of SP/Fansidar	0.651	0.032	278	191	1.130	0.050	0.587	0.716
Child had fever in last 2 weeks	0.136	0.017	636	437	1.186	0.125	0.102	0.170
Child had blood taken from finger/heel	0.534	0.067	87	59	1.207	0.126	0.400	0.669
Child took ACT	0.869	0.071	45	32	1.434	0.082	0.726	1.012
Child has malaria (based on rapid test)	0.221	0.028	287	185	1.022	0.125	0.165	0.276
Child has malaria (based on microscopy test)	0.121	0.022	287	185	0.958	0.185	0.076	0.166
Discriminatory attitudes towards people with HIV	0.724	0.032	871	613	2.096	0.044	0.660	0.787
Condom use at last sex	0.104	0.021	222	156	1.012	0.200	0.062	0.145
Tested for HIV in the past 12 months and received the results of the last test	0.122	0.012	974	676	1.185	0.102	0.097	0.147
Mobile phone ownership	0.753	0.020	974	676	1.441	0.026	0.713	0.793
Have and use a bank account or mobile phone for financial transactions	0.613	0.033	974	676	2.091	0.053	0.548	0.679
Participate in decision making (all three decisions)	0.574	0.046	548	376	2.191	0.081	0.481	0.667
Agree with at least one specified reason a husband is justified in wife beating	0.190	0.042	974	676	3.360	0.224	0.105	0.275
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.509	0.035	548	376	1.645	0.069	0.438	0.579
Experienced physical violence since age 15 by any perpetrator	0.257	0.028	360	240	1.224	0.110	0.200	0.313
Experienced sexual violence by any perpetrator ever	0.074	0.014	360	240	1.037	0.194	0.045	0.102
Experienced sexual violence by any non-intimate partner	0.028	0.010	360	240	1.110	0.347	0.008	0.047
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.166	0.024	317	204	1.148	0.145	0.118	0.214
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.246	0.032	317	204	1.317	0.130	0.182	0.310
	MEN							
No education	0.242	0.039	461	316	1.959	0.162	0.163	0.320
Secondary education or higher	0.631	0.047	461	316	2.088	0.075	0.537	0.725
Literacy	0.643	0.044	461	316	1.974	0.069	0.555	0.732
Use of the internet in last 12 months	0.528	0.039	461	316	1.657	0.073	0.451	0.605
Current tobacco use	0.020	0.009	461	316	1.315	0.431	0.003	0.037
Want no more children	0.201	0.030	209	143	1.087	0.150	0.141	0.262
Discriminatory attitudes towards people with HIV	0.754	0.031	431	299	1.476	0.041	0.693	0.815
Condom use at last sex	0.260	0.054	151	106	1.515	0.210	0.151	0.369
Ever tested for HIV and received results of last test	0.092	0.016	461	316	1.176	0.173	0.060	0.123
Male circumcision	0.944	0.016	461	316	1.456	0.017	0.912	0.975
Mobile phone ownership	0.866	0.022	461	316	1.395	0.026	0.822	0.911
Have and use a bank account or mobile phone for financial transactions	0.619	0.046	461	316	2.036	0.075	0.526	0.711
Agree with at least one specified reason a husband is justified in wife beating	0.100	0.024	461	316	1.686	0.237	0.052	0.147

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.15 Sampling errors: Oti sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.047	0.009	4,470	1,937	1.520	0.196	0.029	0.065
Births registered with civil authority	0.605	0.042	634	281	1.850	0.069	0.521	0.688
Ownership of at least one ITN	0.851	0.015	1,048	444	1.355	0.018	0.822	0.881
Ownership of at least one ITN for every two persons	0.601	0.021	1,041	441	1.393	0.035	0.559	0.643
At least basic drinking water service	0.578	0.068	4,470	1,937	3.655	0.117	0.442	0.713
Water available when needed	0.688	0.045	4,470	1,937	2.510	0.065	0.599	0.778
At least basic sanitation service	0.139	0.021	4,470	1,937	1.647	0.153	0.097	0.182
Using open defecation	0.506	0.061	4,470	1,937	3.277	0.120	0.384	0.627
Using a handwashing facility with soap and water	0.264	0.042	4,464	1,935	2.611	0.160	0.180	0.349
WOMEN								
No education	0.282	0.034	921	403	2.273	0.120	0.214	0.349
Secondary education or higher	0.489	0.038	921	403	2.319	0.078	0.412	0.565
Literacy	0.408	0.030	921	403	1.871	0.074	0.347	0.468
Use of the internet in last 12 months	0.178	0.020	921	403	1.563	0.111	0.138	0.217
Current tobacco use	0.001	0.001	921	403	1.010	1.006	0.000	0.003
Total fertility rate (3 years)	5.197	0.347	2,548	1,122	1.412	0.067	4.502	5.891
Currently pregnant	0.083	0.011	921	403	1.216	0.133	0.061	0.106
Mean number of children ever born to women age 40–49	5.703	0.244	180	81	1.347	0.043	5.216	6.190
Median birth interval	39.512	1.845	473	220	1.457	0.047	35.822	43.202
Ideal number of children	5.157	0.155	888	386	2.276	0.030	4.847	5.468
Total wanted fertility rate (3 years)	4.634	0.219	2,548	1,122	1.024	0.047	4.196	5.072
Currently using any contraceptive method	0.320	0.029	547	248	1.448	0.090	0.262	0.378
Currently using any modern method	0.285	0.027	547	248	1.394	0.095	0.231	0.339
Currently using pill	0.068	0.012	547	248	1.068	0.169	0.045	0.091
Currently using injectables	0.073	0.015	547	248	1.338	0.204	0.043	0.103
Currently using implants	0.070	0.015	547	248	1.392	0.218	0.039	0.100
Currently using male condoms	0.008	0.004	547	248	0.991	0.467	0.001	0.016
Currently using any traditional method	0.035	0.009	547	248	1.111	0.249	0.018	0.053
Unmet need for spacing	0.186	0.021	547	248	1.256	0.112	0.144	0.228
Unmet need for limiting	0.071	0.013	547	248	1.212	0.188	0.044	0.098
Unmet need total	0.257	0.022	547	248	1.160	0.084	0.214	0.301
Demand satisfied by modern methods	0.494	0.038	319	143	1.352	0.077	0.417	0.570
Demand satisfied by modern methods (all women)	0.496	0.031	438	192	1.309	0.063	0.433	0.558
Participation in decision making about family planning	0.818	0.023	547	248	1.367	0.028	0.773	0.863
Not exposed to any of the eight media sources	0.366	0.034	921	403	2.116	0.092	0.298	0.433
Neonatal mortality (last 0–9 years)	32.022	5.479	1,212	559	1.048	0.171	21.065	42.980
Postneonatal mortality (last 0–9 years)	12.324	3.267	1,208	557	0.978	0.265	5.789	18.858
Infant mortality (last 0–9 years)	44.346	5.991	1,212	559	0.989	0.135	32.364	56.328
Child mortality (last 0–9 years)	29.446	5.373	1,193	550	1.004	0.182	18.701	40.192
Under-5 mortality (last 0–9 years)	72.487	6.898	1,223	564	0.895	0.095	58.690	86.284
Perinatal mortality rate	39.187	7.858	640	293	0.994	0.201	23.472	54.903
Stillbirth rate	15.781	4.447	640	293	0.868	0.282	6.887	24.675
Early neonatal mortality rate	23.666	5.683	632	290	0.916	0.240	12.301	35.031
Received ANC from a skilled provider	0.974	0.010	269	123	1.073	0.011	0.954	0.995
4+ ANC visits	0.757	0.047	269	123	1.793	0.062	0.662	0.851
8+ ANC visits	0.249	0.038	269	123	1.445	0.153	0.173	0.326
Took any iron-containing supplements	0.954	0.013	269	123	1.011	0.014	0.928	0.980
Mothers protected against tetanus for last birth	0.713	0.030	269	123	1.092	0.042	0.652	0.773
Delivered in a health facility (live births)	0.671	0.044	281	128	1.546	0.066	0.583	0.759
Delivered by a skilled provider (live births)	0.703	0.042	281	128	1.520	0.060	0.618	0.787
Delivered by C-section (live births)	0.121	0.022	281	128	1.086	0.181	0.077	0.164
Women with postnatal check during first 2 days	0.768	0.038	269	123	1.482	0.050	0.691	0.844
Newborns with postnatal check during first 2 days	0.756	0.040	269	123	1.535	0.053	0.676	0.837
Any problem accessing health care	0.642	0.026	921	403	1.663	0.041	0.589	0.695
Ever had vaccination card	0.995	0.005	124	56	0.809	0.005	0.984	1.005
Received BCG vaccination	0.949	0.019	124	56	0.979	0.020	0.910	0.988
Received DPT-HepB-Hib vaccination (3 doses)	0.915	0.033	124	56	1.314	0.036	0.849	0.981
Received pneumococcal vaccination (3 doses)	0.884	0.035	124	56	1.220	0.040	0.813	0.954
Received measles and rubella 1 vaccination	0.874	0.034	124	56	1.129	0.039	0.807	0.942
Fully vaccinated according to national schedule (12–23 months)	0.533	0.066	124	56	1.431	0.124	0.401	0.665
Received measles and rubella 2 vaccination	0.820	0.036	99	48	0.957	0.043	0.749	0.891
Fully vaccinated according to national schedule (24–35 months)	0.492	0.063	99	48	1.288	0.127	0.366	0.617
Sought treatment for diarrhoea	0.691	0.059	90	40	1.121	0.085	0.574	0.808
Treated with ORS	0.400	0.045	90	40	0.851	0.114	0.309	0.490
Height-for-age (−3 SD)	0.033	0.012	300	134	1.148	0.348	0.010	0.056
Height-for-age (−2 SD)	0.203	0.033	300	134	1.437	0.161	0.137	0.268
Weight-for-height (−2 SD)	0.073	0.017	299	134	1.167	0.229	0.040	0.107
Weight-for-height (+2 SD)	0.003	0.003	299	134	0.945	0.998	0.000	0.009
Weight-for-age (−2 SD)	0.155	0.032	300	134	1.502	0.205	0.092	0.219

Continued...

Table B.15—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.717	0.057	80	36	1.125	0.080	0.602	0.831
Minimum dietary diversity (children 6–23 months)	0.402	0.055	178	82	1.478	0.136	0.293	0.512
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.606	0.041	263	119	1.429	0.068	0.523	0.689
Body mass index (BMI) <18.5	0.054	0.016	308	136	1.233	0.296	0.022	0.085
Body mass index (BMI) ≥25.0	0.321	0.032	308	136	1.198	0.099	0.257	0.385
Body mass index-for-age (−2 SD)	0.010	0.010	91	37	0.944	0.994	0.000	0.030
Body mass index-for-age (+1 SD)	0.117	0.035	91	37	1.032	0.299	0.047	0.187
Minimum dietary diversity (women 15–49)	0.408	0.036	921	403	2.221	0.088	0.336	0.481
Prevalence of any anaemia (women 15–49)	0.518	0.025	444	194	1.068	0.049	0.467	0.569
Child slept under an ITN last night	0.701	0.026	633	279	1.242	0.038	0.648	0.754
Pregnant women slept under an ITN last night	0.659	0.076	73	33	1.407	0.115	0.507	0.811
Received 3+ doses of SP/Fansidar	0.519	0.043	269	123	1.411	0.083	0.433	0.605
Child had fever in last 2 weeks	0.272	0.028	602	276	1.547	0.103	0.216	0.328
Child had blood taken from finger/heel	0.359	0.059	171	75	1.582	0.166	0.240	0.478
Child took ACT	0.730	0.059	93	40	1.212	0.081	0.611	0.848
Child has malaria (based on rapid test)	0.226	0.047	263	119	1.716	0.209	0.132	0.321
Child has malaria (based on microscopy test)	0.150	0.034	263	119	1.429	0.227	0.082	0.219
Discriminatory attitudes towards people with HIV	0.864	0.021	867	379	1.817	0.025	0.821	0.906
Condom use at last sex	0.058	0.013	202	84	0.811	0.231	0.031	0.084
Tested for HIV in the past 12 months and received the results of the last test	0.164	0.012	921	403	0.988	0.074	0.140	0.188
Mobile phone ownership	0.666	0.024	921	403	1.568	0.037	0.617	0.715
Have and use a bank account or mobile phone for financial transactions	0.552	0.026	921	403	1.594	0.047	0.499	0.604
Participate in decision making (all three decisions)	0.479	0.032	547	248	1.472	0.066	0.416	0.542
Agree with at least one specified reason a husband is justified in wife beating	0.241	0.025	921	403	1.770	0.104	0.191	0.291
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.505	0.036	547	248	1.659	0.070	0.434	0.576
Experienced physical violence since age 15 by any perpetrator	0.368	0.033	330	146	1.229	0.089	0.302	0.433
Experienced sexual violence by any perpetrator ever	0.189	0.028	330	146	1.280	0.146	0.134	0.244
Experienced sexual violence by any non-intimate partner	0.058	0.014	330	146	1.056	0.235	0.031	0.085
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.250	0.024	300	130	0.970	0.097	0.201	0.298
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.323	0.038	300	130	1.404	0.118	0.247	0.400
	MEN							
No education	0.187	0.031	411	187	1.597	0.165	0.125	0.248
Secondary education or higher	0.610	0.050	411	187	2.066	0.082	0.510	0.710
Literacy	0.575	0.048	411	187	1.974	0.084	0.478	0.672
Use of the internet in last 12 months	0.494	0.030	411	187	1.196	0.060	0.435	0.553
Current tobacco use	0.038	0.012	411	187	1.248	0.311	0.014	0.061
Want no more children	0.234	0.040	190	87	1.291	0.170	0.155	0.314
Discriminatory attitudes towards people with HIV	0.815	0.024	402	183	1.217	0.029	0.768	0.862
Condom use at last sex	0.164	0.042	151	65	1.371	0.253	0.081	0.247
Ever tested for HIV and received results of last test	0.058	0.011	411	187	0.971	0.193	0.036	0.080
Male circumcision	0.909	0.030	411	187	2.138	0.033	0.848	0.970
Mobile phone ownership	0.836	0.020	411	187	1.078	0.024	0.796	0.875
Have and use a bank account or mobile phone for financial transactions	0.733	0.019	411	187	0.869	0.026	0.696	0.771
Agree with at least one specified reason a husband is justified in wife beating	0.191	0.027	411	187	1.377	0.140	0.137	0.244

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.16 Sampling errors: Northern sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.082	0.018	5,830	5,493	2.288	0.216	0.047	0.118
Births registered with civil authority	0.769	0.041	1,017	957	2.379	0.053	0.688	0.851
Ownership of at least one ITN	0.676	0.029	1,137	1,064	2.078	0.043	0.618	0.734
Ownership of at least one ITN for every two persons	0.371	0.026	1,134	1,061	1.792	0.069	0.319	0.422
At least basic drinking water service	0.644	0.047	5,830	5,493	2.845	0.074	0.549	0.739
Water available when needed	0.679	0.038	5,830	5,493	2.330	0.055	0.604	0.755
At least basic sanitation service	0.129	0.021	5,830	5,493	1.937	0.163	0.087	0.171
Using open defecation	0.706	0.037	5,830	5,493	2.437	0.053	0.631	0.781
Using a handwashing facility with soap and water	0.198	0.029	5,771	5,450	2.086	0.144	0.141	0.256
WOMEN								
No education	0.534	0.031	1,169	1,149	2.096	0.057	0.473	0.595
Secondary education or higher	0.378	0.035	1,169	1,149	2.497	0.094	0.307	0.449
Literacy	0.341	0.035	1,169	1,149	2.488	0.101	0.272	0.410
Use of the internet in last 12 months	0.281	0.038	1,169	1,149	2.888	0.136	0.205	0.357
Current tobacco use	0.021	0.008	1,169	1,149	1.801	0.361	0.006	0.036
Total fertility rate (3 years)	5.556	0.323	3,341	3,276	1.370	0.058	4.910	6.201
Currently pregnant	0.096	0.011	1,169	1,149	1.282	0.115	0.074	0.118
Mean number of children ever born to women age 40–49	5.921	0.280	201	200	1.603	0.047	5.362	6.481
Median birth interval	38.073	0.995	764	750	1.611	0.026	36.083	40.063
Ideal number of children	6.246	0.140	1,158	1,138	1.841	0.022	5.966	6.526
Total wanted fertility rate (3 years)	5.056	0.273	3,341	3,276	1.330	0.054	4.510	5.602
Currently using any contraceptive method	0.246	0.026	893	870	1.768	0.104	0.195	0.297
Currently using any modern method	0.172	0.016	893	870	1.295	0.095	0.139	0.204
Currently using pill	0.034	0.006	893	870	0.971	0.173	0.022	0.046
Currently using injectables	0.067	0.011	893	870	1.315	0.165	0.045	0.089
Currently using implants	0.044	0.009	893	870	1.282	0.199	0.027	0.062
Currently using male condoms	0.013	0.003	893	870	0.811	0.239	0.007	0.019
Currently using any traditional method	0.074	0.019	893	870	2.177	0.258	0.036	0.112
Unmet need for spacing	0.160	0.015	893	870	1.225	0.094	0.130	0.190
Unmet need for limiting	0.063	0.011	893	870	1.348	0.174	0.041	0.085
Unmet need total	0.223	0.018	893	870	1.312	0.082	0.186	0.259
Demand satisfied by modern methods	0.366	0.026	415	408	1.113	0.072	0.314	0.419
Demand satisfied by modern methods (all women)	0.379	0.024	512	503	1.136	0.064	0.330	0.427
Participation in decision making about family planning	0.701	0.042	893	870	2.733	0.060	0.617	0.785
Not exposed to any of the eight media sources	0.399	0.042	1,169	1,149	2.948	0.106	0.314	0.484
Neonatal mortality (last 0–9 years)	15.389	3.288	1,863	1,819	1.062	0.214	8.814	21.965
Postneonatal mortality (last 0–9 years)	10.034	2.941	1,856	1,812	1.218	0.293	4.152	15.917
Infant mortality (last 0–9 years)	25.424	4.793	1,864	1,820	1.178	0.189	15.837	35.010
Child mortality (last 0–9 years)	26.817	5.495	1,825	1,781	1.378	0.205	15.828	37.806
Under-5 mortality (last 0–9 years)	51.559	7.905	1,877	1,832	1.375	0.153	35.749	67.369
Perinatal mortality rate	33.446	5.673	991	969	0.967	0.170	22.100	44.792
Stillbirth rate	22.039	5.083	991	969	1.101	0.231	11.874	32.204
Early neonatal mortality rate	11.664	3.370	970	948	0.977	0.289	4.924	18.403
Received ANC from a skilled provider	0.964	0.016	408	395	1.702	0.016	0.932	0.995
4+ ANC visits	0.808	0.045	408	395	2.319	0.056	0.717	0.899
8+ ANC visits	0.277	0.049	408	395	2.194	0.177	0.179	0.375
Took any iron-containing supplements	0.830	0.027	408	395	1.436	0.032	0.776	0.883
Mothers protected against tetanus for last birth	0.667	0.037	408	395	1.595	0.056	0.592	0.742
Delivered in a health facility (live births)	0.703	0.058	420	406	2.513	0.082	0.588	0.819
Delivered by a skilled provider (live births)	0.716	0.058	420	406	2.563	0.081	0.600	0.832
Delivered by C-section (live births)	0.103	0.018	420	406	1.153	0.173	0.067	0.138
Women with postnatal check during first 2 days	0.727	0.045	408	395	2.009	0.061	0.638	0.816
Newborns with postnatal check during first 2 days	0.730	0.046	408	395	2.083	0.063	0.638	0.822
Any problem accessing health care	0.654	0.042	1,169	1,149	2.989	0.064	0.571	0.738
Ever had vaccination card	0.916	0.029	208	200	1.503	0.032	0.858	0.975
Received BCG vaccination	0.861	0.030	208	200	1.211	0.035	0.801	0.921
Received DPT-HepB-Hib vaccination (3 doses)	0.773	0.044	208	200	1.482	0.057	0.685	0.860
Received pneumococcal vaccination (3 doses)	0.757	0.042	208	200	1.402	0.056	0.672	0.841
Received measles and rubella 1 vaccination	0.726	0.044	208	200	1.391	0.060	0.638	0.813
Fully vaccinated according to national schedule (12–23 months)	0.312	0.041	208	200	1.258	0.132	0.230	0.394
Received measles and rubella 2 vaccination	0.565	0.042	171	168	1.076	0.074	0.481	0.649
Fully vaccinated according to national schedule (24–35 months)	0.185	0.029	171	168	0.964	0.156	0.127	0.242
Sought treatment for diarrhoea	0.687	0.040	167	173	1.069	0.058	0.607	0.767
Treated with ORS	0.481	0.070	167	173	1.753	0.145	0.342	0.620
Height-for-age (−3 SD)	0.088	0.015	503	477	1.064	0.165	0.059	0.117
Height-for-age (−2 SD)	0.296	0.025	503	477	1.174	0.083	0.247	0.345
Weight-for-height (−2 SD)	0.078	0.011	507	480	0.929	0.147	0.055	0.101
Weight-for-height (+2 SD)	0.007	0.004	507	480	1.155	0.601	0.000	0.016
Weight-for-age (−2 SD)	0.199	0.022	503	477	1.151	0.109	0.155	0.242

Continued...

Table B.16—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.732	0.051	88	84	1.073	0.070	0.630	0.834
Minimum dietary diversity (children 6–23 months)	0.402	0.040	310	302	1.422	0.099	0.322	0.481
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.694	0.024	452	430	1.062	0.035	0.645	0.742
Body mass index (BMI) <18.5	0.088	0.019	435	428	1.372	0.212	0.051	0.126
Body mass index (BMI) ≥25.0	0.271	0.029	435	428	1.356	0.107	0.213	0.329
Body mass index-for-age (−2 SD)	0.055	0.027	68	67	0.957	0.486	0.001	0.108
Body mass index-for-age (+1 SD)	0.043	0.023	68	67	0.934	0.538	0.000	0.089
Minimum dietary diversity (women 15–49)	0.461	0.032	1,169	1,149	2.194	0.069	0.397	0.525
Prevalence of any anaemia (women 15–49)	0.484	0.020	582	568	0.973	0.042	0.443	0.524
Child slept under an ITN last night	0.439	0.048	1,016	955	2.399	0.109	0.343	0.535
Pregnant women slept under an ITN last night	0.533	0.060	118	106	1.235	0.112	0.413	0.653
Received 3+ doses of SP/Fansidar	0.444	0.043	408	395	1.742	0.097	0.358	0.530
Child had fever in last 2 weeks	0.216	0.031	944	923	2.240	0.145	0.153	0.278
Child had blood taken from finger/heel	0.330	0.045	191	199	1.350	0.135	0.241	0.420
Child took ACT	0.775	0.074	68	76	1.479	0.095	0.628	0.922
Child has malaria (based on rapid test)	0.188	0.023	452	430	1.108	0.123	0.142	0.233
Child has malaria (based on microscopy test)	0.106	0.016	452	430	1.016	0.155	0.073	0.139
Discriminatory attitudes towards people with HIV	0.857	0.021	803	803	1.727	0.025	0.815	0.900
Condom use at last sex	0.156	0.035	124	124	1.082	0.227	0.085	0.226
Tested for HIV in the past 12 months and received the results of the last test	0.079	0.010	1,169	1,149	1.279	0.128	0.058	0.099
Mobile phone ownership	0.653	0.022	1,169	1,149	1.582	0.034	0.609	0.697
Have and use a bank account or mobile phone for financial transactions	0.488	0.032	1,169	1,149	2.188	0.066	0.424	0.552
Participate in decision making (all three decisions)	0.497	0.049	893	870	2.893	0.098	0.399	0.594
Agree with at least one specified reason a husband is justified in wife beating	0.470	0.023	1,169	1,149	1.596	0.050	0.423	0.516
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.401	0.039	893	870	2.369	0.097	0.323	0.479
Experienced physical violence since age 15 by any perpetrator	0.339	0.038	407	420	1.634	0.113	0.262	0.416
Experienced sexual violence by any perpetrator ever	0.075	0.014	407	420	1.079	0.188	0.047	0.103
Experienced sexual violence by any non-intimate partner	0.026	0.011	407	420	1.355	0.408	0.005	0.048
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.239	0.024	371	367	1.061	0.098	0.192	0.286
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.367	0.033	371	367	1.307	0.089	0.302	0.433
	MEN							
No education	0.342	0.031	491	484	1.450	0.091	0.279	0.404
Secondary education or higher	0.518	0.039	491	484	1.734	0.076	0.439	0.596
Literacy	0.524	0.032	491	484	1.410	0.061	0.461	0.588
Use of the internet in last 12 months	0.396	0.036	491	484	1.621	0.091	0.324	0.468
Current tobacco use	0.079	0.012	491	484	1.002	0.155	0.054	0.103
Want no more children	0.055	0.014	286	276	1.064	0.261	0.026	0.084
Discriminatory attitudes towards people with HIV	0.831	0.027	442	437	1.528	0.033	0.776	0.886
Condom use at last sex	0.228	0.048	90	93	1.076	0.210	0.132	0.324
Ever tested for HIV and received results of last test	0.031	0.010	491	484	1.235	0.310	0.012	0.051
Male circumcision	0.806	0.046	491	484	2.546	0.057	0.715	0.897
Mobile phone ownership	0.836	0.023	491	484	1.374	0.027	0.790	0.882
Have and use a bank account or mobile phone for financial transactions	0.685	0.033	491	484	1.577	0.048	0.619	0.751
Agree with at least one specified reason a husband is justified in wife beating	0.374	0.033	491	484	1.504	0.088	0.308	0.440

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.17 Sampling errors: Savannah sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.025	0.004	5,153	1,586	1.150	0.161	0.017	0.033
Births registered with civil authority	0.651	0.034	838	255	1.683	0.053	0.582	0.720
Ownership of at least one ITN	0.791	0.020	1,047	316	1.604	0.026	0.750	0.831
Ownership of at least one ITN for every two persons	0.510	0.021	1,045	315	1.338	0.041	0.469	0.552
At least basic drinking water service	0.542	0.082	5,153	1,586	4.395	0.151	0.378	0.705
Water available when needed	0.774	0.028	5,153	1,586	1.774	0.036	0.719	0.830
At least basic sanitation service	0.110	0.024	5,153	1,586	2.066	0.216	0.063	0.158
Using open defecation	0.736	0.047	5,153	1,586	2.992	0.064	0.642	0.831
Using a handwashing facility with soap and water	0.395	0.024	5,113	1,574	1.355	0.061	0.347	0.444
WOMEN								
No education	0.469	0.048	999	319	3.028	0.102	0.373	0.565
Secondary education or higher	0.318	0.040	999	319	2.675	0.124	0.239	0.398
Literacy	0.309	0.037	999	319	2.520	0.120	0.235	0.383
Use of the internet in last 12 months	0.153	0.021	999	319	1.835	0.137	0.111	0.195
Current tobacco use	0.004	0.003	999	319	1.287	0.628	0.000	0.009
Total fertility rate (3 years)	5.829	0.357	2,784	881	1.571	0.061	5.115	6.543
Currently pregnant	0.099	0.015	999	319	1.541	0.147	0.070	0.129
Mean number of children ever born to women age 40–49	5.865	0.211	183	58	1.284	0.036	5.443	6.286
Median birth interval	34.484	1.199	623	198	2.074	0.035	32.086	36.882
Ideal number of children	6.340	0.193	990	316	2.358	0.030	5.954	6.726
Total wanted fertility rate (3 years)	5.403	0.307	2,784	881	1.527	0.057	4.789	6.017
Currently using any contraceptive method	0.234	0.028	672	218	1.723	0.120	0.178	0.291
Currently using any modern method	0.191	0.030	672	218	1.944	0.155	0.132	0.251
Currently using pill	0.038	0.011	672	218	1.453	0.284	0.016	0.059
Currently using injectables	0.057	0.012	672	218	1.372	0.216	0.032	0.082
Currently using implants	0.079	0.014	672	218	1.302	0.172	0.052	0.106
Currently using male condoms	0.004	0.003	672	218	1.085	0.669	0.000	0.009
Currently using any traditional method	0.043	0.011	672	218	1.437	0.262	0.020	0.065
Unmet need for spacing	0.170	0.023	672	218	1.559	0.133	0.125	0.216
Unmet need for limiting	0.044	0.011	672	218	1.409	0.254	0.022	0.066
Unmet need total	0.214	0.027	672	218	1.731	0.128	0.159	0.269
Demand satisfied by modern methods	0.427	0.055	324	98	1.928	0.129	0.317	0.537
Demand satisfied by modern methods (all women)	0.437	0.047	410	121	1.857	0.108	0.342	0.532
Participation in decision making about family planning	0.756	0.048	672	218	2.863	0.063	0.660	0.851
Not exposed to any of the eight media sources	0.496	0.032	999	319	2.000	0.064	0.432	0.559
Neonatal mortality (last 0–9 years)	32.300	4.556	1,480	484	0.942	0.141	23.188	41.413
Postneonatal mortality (last 0–9 years)	13.780	2.917	1,480	483	0.873	0.212	7.946	19.614
Infant mortality (last 0–9 years)	46.080	5.522	1,481	485	0.983	0.120	35.037	57.123
Child mortality (last 0–9 years)	17.546	4.997	1,435	470	1.254	0.285	7.552	27.540
Under-5 mortality (last 0–9 years)	62.818	8.829	1,487	488	1.291	0.141	45.160	80.476
Perinatal mortality rate	36.931	5.793	812	262	0.771	0.157	25.345	48.517
Stillbirth rate	13.814	4.849	812	262	1.120	0.351	4.116	23.512
Early neonatal mortality rate	23.441	5.833	797	258	0.923	0.249	11.775	35.107
Received ANC from a skilled provider	0.951	0.018	324	105	1.522	0.019	0.915	0.988
4+ ANC visits	0.795	0.036	324	105	1.581	0.045	0.724	0.866
8+ ANC visits	0.194	0.028	324	105	1.273	0.144	0.138	0.250
Took any iron-containing supplements	0.812	0.031	324	105	1.432	0.038	0.750	0.875
Mothers protected against tetanus for last birth	0.431	0.032	324	105	1.171	0.075	0.367	0.496
Delivered in a health facility (live births)	0.706	0.041	340	111	1.645	0.059	0.623	0.789
Delivered by a skilled provider (live births)	0.720	0.040	340	111	1.615	0.056	0.639	0.800
Delivered by C-section (live births)	0.070	0.016	340	111	1.125	0.231	0.038	0.102
Women with postnatal check during first 2 days	0.815	0.039	324	105	1.803	0.048	0.737	0.893
Newborns with postnatal check during first 2 days	0.815	0.041	324	105	1.899	0.051	0.733	0.897
Any problem accessing health care	0.724	0.040	999	319	2.783	0.055	0.645	0.803
Ever had vaccination card	0.988	0.012	155	50	1.366	0.012	0.965	1.012
Received BCG vaccination	0.949	0.025	155	50	1.398	0.026	0.900	0.998
Received DPT-HepB-Hib vaccination (3 doses)	0.834	0.053	155	50	1.771	0.063	0.728	0.940
Received pneumococcal vaccination (3 doses)	0.829	0.079	155	50	2.590	0.095	0.671	0.986
Received measles and rubella 1 vaccination	0.864	0.037	155	50	1.357	0.043	0.790	0.939
Fully vaccinated according to national schedule (12–23 months)	0.418	0.059	155	50	1.461	0.140	0.301	0.536
Received measles and rubella 2 vaccination	0.662	0.058	163	52	1.550	0.088	0.546	0.779
Fully vaccinated according to national schedule (24–35 months)	0.331	0.044	163	52	1.171	0.134	0.242	0.420
Sought treatment for diarrhoea	0.594	0.046	162	54	1.193	0.078	0.501	0.686
Treated with ORS	0.327	0.061	162	54	1.637	0.188	0.204	0.450
Height-for-age (−3 SD)	0.044	0.012	423	128	1.130	0.276	0.020	0.068
Height-for-age (−2 SD)	0.210	0.019	423	128	0.945	0.088	0.173	0.247
Weight-for-height (−2 SD)	0.044	0.009	425	128	0.925	0.213	0.025	0.062
Weight-for-height (+2 SD)	0.021	0.006	425	128	0.944	0.311	0.008	0.034
Weight-for-age (−2 SD)	0.140	0.037	424	128	2.190	0.266	0.065	0.214

Continued...

Table B.17—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.781	0.055	96	32	1.296	0.071	0.671	0.891
Minimum dietary diversity (children 6–23 months)	0.175	0.029	221	72	1.115	0.163	0.118	0.232
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.628	0.037	374	113	1.408	0.059	0.553	0.702
Body mass index (BMI) <18.5	0.090	0.027	353	113	1.778	0.302	0.036	0.145
Body mass index (BMI) ≥25.0	0.299	0.028	353	113	1.154	0.094	0.243	0.355
Body mass index-for-age (−2 SD)	0.000	0.000	108	34	na	na	0.000	0.000
Body mass index-for-age (+1 SD)	0.068	0.023	108	34	0.936	0.334	0.023	0.114
Minimum dietary diversity (women 15–49)	0.253	0.024	999	319	1.759	0.096	0.205	0.302
Prevalence of any anaemia (women 15–49)	0.432	0.025	524	169	1.131	0.057	0.383	0.481
Child slept under an ITN last night	0.635	0.030	841	257	1.488	0.047	0.575	0.696
Pregnant women slept under an ITN last night	0.694	0.042	99	30	0.907	0.061	0.610	0.779
Received 3+ doses of SP/Fansidar	0.517	0.058	324	105	2.058	0.111	0.402	0.632
Child had fever in last 2 weeks	0.172	0.026	763	247	1.792	0.151	0.120	0.225
Child had blood taken from finger/heel	0.346	0.043	126	43	1.025	0.125	0.259	0.432
Child took ACT	0.821	0.048	67	22	1.064	0.059	0.725	0.918
Child has malaria (based on rapid test)	0.266	0.039	375	113	1.686	0.147	0.187	0.344
Child has malaria (based on microscopy test)	0.121	0.035	375	113	1.887	0.288	0.051	0.190
Discriminatory attitudes towards people with HIV	0.868	0.019	852	265	1.661	0.022	0.829	0.906
Condom use at last sex	0.100	0.037	142	41	1.477	0.375	0.025	0.175
Tested for HIV in the past 12 months and received the results of the last test	0.060	0.010	999	319	1.376	0.172	0.039	0.081
Mobile phone ownership	0.646	0.034	999	319	2.214	0.052	0.579	0.714
Have and use a bank account or mobile phone for financial transactions	0.424	0.035	999	319	2.229	0.082	0.354	0.494
Participate in decision making (all three decisions)	0.381	0.036	672	218	1.942	0.096	0.308	0.453
Agree with at least one specified reason a husband is justified in wife beating	0.578	0.045	999	319	2.864	0.078	0.488	0.668
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.391	0.038	672	218	2.017	0.097	0.315	0.467
Experienced physical violence since age 15 by any perpetrator	0.429	0.041	371	123	1.605	0.096	0.346	0.512
Experienced sexual violence by any perpetrator ever	0.196	0.026	371	123	1.263	0.133	0.143	0.248
Experienced sexual violence by any non-intimate partner	0.065	0.017	371	123	1.299	0.257	0.032	0.098
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.341	0.036	334	104	1.386	0.106	0.269	0.413
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.469	0.043	334	104	1.562	0.091	0.383	0.554
	MEN							
No education	0.381	0.056	490	155	2.539	0.147	0.269	0.493
Secondary education or higher	0.468	0.055	490	155	2.432	0.118	0.358	0.578
Literacy	0.510	0.050	490	155	2.200	0.098	0.410	0.609
Use of the internet in last 12 months	0.381	0.027	490	155	1.222	0.071	0.327	0.434
Current tobacco use	0.072	0.023	490	155	1.939	0.316	0.026	0.117
Want no more children	0.072	0.017	261	86	1.032	0.230	0.039	0.105
Discriminatory attitudes towards people with HIV	0.779	0.020	415	125	0.994	0.026	0.738	0.819
Condom use at last sex	0.314	0.056	107	31	1.244	0.179	0.202	0.427
Ever tested for HIV and received results of last test	0.031	0.008	490	155	1.064	0.271	0.014	0.047
Male circumcision	0.927	0.016	490	155	1.385	0.018	0.895	0.960
Mobile phone ownership	0.791	0.035	490	155	1.902	0.044	0.721	0.861
Have and use a bank account or mobile phone for financial transactions	0.592	0.033	490	155	1.499	0.056	0.525	0.659
Agree with at least one specified reason a husband is justified in wife beating	0.432	0.047	490	155	2.078	0.108	0.338	0.525

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).
na = not applicable

Table B.18 Sampling errors: North East sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.023	0.006	5,558	1,552	1.356	0.262	0.011	0.035
Births registered with civil authority	0.741	0.045	1,041	296	2.581	0.060	0.651	0.830
Ownership of at least one ITN	0.626	0.024	1,034	287	1.618	0.039	0.577	0.675
Ownership of at least one ITN for every two persons	0.262	0.023	1,034	287	1.644	0.086	0.217	0.307
At least basic drinking water service	0.434	0.044	5,558	1,552	2.500	0.102	0.345	0.522
Water available when needed	0.738	0.032	5,558	1,552	2.043	0.044	0.674	0.802
At least basic sanitation service	0.114	0.024	5,558	1,552	2.031	0.209	0.066	0.162
Using open defecation	0.642	0.049	5,558	1,552	2.813	0.076	0.545	0.739
Using a handwashing facility with soap and water	0.032	0.007	5,349	1,501	1.186	0.220	0.018	0.046
WOMEN								
No education	0.551	0.038	963	290	2.382	0.070	0.474	0.627
Secondary education or higher	0.332	0.031	963	290	2.056	0.094	0.270	0.395
Literacy	0.272	0.027	963	290	1.892	0.100	0.218	0.327
Use of the internet in last 12 months	0.117	0.018	963	290	1.778	0.158	0.080	0.153
Current tobacco use	0.004	0.002	963	290	0.928	0.463	0.000	0.008
Total fertility rate (3 years)	6.639	0.344	2,697	812	1.478	0.052	5.950	7.328
Currently pregnant	0.106	0.012	963	290	1.212	0.113	0.082	0.130
Mean number of children ever born to women age 40–49	6.291	0.237	145	45	1.393	0.038	5.816	6.765
Median birth interval	36.845	1.053	669	211	1.607	0.029	34.739	38.950
Ideal number of children	6.512	0.135	957	288	1.853	0.021	6.243	6.781
Total wanted fertility rate (3 years)	6.509	0.341	2,697	812	1.512	0.052	5.827	7.191
Currently using any contraceptive method	0.171	0.023	744	229	1.667	0.135	0.125	0.217
Currently using any modern method	0.149	0.020	744	229	1.516	0.133	0.110	0.189
Currently using pill	0.028	0.006	744	229	0.962	0.209	0.016	0.039
Currently using injectables	0.056	0.010	744	229	1.232	0.185	0.036	0.077
Currently using implants	0.052	0.011	744	229	1.387	0.218	0.029	0.074
Currently using male condoms	0.003	0.002	744	229	0.924	0.598	0.000	0.007
Currently using any traditional method	0.022	0.006	744	229	1.109	0.274	0.010	0.033
Unmet need for spacing	0.175	0.016	744	229	1.173	0.093	0.143	0.208
Unmet need for limiting	0.050	0.007	744	229	0.919	0.147	0.035	0.065
Unmet need total	0.225	0.019	744	229	1.207	0.082	0.188	0.262
Demand satisfied by modern methods	0.377	0.035	311	91	1.243	0.093	0.307	0.447
Demand satisfied by modern methods (all women)	0.407	0.031	368	105	1.168	0.075	0.346	0.469
Participation in decision making about family planning	0.660	0.052	744	229	2.983	0.079	0.556	0.764
Not exposed to any of the eight media sources	0.520	0.049	963	290	3.041	0.095	0.422	0.619
Neonatal mortality (last 0–9 years)	10.570	2.555	1,560	488	0.968	0.242	5.459	15.680
Postneonatal mortality (last 0–9 years)	9.627	2.289	1,549	485	0.938	0.238	5.049	14.206
Infant mortality (last 0–9 years)	20.197	2.853	1,563	490	0.810	0.141	14.491	25.903
Child mortality (last 0–9 years)	20.738	4.227	1,507	474	1.023	0.204	12.284	29.192
Under-5 mortality (last 0–9 years)	40.516	5.027	1,574	493	0.947	0.124	30.462	50.570
Perinatal mortality rate	19.827	6.010	879	276	1.220	0.303	7.807	31.846
Stillbirth rate	12.289	4.514	879	276	1.173	0.367	3.261	21.317
Early neonatal mortality rate	7.632	3.069	868	272	0.965	0.402	1.493	13.771
Received ANC from a skilled provider	0.955	0.016	365	112	1.422	0.016	0.924	0.986
4+ ANC visits	0.835	0.031	365	112	1.596	0.037	0.773	0.898
8+ ANC visits	0.287	0.039	365	112	1.650	0.137	0.208	0.365
Took any iron-containing supplements	0.892	0.018	365	112	1.115	0.020	0.855	0.928
Mothers protected against tetanus for last birth	0.457	0.039	365	112	1.488	0.085	0.379	0.535
Delivered in a health facility (live births)	0.844	0.026	379	116	1.398	0.031	0.791	0.897
Delivered by a skilled provider (live births)	0.852	0.026	379	116	1.393	0.030	0.800	0.903
Delivered by C-section (live births)	0.088	0.015	379	116	0.973	0.173	0.057	0.118
Women with postnatal check during first 2 days	0.832	0.033	365	112	1.674	0.039	0.766	0.898
Newborns with postnatal check during first 2 days	0.841	0.028	365	112	1.469	0.034	0.785	0.897
Any problem accessing health care	0.657	0.040	963	290	2.618	0.061	0.576	0.737
Ever had vaccination card	0.978	0.021	179	53	1.917	0.022	0.936	1.021
Received BCG vaccination	0.963	0.022	179	53	1.539	0.023	0.919	1.007
Received DPT-HepB-Hib vaccination (3 doses)	0.899	0.028	179	53	1.215	0.031	0.843	0.954
Received pneumococcal vaccination (3 doses)	0.892	0.028	179	53	1.190	0.031	0.836	0.948
Received measles and rubella 1 vaccination	0.872	0.039	179	53	1.521	0.044	0.795	0.949
Fully vaccinated according to national schedule (12–23 months)	0.523	0.044	179	53	1.137	0.084	0.435	0.611
Received measles and rubella 2 vaccination	0.825	0.035	176	56	1.220	0.042	0.756	0.894
Fully vaccinated according to national schedule (24–35 months)	0.393	0.049	176	56	1.291	0.124	0.296	0.490
Sought treatment for diarrhoea	0.591	0.047	155	48	1.090	0.079	0.497	0.684
Treated with ORS	0.324	0.042	155	48	1.031	0.128	0.241	0.407
Height-for-age (−3 SD)	0.088	0.018	523	148	1.344	0.203	0.052	0.124
Height-for-age (−2 SD)	0.293	0.031	523	148	1.470	0.105	0.232	0.355
Weight-for-height (−2 SD)	0.068	0.010	523	148	0.993	0.153	0.047	0.089
Weight-for-height (+2 SD)	0.008	0.004	523	148	0.952	0.455	0.001	0.015
Weight-for-age (−2 SD)	0.204	0.024	525	148	1.307	0.116	0.157	0.252

Continued...

Table B.18—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.655	0.051	104	35	1.088	0.078	0.552	0.757
Minimum dietary diversity (children 6–23 months)	0.514	0.039	254	76	1.226	0.075	0.436	0.591
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.649	0.035	462	130	1.477	0.053	0.580	0.719
Body mass index (BMI) <18.5	0.092	0.017	308	91	1.004	0.180	0.059	0.125
Body mass index (BMI) ≥25.0	0.183	0.025	308	91	1.112	0.134	0.134	0.232
Body mass index-for-age (−2 SD)	0.016	0.011	95	26	0.858	0.690	0.000	0.038
Body mass index-for-age (+1 SD)	0.079	0.027	95	26	0.986	0.346	0.024	0.134
Minimum dietary diversity (women 15–49)	0.647	0.030	963	290	1.913	0.046	0.588	0.706
Prevalence of any anaemia (women 15–49)	0.450	0.024	470	139	1.047	0.053	0.402	0.498
Child slept under an ITN last night	0.507	0.034	1,041	297	1.666	0.068	0.439	0.576
Pregnant women slept under an ITN last night	0.563	0.059	97	28	1.179	0.105	0.444	0.681
Received 3+ doses of SP/Fansidar	0.599	0.036	365	112	1.406	0.060	0.527	0.672
Child had fever in last 2 weeks	0.221	0.030	852	267	1.938	0.134	0.162	0.280
Child had blood taken from finger/heel	0.632	0.028	192	59	0.748	0.045	0.576	0.689
Child took ACT	0.675	0.063	122	39	1.392	0.094	0.548	0.802
Child has malaria (based on rapid test)	0.269	0.027	462	130	1.159	0.100	0.215	0.323
Child has malaria (based on microscopy test)	0.103	0.014	462	130	0.968	0.139	0.075	0.132
Discriminatory attitudes towards people with HIV	0.859	0.017	813	241	1.358	0.019	0.826	0.892
Condom use at last sex	0.260	0.055	99	25	1.227	0.210	0.151	0.369
Tested for HIV in the past 12 months and received the results of the last test	0.122	0.013	963	290	1.248	0.108	0.095	0.148
Mobile phone ownership	0.634	0.022	963	290	1.431	0.035	0.590	0.679
Have and use a bank account or mobile phone for financial transactions	0.438	0.038	963	290	2.390	0.087	0.362	0.515
Participate in decision making (all three decisions)	0.425	0.035	744	229	1.942	0.083	0.354	0.496
Agree with at least one specified reason a husband is justified in wife beating	0.344	0.037	963	290	2.429	0.108	0.269	0.418
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.285	0.036	744	229	2.188	0.127	0.213	0.358
Experienced physical violence since age 15 by any perpetrator	0.237	0.044	343	100	1.919	0.187	0.148	0.325
Experienced sexual violence by any perpetrator ever	0.052	0.014	343	100	1.184	0.275	0.023	0.080
Experienced sexual violence by any non-intimate partner	0.009	0.004	343	100	0.807	0.447	0.001	0.018
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.165	0.039	316	90	1.859	0.237	0.087	0.242
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.256	0.043	316	90	1.746	0.168	0.170	0.342
	MEN							
No education	0.338	0.035	386	119	1.463	0.104	0.267	0.409
Secondary education or higher	0.506	0.036	386	119	1.392	0.070	0.435	0.577
Literacy	0.506	0.041	386	119	1.592	0.080	0.425	0.587
Use of the internet in last 12 months	0.371	0.031	386	119	1.251	0.083	0.309	0.432
Current tobacco use	0.044	0.013	386	119	1.259	0.301	0.017	0.070
Want no more children	0.118	0.026	240	74	1.236	0.219	0.066	0.169
Discriminatory attitudes towards people with HIV	0.852	0.025	360	111	1.355	0.030	0.801	0.903
Condom use at last sex	0.388	0.079	76	23	1.393	0.203	0.230	0.546
Ever tested for HIV and received results of last test	0.050	0.014	386	119	1.225	0.272	0.023	0.077
Male circumcision	0.955	0.024	386	119	2.215	0.025	0.908	1.002
Mobile phone ownership	0.860	0.016	386	119	0.910	0.019	0.828	0.893
Have and use a bank account or mobile phone for financial transactions	0.676	0.032	386	119	1.332	0.047	0.612	0.740
Agree with at least one specified reason a husband is justified in wife beating	0.214	0.034	386	119	1.628	0.159	0.146	0.282

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.19 Sampling errors: Upper East sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.086	0.013	4,660	2,904	1.364	0.148	0.060	0.111
Births registered with civil authority	0.834	0.027	672	420	1.680	0.033	0.780	0.889
Ownership of at least one ITN	0.795	0.022	1,070	654	1.789	0.028	0.750	0.839
Ownership of at least one ITN for every two persons	0.542	0.025	1,069	653	1.607	0.045	0.493	0.591
At least basic drinking water service	0.851	0.030	4,660	2,904	2.335	0.035	0.791	0.910
Water available when needed	0.860	0.026	4,660	2,904	2.062	0.030	0.808	0.912
At least basic sanitation service	0.139	0.023	4,660	2,904	1.944	0.164	0.093	0.184
Using open defecation	0.713	0.040	4,660	2,904	2.590	0.057	0.632	0.794
Using a handwashing facility with soap and water	0.324	0.038	4,537	2,836	2.353	0.118	0.248	0.401
WOMEN								
No education	0.259	0.024	987	640	1.708	0.092	0.211	0.306
Secondary education or higher	0.568	0.030	987	640	1.923	0.054	0.507	0.628
Literacy	0.552	0.028	987	640	1.765	0.051	0.496	0.608
Use of the internet in last 12 months	0.301	0.025	987	640	1.677	0.082	0.252	0.350
Current tobacco use	0.013	0.004	987	640	1.232	0.346	0.004	0.021
Total fertility rate (3 years)	4.598	0.262	2,781	1,804	1.357	0.057	4.074	5.121
Currently pregnant	0.067	0.009	987	640	1.147	0.136	0.049	0.086
Mean number of children ever born to women age 40–49	4.962	0.230	176	115	1.452	0.046	4.502	5.421
Median birth interval	42.975	0.833	433	280	1.124	0.019	41.309	44.642
Ideal number of children	5.175	0.169	962	624	2.482	0.033	4.837	5.513
Total wanted fertility rate (3 years)	4.500	0.262	2,781	1,804	1.362	0.058	3.976	5.024
Currently using any contraceptive method	0.355	0.026	642	426	1.391	0.074	0.302	0.407
Currently using any modern method	0.309	0.024	642	426	1.335	0.079	0.260	0.358
Currently using pill	0.023	0.006	642	426	1.099	0.284	0.010	0.036
Currently using injectables	0.090	0.013	642	426	1.122	0.141	0.065	0.116
Currently using implants	0.166	0.020	642	426	1.327	0.118	0.127	0.205
Currently using male condoms	0.010	0.004	642	426	0.940	0.362	0.003	0.018
Currently using any traditional method	0.046	0.011	642	426	1.380	0.249	0.023	0.069
Unmet need for spacing	0.133	0.017	642	426	1.234	0.125	0.100	0.166
Unmet need for limiting	0.046	0.010	642	426	1.177	0.211	0.027	0.066
Unmet need total	0.179	0.015	642	426	1.009	0.085	0.148	0.210
Demand satisfied by modern methods	0.579	0.025	343	227	0.955	0.044	0.528	0.630
Demand satisfied by modern methods (all women)	0.558	0.022	439	283	0.911	0.039	0.515	0.602
Participation in decision making about family planning	0.900	0.020	642	426	1.725	0.023	0.859	0.941
Not exposed to any of the eight media sources	0.350	0.039	987	640	2.543	0.111	0.272	0.427
Neonatal mortality (last 0–9 years)	27.198	6.410	1,115	735	1.050	0.236	14.377	40.018
Postneonatal mortality (last 0–9 years)	9.161	3.239	1,104	726	1.139	0.354	2.683	15.639
Infant mortality (last 0–9 years)	36.359	6.683	1,115	735	0.978	0.184	22.993	49.724
Child mortality (last 0–9 years)	13.298	4.134	1,035	681	1.111	0.311	5.029	21.567
Under-5 mortality (last 0–9 years)	49.173	9.520	1,117	736	1.194	0.194	30.134	68.212
Perinatal mortality rate	19.960	5.639	643	420	1.039	0.283	8.681	31.238
Stillbirth rate	8.212	3.383	643	420	0.963	0.412	1.446	14.978
Early neonatal mortality rate	11.843	4.656	638	416	1.094	0.393	2.531	21.154
Received ANC from a skilled provider	0.990	0.007	279	191	1.210	0.007	0.975	1.004
4+ ANC visits	0.948	0.015	279	191	1.151	0.016	0.917	0.978
8+ ANC visits	0.420	0.038	279	191	1.288	0.091	0.343	0.496
Took any iron-containing supplements	0.881	0.035	279	191	1.769	0.039	0.811	0.950
Mothers protected against tetanus for last birth	0.751	0.057	279	191	2.173	0.076	0.638	0.865
Delivered in a health facility (live births)	0.974	0.011	287	196	1.163	0.011	0.953	0.996
Delivered by a skilled provider (live births)	0.980	0.009	287	196	1.052	0.009	0.963	0.997
Delivered by C-section (live births)	0.207	0.021	287	196	0.871	0.104	0.164	0.250
Women with postnatal check during first 2 days	0.967	0.012	279	191	1.108	0.012	0.944	0.991
Newborns with postnatal check during first 2 days	0.955	0.014	279	191	1.155	0.015	0.926	0.984
Any problem accessing health care	0.505	0.053	987	640	3.298	0.105	0.399	0.610
Ever had vaccination card	0.982	0.013	126	87	1.106	0.013	0.956	1.008
Received BCG vaccination	0.936	0.020	126	87	0.951	0.022	0.896	0.977
Received DPT-HepB-Hib vaccination (3 doses)	0.846	0.029	126	87	0.933	0.035	0.788	0.905
Received pneumococcal vaccination (3 doses)	0.834	0.030	126	87	0.915	0.035	0.775	0.893
Received measles and rubella 1 vaccination	0.922	0.023	126	87	0.966	0.024	0.877	0.967
Fully vaccinated according to national schedule (12–23 months)	0.554	0.058	126	87	1.332	0.104	0.439	0.670
Received measles and rubella 2 vaccination	0.748	0.047	111	74	1.111	0.063	0.654	0.842
Fully vaccinated according to national schedule (24–35 months)	0.398	0.062	111	74	1.313	0.155	0.275	0.522
Sought treatment for diarrhoea	0.561	0.052	63	37	0.732	0.092	0.458	0.664
Treated with ORS	0.566	0.061	63	37	0.852	0.109	0.443	0.689
Height-for-age (−3 SD)	0.049	0.017	339	212	1.264	0.347	0.015	0.083
Height-for-age (−2 SD)	0.211	0.027	339	212	1.138	0.129	0.156	0.265
Weight-for-height (−2 SD)	0.032	0.010	340	213	1.076	0.315	0.012	0.052
Weight-for-height (+2 SD)	0.023	0.012	340	213	1.460	0.503	0.000	0.047
Weight-for-age (−2 SD)	0.127	0.019	340	213	1.037	0.151	0.089	0.165

Continued...

Table B.19—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.518	0.067	77	54	1.160	0.129	0.385	0.651
Minimum dietary diversity (children 6–23 months)	0.558	0.028	194	133	0.798	0.051	0.501	0.615
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.693	0.033	299	184	1.241	0.048	0.627	0.760
Body mass index (BMI) <18.5	0.080	0.013	383	256	0.942	0.164	0.053	0.106
Body mass index (BMI) ≥25.0	0.281	0.029	383	256	1.278	0.105	0.222	0.340
Body mass index-for-age (−2 SD)	0.050	0.024	84	51	0.995	0.478	0.002	0.097
Body mass index-for-age (+1 SD)	0.071	0.026	84	51	0.905	0.358	0.020	0.122
Minimum dietary diversity (women 15–49)	0.681	0.034	987	640	2.284	0.050	0.613	0.749
Prevalence of any anaemia (women 15–49)	0.470	0.031	501	331	1.371	0.065	0.409	0.531
Child slept under an ITN last night	0.630	0.024	679	423	1.081	0.038	0.583	0.678
Pregnant women slept under an ITN last night	0.664	0.065	65	41	1.121	0.098	0.534	0.794
Received 3+ doses of SP/Fansidar	0.788	0.050	279	191	2.021	0.063	0.689	0.888
Child had fever in last 2 weeks	0.173	0.025	619	406	1.545	0.147	0.122	0.224
Child had blood taken from finger/heel	0.728	0.064	100	70	1.320	0.089	0.599	0.857
Child took ACT	0.637	0.072	63	41	1.094	0.112	0.494	0.780
Child has malaria (based on rapid test)	0.336	0.035	299	184	1.254	0.105	0.266	0.407
Child has malaria (based on microscopy test)	0.122	0.022	299	184	1.085	0.179	0.078	0.166
Discriminatory attitudes towards people with HIV	0.801	0.031	950	614	2.422	0.039	0.738	0.864
Condom use at last sex	0.266	0.045	141	84	1.213	0.171	0.175	0.357
Tested for HIV in the past 12 months and received the results of the last test	0.157	0.018	987	640	1.576	0.116	0.120	0.193
Mobile phone ownership	0.805	0.015	987	640	1.214	0.019	0.774	0.836
Have and use a bank account or mobile phone for financial transactions	0.760	0.017	987	640	1.276	0.023	0.725	0.795
Participate in decision making (all three decisions)	0.633	0.039	642	426	2.064	0.062	0.554	0.711
Agree with at least one specified reason a husband is justified in wife beating	0.212	0.035	987	640	2.710	0.167	0.141	0.283
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.525	0.022	642	426	1.120	0.042	0.481	0.569
Experienced physical violence since age 15 by any perpetrator	0.350	0.052	377	245	2.120	0.150	0.245	0.455
Experienced sexual violence by any perpetrator ever	0.090	0.021	377	245	1.454	0.239	0.047	0.133
Experienced sexual violence by any non-intimate partner	0.045	0.015	377	245	1.350	0.320	0.016	0.074
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.194	0.028	330	208	1.273	0.143	0.138	0.249
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.295	0.044	330	208	1.741	0.149	0.207	0.383
	MEN							
No education	0.127	0.026	415	267	1.588	0.205	0.075	0.180
Secondary education or higher	0.679	0.028	415	267	1.200	0.041	0.624	0.734
Literacy	0.635	0.029	415	267	1.237	0.046	0.576	0.693
Use of the internet in last 12 months	0.542	0.032	415	267	1.313	0.059	0.478	0.606
Current tobacco use	0.036	0.009	415	267	1.008	0.257	0.017	0.054
Want no more children	0.164	0.045	209	137	1.743	0.275	0.074	0.254
Discriminatory attitudes towards people with HIV	0.614	0.030	403	259	1.231	0.049	0.554	0.673
Condom use at last sex	0.478	0.052	119	74	1.138	0.110	0.373	0.583
Ever tested for HIV and received results of last test	0.093	0.019	415	267	1.344	0.206	0.055	0.132
Male circumcision	0.887	0.027	415	267	1.728	0.030	0.834	0.941
Mobile phone ownership	0.823	0.022	415	267	1.183	0.027	0.779	0.868
Have and use a bank account or mobile phone for financial transactions	0.794	0.030	415	267	1.507	0.038	0.734	0.854
Agree with at least one specified reason a husband is justified in wife beating	0.195	0.023	415	267	1.197	0.119	0.149	0.242

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

Table B.20 Sampling errors: Upper West sample, Ghana DHS 2022

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
HOUSEHOLDS AND POPULATION								
Primary reliance on clean fuels and technology for cooking, space heating, and lighting	0.042	0.008	4,359	1,774	1.402	0.181	0.027	0.057
Births registered with civil authority	0.780	0.031	625	253	1.667	0.039	0.719	0.841
Ownership of at least one ITN	0.695	0.025	1,061	427	1.737	0.035	0.646	0.744
Ownership of at least one ITN for every two persons	0.379	0.027	1,061	427	1.839	0.072	0.324	0.434
At least basic drinking water service	0.799	0.028	4,359	1,774	1.935	0.035	0.742	0.855
Water available when needed	0.826	0.039	4,359	1,774	2.905	0.048	0.747	0.904
At least basic sanitation service	0.118	0.017	4,359	1,774	1.476	0.143	0.084	0.152
Using open defecation	0.564	0.050	4,359	1,774	2.818	0.088	0.464	0.663
Using a handwashing facility with soap and water	0.257	0.056	4,224	1,732	3.644	0.217	0.145	0.368
WOMEN								
No education	0.346	0.024	958	398	1.530	0.068	0.299	0.393
Secondary education or higher	0.472	0.032	958	398	1.972	0.067	0.409	0.536
Literacy	0.510	0.027	958	398	1.648	0.052	0.457	0.563
Use of the internet in last 12 months	0.203	0.021	958	398	1.600	0.103	0.161	0.245
Current tobacco use	0.006	0.003	958	398	1.015	0.412	0.001	0.011
Total fertility rate (3 years)	4.543	0.202	2,684	1,107	1.264	0.044	4.139	4.947
Currently pregnant	0.065	0.011	958	398	1.341	0.165	0.043	0.086
Mean number of children ever born to women age 40–49	5.053	0.214	175	78	1.334	0.042	4.625	5.482
Median birth interval	41.224	1.340	432	180	1.329	0.033	38.544	43.905
Ideal number of children	5.186	0.102	956	398	1.573	0.020	4.983	5.389
Total wanted fertility rate (3 years)	4.217	0.195	2,684	1,107	1.278	0.046	3.827	4.607
Currently using any contraceptive method	0.368	0.029	609	258	1.467	0.078	0.311	0.426
Currently using any modern method	0.338	0.028	609	258	1.468	0.083	0.282	0.394
Currently using pill	0.022	0.006	609	258	0.983	0.265	0.010	0.034
Currently using injectables	0.146	0.022	609	258	1.519	0.149	0.102	0.189
Currently using implants	0.144	0.031	609	258	2.204	0.219	0.081	0.207
Currently using male condoms	0.005	0.002	609	258	0.880	0.509	0.000	0.010
Currently using any traditional method	0.030	0.008	609	258	1.094	0.251	0.015	0.046
Unmet need for spacing	0.114	0.015	609	258	1.147	0.129	0.085	0.144
Unmet need for limiting	0.064	0.014	609	258	1.394	0.217	0.036	0.091
Unmet need total	0.178	0.023	609	258	1.470	0.128	0.132	0.224
Demand satisfied by modern methods	0.619	0.043	338	141	1.600	0.069	0.533	0.704
Demand satisfied by modern methods (all women)	0.617	0.034	422	173	1.431	0.055	0.549	0.686
Participation in decision making about family planning	0.803	0.026	609	258	1.595	0.032	0.752	0.855
Not exposed to any of the eight media sources	0.356	0.025	958	398	1.586	0.069	0.307	0.406
Neonatal mortality (last 0–9 years)	15.574	3.981	1,116	467	1.038	0.256	7.613	23.536
Postneonatal mortality (last 0–9 years)	9.759	3.213	1,110	465	1.103	0.329	3.334	16.185
Infant mortality (last 0–9 years)	25.334	4.859	1,116	467	1.028	0.192	15.616	35.052
Child mortality (last 0–9 years)	17.304	5.703	1,105	461	1.326	0.330	5.897	28.711
Under-5 mortality (last 0–9 years)	42.199	8.258	1,122	470	1.289	0.196	25.683	58.715
Perinatal mortality rate	26.343	7.307	608	255	0.986	0.277	11.728	40.957
Stillbirth rate	10.335	4.915	608	255	1.029	0.476	0.506	20.165
Early neonatal mortality rate	16.174	5.313	601	252	0.955	0.328	5.549	26.800
Received ANC from a skilled provider	0.982	0.013	246	105	1.484	0.013	0.956	1.007
4+ ANC visits	0.948	0.016	246	105	1.160	0.017	0.916	0.981
8+ ANC visits	0.329	0.036	246	105	1.184	0.108	0.258	0.400
Took any iron-containing supplements	0.978	0.012	246	105	1.258	0.012	0.954	1.002
Mothers protected against tetanus for last birth	0.708	0.032	246	105	1.111	0.046	0.644	0.773
Delivered in a health facility (live births)	0.940	0.017	256	109	1.124	0.018	0.906	0.973
Delivered by a skilled provider (live births)	0.917	0.028	256	109	1.586	0.031	0.860	0.974
Delivered by C-section (live births)	0.178	0.030	256	109	1.145	0.169	0.118	0.239
Women with postnatal check during first 2 days	0.910	0.018	246	105	0.999	0.020	0.873	0.946
Newborns with postnatal check during first 2 days	0.896	0.021	246	105	1.072	0.023	0.854	0.938
Any problem accessing health care	0.666	0.039	958	398	2.557	0.059	0.587	0.744
Ever had vaccination card	0.983	0.012	135	58	1.075	0.012	0.959	1.007
Received BCG vaccination	0.957	0.016	135	58	0.933	0.017	0.924	0.989
Received DPT-HepB-Hib vaccination (3 doses)	0.930	0.032	135	58	1.480	0.035	0.865	0.995
Received pneumococcal vaccination (3 doses)	0.924	0.033	135	58	1.445	0.036	0.858	0.990
Received measles and rubella 1 vaccination	0.846	0.047	135	58	1.447	0.055	0.752	0.939
Fully vaccinated according to national schedule (12–23 months)	0.560	0.060	135	58	1.396	0.108	0.440	0.681
Received measles and rubella 2 vaccination	0.862	0.036	110	44	1.025	0.042	0.789	0.935
Fully vaccinated according to national schedule (24–35 months)	0.584	0.075	110	44	1.522	0.128	0.434	0.733
Sought treatment for diarrhoea	0.667	0.085	43	16	1.098	0.128	0.496	0.838
Treated with ORS	0.474	0.091	43	16	1.110	0.193	0.291	0.657
Height-for-age (−3 SD)	0.027	0.009	341	137	0.895	0.314	0.010	0.044
Height-for-age (−2 SD)	0.165	0.024	341	137	1.125	0.144	0.118	0.213
Weight-for-height (−2 SD)	0.064	0.014	341	137	0.967	0.216	0.036	0.092
Weight-for-height (+2 SD)	0.012	0.006	341	137	0.976	0.475	0.001	0.023
Weight-for-age (−2 SD)	0.114	0.016	342	137	0.933	0.138	0.082	0.145

Continued...

Table B.20—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits (R-2SE)	Confidence limits (R+2SE)
Exclusive breastfeeding	0.681	0.061	57	24	0.973	0.089	0.560	0.802
Minimum dietary diversity (children 6–23 months)	0.368	0.048	184	79	1.332	0.129	0.273	0.463
Prevalence of anaemia (children 6–59 months) (haemoglobin <11.0 g/dl)	0.612	0.033	307	122	1.100	0.054	0.546	0.678
Body mass index (BMI) <18.5	0.061	0.016	345	140	1.256	0.266	0.029	0.094
Body mass index (BMI) ≥25.0	0.260	0.027	345	140	1.141	0.104	0.206	0.315
Body mass index-for-age (−2 SD)	0.030	0.019	101	43	1.122	0.642	0.000	0.068
Body mass index-for-age (+1 SD)	0.038	0.018	101	43	0.931	0.465	0.003	0.074
Minimum dietary diversity (women 15–49)	0.348	0.033	958	398	2.147	0.095	0.282	0.415
Prevalence of any anaemia (women 15–49)	0.463	0.027	487	200	1.201	0.059	0.409	0.517
Child slept under an ITN last night	0.561	0.035	628	254	1.490	0.062	0.491	0.630
Pregnant women slept under an ITN last night	0.558	0.060	65	25	0.963	0.107	0.438	0.678
Received 3+ doses of SP/Fansidar	0.779	0.036	246	105	1.359	0.046	0.706	0.851
Child had fever in last 2 weeks	0.085	0.018	577	242	1.462	0.212	0.049	0.121
Child had blood taken from finger/heel	0.571	0.082	56	21	1.148	0.144	0.407	0.735
Child took ACT	0.822	0.084	18	7	0.863	0.102	0.655	0.989
Child has malaria (based on rapid test)	0.302	0.039	307	122	1.359	0.128	0.225	0.379
Child has malaria (based on microscopy test)	0.134	0.026	307	122	1.237	0.193	0.082	0.187
Discriminatory attitudes towards people with HIV	0.838	0.020	923	383	1.651	0.024	0.798	0.878
Condom use at last sex	0.105	0.022	129	48	0.829	0.213	0.060	0.150
Tested for HIV in the past 12 months and received the results of the last test	0.131	0.013	958	398	1.209	0.101	0.104	0.157
Mobile phone ownership	0.621	0.024	958	398	1.543	0.039	0.572	0.669
Have and use a bank account or mobile phone for financial transactions	0.441	0.026	958	398	1.635	0.060	0.389	0.494
Participate in decision making (all three decisions)	0.393	0.050	609	258	2.491	0.126	0.294	0.492
Agree with at least one specified reason a husband is justified in wife beating	0.484	0.022	958	398	1.339	0.045	0.441	0.527
Make own decisions about sexual relations, contraceptive use, and reproductive care	0.408	0.039	609	258	1.940	0.095	0.330	0.485
Experienced physical violence since age 15 by any perpetrator	0.237	0.028	380	148	1.302	0.120	0.180	0.294
Experienced sexual violence by any perpetrator ever	0.109	0.022	380	148	1.400	0.206	0.064	0.154
Experienced sexual violence by any non-intimate partner	0.037	0.014	380	148	1.429	0.377	0.009	0.064
Experienced physical/sexual violence by the current or most recent husband or intimate partner ever	0.177	0.019	336	126	0.891	0.105	0.140	0.214
Experienced emotional/physical/sexual violence by any husband or intimate partner in the past 12 months	0.222	0.026	336	126	1.162	0.119	0.169	0.275
	MEN							
No education	0.256	0.027	378	155	1.183	0.104	0.203	0.309
Secondary education or higher	0.565	0.033	378	155	1.276	0.058	0.499	0.630
Literacy	0.513	0.040	378	155	1.539	0.077	0.434	0.593
Use of the internet in last 12 months	0.395	0.031	378	155	1.222	0.078	0.334	0.457
Current tobacco use	0.039	0.011	378	155	1.150	0.296	0.016	0.061
Want no more children	0.177	0.036	204	86	1.348	0.204	0.105	0.249
Discriminatory attitudes towards people with HIV	0.778	0.031	366	151	1.414	0.040	0.717	0.840
Condom use at last sex	0.383	0.063	64	24	1.027	0.164	0.257	0.509
Ever tested for HIV and received results of last test	0.053	0.011	378	155	0.967	0.210	0.031	0.076
Male circumcision	0.783	0.056	378	155	2.614	0.071	0.671	0.895
Mobile phone ownership	0.782	0.030	378	155	1.398	0.038	0.722	0.841
Have and use a bank account or mobile phone for financial transactions	0.701	0.036	378	155	1.514	0.051	0.630	0.773
Agree with at least one specified reason a husband is justified in wife beating	0.365	0.040	378	155	1.600	0.109	0.285	0.444

Note: An insecticide-treated net (ITN) is a factory-treated net that does not require any further treatment. In the 2008 GDHS, 2014 GDHS, and 2016 GMIS, this was known as a long-lasting insecticidal net (LLIN).

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Ghana DHS 2022

	Women		Men			Women		Men	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	792	2.4	881	2.9	42	419	1.3	367	1.2
1	902	2.7	903	3.0	43	285	0.9	283	0.9
2	801	2.4	794	2.6	44	237	0.7	188	0.6
3	923	2.8	800	2.7	45	350	1.1	296	1.0
4	806	2.4	947	3.2	46	225	0.7	219	0.7
5	807	2.4	793	2.6	47	229	0.7	217	0.7
6	902	2.7	935	3.1	48	265	0.8	257	0.9
7	829	2.5	894	3.0	49	200	0.6	195	0.6
8	894	2.7	896	3.0	50	423	1.3	284	0.9
9	862	2.6	849	2.8	51	289	0.9	110	0.4
10	909	2.7	837	2.8	52	440	1.3	222	0.7
11	731	2.2	749	2.5	53	297	0.9	145	0.5
12	874	2.6	887	3.0	54	330	1.0	154	0.5
13	925	2.8	793	2.6	55	319	1.0	190	0.6
14	765	2.3	811	2.7	56	280	0.8	154	0.5
15	629	1.9	688	2.3	57	175	0.5	147	0.5
16	520	1.6	622	2.1	58	195	0.6	147	0.5
17	540	1.6	519	1.7	59	147	0.4	111	0.4
18	515	1.5	550	1.8	60	285	0.9	255	0.9
19	459	1.4	491	1.6	61	106	0.3	139	0.5
20	567	1.7	495	1.7	62	241	0.7	239	0.8
21	457	1.4	358	1.2	63	149	0.4	149	0.5
22	593	1.8	550	1.8	64	139	0.4	149	0.5
23	525	1.6	421	1.4	65	241	0.7	223	0.7
24	487	1.5	362	1.2	66	94	0.3	94	0.3
25	490	1.5	412	1.4	67	119	0.4	106	0.4
26	463	1.4	342	1.1	68	127	0.4	118	0.4
27	467	1.4	353	1.2	69	78	0.2	59	0.2
28	490	1.5	414	1.4	70	180	0.5	145	0.5
29	397	1.2	383	1.3	71	43	0.1	30	0.1
30	570	1.7	497	1.7	72	107	0.3	113	0.4
31	330	1.0	273	0.9	73	67	0.2	65	0.2
32	488	1.5	406	1.4	74	68	0.2	56	0.2
33	407	1.2	288	1.0	75	127	0.4	98	0.3
34	388	1.2	338	1.1	76	58	0.2	43	0.1
35	406	1.2	398	1.3	77	72	0.2	44	0.1
36	395	1.2	284	0.9	78	77	0.2	37	0.1
37	409	1.2	298	1.0	79	41	0.1	27	0.1
38	377	1.1	302	1.0	80+	551	1.7	297	1.0
39	420	1.3	324	1.1	Don't know	18	0.1	12	0.0
40	475	1.4	432	1.4					
41	220	0.7	199	0.7	Total	33,299	100.0	29,948	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10–54, number and percent distribution of interviewed women age 15–49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, Ghana DHS 2022

Age group	Household population of women age 10–54	Interviewed women age 15–49		Percentage of eligible women interviewed
		Number	Percentage	
10–14	4,205	na	na	na
15–19	2,663	2,600	18.0	97.6
20–24	2,630	2,593	18.0	98.6
25–29	2,308	2,266	15.7	98.2
30–34	2,183	2,150	14.9	98.5
35–39	2,007	1,970	13.7	98.2
40–44	1,636	1,594	11.1	97.5
45–49	1,269	1,236	8.6	97.4
50–54	1,780	na	na	na
15–49	14,696	14,409	100.0	98.0
Ratios				
10–14 to 15–19	158	na	na	na
50–54 to 45–49	140	na	na	na

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10–64, number and percent distribution of interviewed men age 15–59, and percentage of eligible men who were interviewed (weighted), by 5-year age groups, Ghana DHS 2022

Age group	Household population of men age 10–64	Interviewed men age 15–59		Percentage of eligible men interviewed
	Number	Number	Percentage	
10–14	2,074	na	na	na
15–19	1,376	1,352	20.2	98.3
20–24	1,001	973	14.6	97.2
25–29	889	861	12.9	96.9
30–34	827	791	11.8	95.7
35–39	801	774	11.6	96.7
40–44	723	677	10.1	93.6
45–49	548	524	7.8	95.6
50–54	421	410	6.1	97.4
55–59	333	322	4.8	96.7
60–64	479	na	na	na
15–59	6,919	6,685	100.0	96.6
Ratios				
10–14 to 15–19	151	na	na	na
55–59 to 60–64	144	na	na	na

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of men and interviewed men are household weights. Age is based on the household questionnaire.
na = not applicable

Table C.3 Age displacement at ages 14/15

Number of women and men age 12–18 listed in the household schedule by single-year age and age ratio 15/14, according to region (weighted), Ghana DHS 2022

Region	Age							Total age 12–18	Age ratio (age 15/ age 14)
	12	13	14	15	16	17	18		
				WOMEN					
Western	51	50	49	37	42	39	28	297	75.5
Central	60	106	79	101	67	74	74	561	127.3
Greater Accra	118	146	101	105	58	75	69	672	103.5
Volta	46	33	46	41	34	31	32	261	89.7
Eastern	79	86	64	62	32	40	31	394	96.9
Ashanti	206	195	136	88	81	107	109	922	64.4
Western North	29	27	21	19	15	15	16	143	93.4
Ahafo	24	21	18	15	11	14	11	114	87.1
Bono	34	40	31	18	32	28	19	201	56.7
Bono East	33	34	35	26	28	21	33	210	74.6
Oti	33	29	22	16	19	20	16	155	72.4
Northern	65	65	68	38	40	33	29	339	56.3
Savannah	19	20	22	18	14	11	14	117	82.8
North East	25	18	20	13	12	8	8	104	64.3
Upper East	33	40	44	26	21	19	24	206	58.5
Upper West	23	25	31	17	20	16	17	150	56.2
Total	876	936	787	640	527	552	529	4,846	81.4
				MEN					
Western	55	40	54	36	42	28	43	297	65.8
Central	106	86	79	77	62	71	62	542	97.1
Greater Accra	121	90	93	88	76	71	66	605	93.9
Volta	46	43	46	24	32	28	26	246	52.4
Eastern	81	63	69	76	55	39	40	423	111.3
Ashanti	175	158	165	120	119	90	119	945	72.7
Western North	26	31	26	23	12	20	11	149	86.4
Ahafo	20	22	12	16	13	14	14	111	138.0
Bono	20	29	23	22	25	25	22	167	93.1
Bono East	38	29	31	24	25	23	26	196	76.9
Oti	31	30	32	21	22	20	24	180	67.0
Northern	70	74	75	65	58	45	48	437	86.5
Savannah	19	20	21	18	15	11	14	116	85.2
North East	25	18	27	18	15	12	12	128	65.9
Upper East	39	39	46	39	30	31	17	240	84.3
Upper West	26	24	22	29	25	11	17	154	133.9
Total	898	796	820	694	626	540	560	4,935	84.6

Table C.4 Age displacement at ages 49/50

Number of women and men age 47–53 listed in the household schedule by single-year age and age ratio 50/49, according to region (weighted), Ghana DHS 2022

Region	Age							Total age 47–53	Age ratio (age 50/ age 49)
	47	48	49	50	51	52	53		
				WOMEN					
Western	21	12	11	28	22	24	19	136	264.6
Central	20	37	29	55	20	56	24	241	190.7
Greater Accra	32	48	19	72	53	75	33	333	369.9
Volta	9	9	12	30	13	28	11	112	253.2
Eastern	28	29	9	46	15	38	38	204	513.2
Ashanti	55	46	54	78	40	70	71	414	145.5
Western North	4	9	6	8	6	13	6	53	138.1
Ahafo	3	6	4	9	8	7	9	45	202.2
Bono	4	9	8	11	17	10	12	72	134.7
Bono East	11	8	9	11	12	19	10	79	126.6
Oti	5	9	7	10	7	14	8	60	141.6
Northern	21	18	14	30	31	38	24	177	216.4
Savannah	7	3	2	11	11	14	7	56	494.1
North East	3	4	2	13	8	11	7	48	694.3
Upper East	10	10	12	14	22	21	15	104	110.6
Upper West	6	9	5	9	8	9	10	56	174.0
Total	239	268	202	434	294	448	304	2,189	214.3
				MEN					
Western	16	23	19	20	5	15	8	106	107.8
Central	27	19	8	24	12	19	17	126	291.4
Greater Accra	35	50	44	53	13	43	26	265	121.1
Volta	7	11	13	15	11	15	3	76	112.3
Eastern	20	22	16	28	16	21	18	141	175.6
Ashanti	30	63	53	51	18	28	22	265	96.3
Western North	12	9	4	14	3	6	5	53	379.2
Ahafo	6	8	5	10	2	10	3	44	214.1
Bono	9	6	5	5	5	10	6	46	90.6
Bono East	7	14	5	11	3	10	5	55	214.2
Oti	6	9	3	10	2	7	3	40	351.5
Northern	18	22	9	21	8	15	14	109	234.0
Savannah	6	6	4	8	2	8	4	38	182.6
North East	3	3	4	4	2	6	3	25	90.3
Upper East	14	4	5	13	7	11	5	58	234.8
Upper West	7	4	5	6	4	4	4	33	105.6
Total	224	273	203	292	113	228	147	1,481	143.9

Table C.5 Pregnancy outcomes by years preceding the survey

Number of pregnancy outcomes, percentage with year and month of birth given or end of pregnancy given, sex ratio at birth of live births, and ratio by years preceding the survey, according to living children, dead children, stillbirths, miscarriages/abortions, and total pregnancy outcomes (weighted), Ghana DHS 2022

	Number of pregnancy outcomes					Percentage with year and month of birth given or end of pregnancy given					Sex ratio at birth of live births[1]			Ratio of years preceding survey[2]				
Years preceding survey	Living children	Dead children	Stillbirths	Miscar-riages/ abortions	Total	Living children	Dead children	Stillbirths	Miscar-riages/ abortions	Total	Living children	Dead children	Total	Living children	Dead children	Stillbirths	Miscar-riages/ abortions	Total
0	1,718	49	24	379	2,170	99.9	100.0	99.1	96.7	99.4	113.6	54.5	111.4	na	na	na	na	na
1	1,823	48	33	390	2,294	99.9	95.0	96.7	89.3	97.9	103.6	171.9	104.9	111.7	98.9	135.8	111.0	111.6
2	1,546	48	25	324	1,943	99.9	95.2	98.9	85.8	97.4	97.8	202.1	99.8	89.5	95.7	88.9	86.3	89.1
3	1,632	52	24	360	2,068	99.8	85.6	93.0	84.8	96.7	88.1	138.8	89.4	103.9	89.1	93.0	117.9	105.5
4	1,596	69	26	287	1,977	99.1	93.1	91.8	85.6	96.9	119.8	110.2	119.4	100.7	115.3	88.4	97.0	100.4
5	1,536	68	34	232	1,870	99.1	91.4	96.5	86.7	97.2	94.3	158.2	96.3	96.2	96.8	124.9	86.9	95.3
6	1,600	71	29	246	1,946	98.8	88.9	96.9	85.1	96.6	104.2	142.6	105.6	108.0	100.8	95.6	99.1	106.3
7	1,427	73	27	265	1,792	98.0	92.4	79.8	82.0	95.1	109.1	104.6	108.9	90.9	90.9	77.1	109.9	93.1
8	1,539	90	40	236	1,906	99.0	88.6	69.3	70.6	94.4	101.2	104.0	101.4	108.1	123.9	135.4	95.0	107.4
9	1,420	72	33	232	1,757	98.2	90.0	73.0	73.8	94.2	99.5	177.5	102.2	92.3	76.0	98.9	106.2	93.2
0–4	8,315	266	132	1,740	10,452	99.7	93.6	95.9	88.7	97.7	104.1	121.9	104.6	na	na	na	na	na
5–9	7,522	375	163	1,211	9,271	98.6	90.2	82.4	79.7	95.5	101.5	131.8	102.7	na	na	na	na	na
10–14	6,295	432	119	819	7,665	97.4	86.6	80.3	78.3	94.4	95.4	118.3	96.8	na	na	na	na	na
15–10	4,600	422	67	539	5,629	96.9	84.0	87.8	79.2	94.1	99.3	100.6	99.5	na	na	na	na	na
20+	4,085	564	105	687	5,441	95.0	84.2	72.5	66.6	89.8	95.6	112.1	97.4	na	na	na	na	na
All	30,817	2,058	587	4,996	38,458	97.9	86.9	83.9	80.7	94.9	99.8	115.4	100.7	na	na	na	na	na

na = not applicable

[1] $(B_m/B_f)x100$, where B_m and B_f are the numbers of male and female births, respectively

[2] $[2P_x/(P_{x-1}+P_{x+1})]x100$, where P_x is the number of pregnancy outcomes in year x preceding the survey

Table C.6 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Ghana DHS 2022

Subject	Percentage with information missing	Number of cases
Date of live birth or stillbirth (last 15 years)		
Missing day only	1.36	23,619
Missing month but year reported	1.95	23,619
Missing year	0.00	23,619
Date of live birth or stillbirth (last 5 years)		
Missing day only	0.62	8,713
Missing month but year reported	0.52	8,713
Date of birth of women		
Missing month but year reported	1.22	15,014
Missing year	0.07	15,014
Date of birth of men		
Missing month but year reported	0.84	7,044
Missing year	0.15	7,044
Diarrhoea in last 2 weeks	0.52	8,268
Anthropometry of children		
Height	2.02	4,393
Weight	2.00	4,393
Height or weight	2.02	4,393
Anthropometry of women		
Height	2.65	7,628
Weight	2.70	7,628
Height or weight	2.70	7,628
Anthropometry of men		
Height	4.02	6,166
Weight	4.04	6,166
Height or weight	4.04	6,166
Anaemia		
Children	3.68	3,983
Women	6.88	7,628
Men	173.72	6,920
Malaria		
Children	2.57	3,983

Table C.7 Standardisation exercise results from anthropometry training

Trainees' precision and accuracy for height measurements taken during the standardisation exercise for anthropometry, Ghana DHS 2022

	Standardisation exercise[1]	
Measurer	Trainees' precision[2]	Trainees' accuracy[2]
Trainee 1	0.50	0.47
Trainee 2	0.40	0.51
Trainee 3	0.42	0.38
Trainee 4	0.36	0.45
Trainee 5	0.36	0.54
Trainee 6	0.18	0.50
Trainee 7	0.21	0.56
Trainee 8	0.19	0.51
Trainee 9	0.31	0.47
Trainee 10	0.39	0.46
Trainee 11	0.37	0.58
Trainee 12	0.31	0.57
Trainee 13	0.23	0.44
Trainee 14	0.33	0.73
Trainee 15	0.49	0.65
Trainee 16	0.29	0.74
Trainee 17	0.22	0.61
Trainee 18	0.45	0.85
Trainee 19	0.31	0.65
Trainee 20	0.65	0.85
Trainee 21	0.23	0.25
Trainee 22	0.69	0.34
Trainee 23	2.96	1.46
Trainee 24	0.47	0.52
Trainee 25	0.59	0.52
Trainee 26	0.40	0.40
Trainee 27	0.22	0.31
Trainee 28	0.09	0.17
Trainee 29	0.43	0.72
Trainee 30	0.20	0.30
Trainee 31	0.08	0.26
Trainee 32	0.36	0.52
Trainee 33	0.22	0.34
Trainee 34	0.30	0.58
Trainee 35	0.35	0.41
Trainee 36	0.29	0.62
Trainee 37	0.21	0.32
Trainee 38	0.15	0.30
Trainee 39	0.28	0.42
Trainee 40	0.18	0.33
Trainee 41	0.44	0.47
Trainee 42	0.31	0.39
Trainee 43	0.24	0.46
Trainee 44	0.39	0.44
Trainee 45	0.35	0.71
Trainee 46	0.89	0.54
Trainee 47	0.33	0.27
Trainee 48	6.22	3.11
Trainee 49	0.84	0.73
Trainee 50	0.33	0.58
Trainee 51	0.21	0.36
Trainee 52	0.30	0.40
Trainee 53	0.11	0.37
Trainee 54	0.43	0.35
Trainee 55	0.15	0.40
Trainee 56	0.28	0.52
Trainee 57	0.28	0.37
Trainee 58	0.28	0.25
Trainee 59	0.34	0.55
Trainee 60	0.42	0.44
Trainee 61	0.30	0.59
Trainee 62	1.81	0.87
Trainee 63	0.34	0.49
Trainee 64	0.56	0.82
Trainee 65	0.28	0.55

Continued...

Table C.7—*Continued*

Measurer	Standardisation exercise[1]	
	Trainees' precision[2]	Trainees' accuracy[2]
Trainee 66	0.32	0.53
Trainee 67	0.27	0.46
Trainee 68	0.15	0.58
Trainee 69	0.35	0.44
Trainee 70	0.29	0.63
Trainee 71	0.36	0.49
Trainee 72	0.54	0.75
Trainee 73	0.18	0.62
Trainee 74	0.31	0.60
Trainee 75	0.17	0.68
Trainee 76	0.46	0.61
Trainee 77	0.30	0.59
Trainee 78	1.81	0.87
Average	1.81	0.87

[1] Ten children were measured twice for each standardisation exercise.
[2] Trainees' precision and accuracy are defined in terms of a technical error of measurement (TEM), which is calculated as $\sqrt{\sum(D^2)/(2N)}$, where D is the difference in height and N is the number of repeat measurements. An acceptable TEM according to WHO-UNICEF is a TEM of <0.6 cm for precision and <0.8 cm for accuracy.

Table C.8 Height and weight data completeness and quality for children

Among children under age 5 (age 0–59 months) who were eligible for anthropometry, percentage with incomplete or missing data for height, weight, or month or year of birth; among children with complete data on height and age, percentage with implausible data for height-for-age; among children with complete data on weight and height, percentage with implausible data for weight-for-height; among children with complete data on weight and age, percentage with implausible data for weight-for-age; and among all children under age 5 who were eligible for anthropometry, percentage with valid data for height-for-age, weight-for-height, or weight-for-age, according to background characteristics (unweighted), Ghana DHS 2022

	Percentage with data incomplete or missing for:				Percentage with implausible data for:						Percentage with valid data for[8]:			
Background characteristic	Height[1]	Weight[2]	Month or year of birth[3]	Number of children	Height-for-age[4]	Number of children with complete height and age[5]	Weight-for-height[6]	Number of children with complete weight and height	Weight-for-age[7]	Number of children with complete weight and age[5]	Height-for-age	Weight-for-height	Weight-for-age	Number of children
Age in months														
<6	3.6	3.4	0.0	527	0.4	508	1.0	508	0.2	509	96.0	95.4	96.4	527
6–11	1.4	1.4	0.0	504	0.6	497	0.4	497	0.4	497	98.0	98.2	98.2	504
12–23	0.8	0.8	0.1	1,066	0.2	1,056	0.2	1,057	0.1	1,056	98.9	99.0	99.0	1,066
24–35	2.5	2.5	0.4	977	0.1	951	0.1	953	0.0	951	97.2	97.4	97.3	977
36–47	2.1	2.0	0.3	1,011	0.0	989	0.0	990	0.0	990	97.8	97.9	97.9	1,011
48–59	2.5	2.4	0.4	960	0.0	935	0.0	936	0.0	936	97.4	97.5	97.5	960
0–23	1.7	1.6	0.0	2,097	0.3	2,061	0.4	2,062	0.2	2,062	97.9	97.9	98.1	2,097
24–59	2.3	2.3	0.4	2,948	0.0	2,875	0.0	2,879	0.0	2,877	97.5	97.6	97.6	2,948
Sex														
Male	2.4	2.3	0.3	2,600	0.3	2,536	0.2	2,538	0.1	2,539	97.3	97.4	97.6	2,600
Female	1.7	1.7	0.2	2,445	0.0	2,400	0.2	2,403	0.1	2,400	98.1	98.1	98.1	2,445
Mother's interview status														
Interviewed	1.2	1.1	0.1	4,458	0.2	4,399	0.2	4,404	0.1	4,402	98.5	98.6	98.7	4,458
Not interviewed but in household	24.8	24.8	4.0	149	0.9	112	0.0	112	0.0	112	74.5	75.2	75.2	149
Not interviewed and not in the household[9]	3.0	3.0	0.2	438	0.0	425	0.2	425	0.0	425	97.0	96.8	97.0	438
Residence														
Urban	2.3	2.3	0.1	2,081	0.2	2,033	0.3	2,033	0.1	2,034	97.5	97.4	97.6	2,081
Rural	1.9	1.8	0.3	2,964	0.1	2,903	0.1	2,908	0.1	2,905	97.8	98.0	97.9	2,964
Region														
Western	1.7	1.7	0.9	234	0.4	230	0.0	230	0.0	230	97.9	98.3	98.3	234
Central	1.5	1.5	0.0	269	0.0	265	0.0	265	0.0	265	98.5	98.5	98.5	269
Greater Accra	3.3	3.3	0.4	243	0.4	235	0.9	235	0.0	235	96.3	95.9	96.7	243
Volta	1.0	1.0	0.5	209	0.0	206	0.5	207	0.0	206	98.6	98.6	98.6	209
Eastern	0.4	0.4	0.0	239	0.0	238	0.0	238	0.0	238	99.6	99.6	99.6	239
Ashanti	1.6	1.6	0.3	321	0.0	316	0.3	316	0.0	316	98.4	98.1	98.4	321
Western North	4.1	4.1	1.4	217	0.0	207	0.0	208	0.0	207	95.4	95.9	95.4	217
Ahafo	3.2	3.2	0.0	278	0.0	269	0.0	269	0.0	269	96.8	96.8	96.8	278
Bono	0.5	0.5	0.0	213	0.0	212	0.9	212	0.0	212	99.5	98.6	99.5	213
Bono East	1.2	1.2	0.0	328	0.3	324	0.6	324	0.3	324	98.5	98.2	98.5	328
Oti	2.3	2.3	0.3	307	0.0	300	0.3	300	0.0	300	97.7	97.4	97.7	307
Northern	1.9	1.9	0.4	517	0.4	505	0.0	507	0.4	505	97.3	98.1	97.3	517
Savannah	2.3	2.1	0.2	435	0.2	424	0.0	425	0.2	425	97.2	97.7	97.5	435
North East	2.6	2.2	0.0	537	0.0	523	0.0	523	0.0	525	97.4	97.4	97.8	537
Upper East	3.1	3.1	0.0	351	0.3	340	0.0	340	0.0	340	96.6	96.9	96.9	351
Upper West	1.4	1.4	0.0	347	0.3	342	0.3	342	0.0	342	98.3	98.3	98.6	347

Continued...

Table C.8—*Continued*

Background characteristic	Percentage with data incomplete or missing for:				Percentage with implausible data for:						Percentage with valid data for[8]:			
	Height[1]	Weight[2]	Month or year of birth[3]	Number of children	Height-for-age[4]	Number of children with complete height and age[5]	Weight-for-height[6]	Number of children with complete weight and height	Weight-for-age[7]	Number of children with complete weight and age[5]	Height-for-age	Weight-for-height	Weight-for-age	Number of children
Mother's education														
No education	2.2	2.1	0.2	1,509	0.3	1,473	0.1	1,476	0.1	1,475	97.3	97.7	97.6	1,509
Primary	1.3	1.1	0.1	703	0.1	694	0.0	694	0.1	695	98.6	98.7	98.7	703
Secondary	1.7	1.7	0.2	2,051	0.0	2,015	0.3	2,017	0.0	2,015	98.2	98.0	98.2	2,051
More than secondary	4.4	4.4	0.9	344	0.3	329	0.6	329	0.3	329	95.3	95.1	95.3	344
Measurer														
Measurer 1	4.8	4.8	2.4	83	0.0	79	0.0	79	0.0	79	95.2	95.2	95.2	83
Measurer 2	0.0	0.0	0.0	131	0.8	131	0.0	131	0.0	131	99.2	100.0	100.0	131
Measurer 3	0.0	0.0	0.0	110	0.0	110	0.0	110	0.0	110	100.0	100.0	100.0	110
Measurer 4	3.3	3.3	0.0	120	0.0	116	0.0	116	0.0	116	96.7	96.7	96.7	120
Measurer 5	0.0	0.0	0.0	104	0.0	104	1.9	104	0.0	104	100.0	98.1	100.0	104
Measurer 6	5.6	5.6	1.1	90	0.0	85	0.0	85	0.0	85	94.4	94.4	94.4	90
Measurer 7	1.3	1.3	0.0	79	1.3	78	0.0	78	0.0	78	97.5	98.7	98.7	79
Measurer 8	1.4	1.4	0.0	73	0.0	72	0.0	72	0.0	72	98.6	98.6	98.6	73
Measurer 9	1.0	1.0	0.0	100	0.0	99	0.0	99	0.0	99	99.0	99.0	99.0	100
Measurer 10	0.0	0.0	0.0	79	0.0	79	0.0	79	0.0	79	100.0	100.0	100.0	79
Measurer 11	0.0	0.0	0.0	108	0.0	108	0.0	108	0.0	108	100.0	100.0	100.0	108
Measurer 12	1.0	1.0	1.0	99	0.0	98	0.0	98	0.0	98	99.0	99.0	99.0	99
Measurer 13	0.8	0.8	0.0	120	0.0	119	0.8	119	0.0	119	99.2	98.3	99.2	120
Measurer 14	2.5	2.5	0.0	118	0.0	115	0.0	115	0.0	115	97.5	97.5	97.5	118
Measurer 15	8.3	8.3	0.0	84	0.0	77	0.0	77	0.0	77	91.7	91.7	91.7	84
Measurer 16	0.0	0.0	0.9	107	0.0	106	0.0	107	0.0	106	99.1	100.0	99.1	107
Measurer 17	2.4	2.4	1.6	124	0.0	121	0.0	121	0.0	121	97.6	97.6	97.6	124
Measurer 18	0.0	0.0	0.0	121	0.0	121	0.0	121	0.0	121	100.0	100.0	100.0	121
Measurer 19	0.6	0.6	0.0	165	0.0	164	0.0	164	0.6	164	99.4	99.4	98.8	165
Measurer 20	3.4	3.4	1.4	148	0.0	142	0.7	143	0.0	142	95.9	95.9	95.9	148
Measurer 21	1.4	1.4	0.0	148	0.0	146	0.7	146	0.0	146	98.6	98.0	98.6	148
Measurer 22	2.0	2.0	0.0	102	0.0	100	0.0	100	0.0	100	98.0	98.0	98.0	102
Measurer 23	1.4	1.4	0.9	214	0.0	209	0.5	211	0.0	209	97.7	98.1	97.7	214
Measurer 24	2.6	2.6	0.0	196	0.0	191	0.0	191	0.0	191	97.4	97.4	97.4	196
Measurer 25	5.3	5.3	0.0	171	1.2	162	0.0	162	1.2	162	93.6	94.7	93.6	171
Measurer 26	0.5	0.5	0.5	199	0.0	197	0.0	198	0.0	197	99.0	99.5	99.0	199
Measurer 27	2.2	1.7	0.0	181	0.0	177	0.0	177	0.0	178	97.8	97.8	98.3	181
Measurer 28	2.5	2.5	0.0	201	1.0	196	0.0	196	0.5	196	96.5	97.5	97.0	201
Measurer 29	6.8	6.8	0.0	222	0.0	207	0.5	207	0.0	207	93.2	92.8	93.2	222
Measurer 30	0.5	0.0	0.0	201	0.0	200	0.0	200	0.0	201	99.5	99.5	100.0	201
Measurer 31	0.5	0.0	0.0	196	0.0	195	0.0	195	0.0	196	99.5	99.5	100.0	196
Measurer 32	3.1	3.1	0.0	129	0.0	125	1.6	125	0.0	125	96.9	95.3	96.9	129
Measurer 33	2.8	2.8	0.0	142	0.0	138	0.0	138	0.0	138	97.2	97.2	97.2	142
Measurer 34	2.5	2.5	0.0	160	0.6	156	0.0	156	0.0	156	96.9	97.5	97.5	160
Measurer 35	2.1	2.1	0.0	144	0.0	141	0.0	141	0.0	141	97.9	97.9	97.9	144
Measurer 36	0.0	0.0	0.0	157	0.6	157	0.6	157	0.0	157	99.4	99.4	100.0	157
Measurer 37	0.0	0.0	0.0	115	0.0	115	0.0	115	0.0	115	100.0	100.0	100.0	115
Total	2.1	2.0	0.2	5,045	0.2	4,936	0.2	4,941	0.1	4,939	97.7	97.7	97.8	5,045

[1] Child's height in centimetres is missing, child was not present, child refused, and "other" result codes
[2] Child's weight in kilograms is missing, child was not present, child refused, and "other" result codes
[3] Incomplete date of birth; a complete date of birth is month/day/year or month/year.

[4] Implausible cases for height-for-age are defined as more than 6 standard deviations (SD) above or below the standard population median (*z* scores) based on the WHO Child Growth Standards among children with complete height and month/year of birth data.
[5] Complete age is calculated from month and year of birth.
[6] Implausible cases for weight-for-height are defined as more than 5 SD above or below the standard population median (*z* scores) based on the WHO Child Growth Standards among children with complete weight and height data.
[7] Implausible cases for weight-for-age are defined as more than 5 SD above or 6 SD below the standard population median (*z* scores) based on the WHO Child Growth Standards among children with complete weight and month/year of birth data.
[8] No missing data, incomplete data, or implausible data
[9] Includes children whose mothers are deceased

Table C.9 Height measurements from random subsample of measured children

Differences in first height measurement and second height measurement among children under age 5 (0–59 months) randomly selected and remeasured, according to region and measurer (unweighted), Ghana DHS 2022

Region and measurer	Median difference in height measurements[1]	Percentage of height measurements with a difference >1 cm	Number of children randomly selected and remeasured
Region			
Western	0.228	8.1	62
Central	0.105	2.9	69
Greater Accra	0.231	7.4	81
Volta	0.202	0.0	64
Eastern	0.210	1.4	73
Ashanti	0.161	2.4	84
Western North	0.225	6.3	64
Ahafo	0.185	0.0	64
Bono	0.171	3.2	62
Bono East	0.133	6.1	66
Oti	0.200	6.0	67
Northern	0.238	4.1	74
Savannah	0.188	8.8	68
North East	0.237	3.0	67
Upper East	0.227	0.0	66
Upper West	0.225	3.0	66
Measurer			
Measurer 1	0.320	3.7	27
Measurer 2	0.205	13.8	29
Measurer 3	0.090	0.0	29
Measurer 4	0.097	3.3	30
Measurer 5	0.212	10.3	29
Measurer 6	0.313	8.0	25
Measurer 7	0.188	3.3	30
Measurer 8	0.300	3.4	29
Measurer 9	0.219	0.0	31
Measurer 10	0.182	3.4	29
Measurer 11	0.246	0.0	29
Measurer 12	0.206	0.0	30
Measurer 13	0.163	0.0	29
Measurer 14	0.127	6.5	31
Measurer 15	0.250	3.6	28
Measurer 16	0.230	7.1	28
Measurer 17	0.180	3.7	27
Measurer 18	0.203	0.0	29
Measurer 19	0.080	3.0	33
Measurer 20	0.207	10.0	30
Measurer 21	0.300	0.0	31
Measurer 22	0.077	3.3	30
Measurer 23	0.379	0.0	32
Measurer 24	0.182	0.0	32
Measurer 25	0.205	9.7	31
Measurer 26	0.161	0.0	30
Measurer 27	0.169	0.0	29
Measurer 28	0.333	25.8	31
Measurer 29	0.245	3.2	31
Measurer 30	0.230	6.7	30
Measurer 31	0.175	0.0	31
Measurer 32	0.225	0.0	28
Measurer 33	0.150	0.0	30
Measurer 34	0.229	0.0	31
Measurer 35	0.289	10.3	29
Measurer 36	0.145	3.4	29
Measurer 37	0.207	0.0	30
Total	0.199	3.9	1,097

[1] Median absolute difference between measurers' first and second height measurements in centimetres

Table C.10 Interference in height and weight measurements of children

Among children under age 5 measured for height or weight, percentage for whom hairstyle or ornamentation interfered with height measurement and percentage who were not minimally dressed or who wore heavy permanent ornaments during weight measurement, according to background characteristics (unweighted), Ghana DHS 2022

Background characteristic	Percentage of children for whom hairstyle or ornamentation interfered with height measurement	Percentage of children who were not minimally dressed or who wore heavy permanent ornaments during weight measurement	Number of children
Age in months			
<6	1.1	0.6	527
6–11	2.2	0.2	504
12–23	1.4	0.5	1,066
24–35	1.1	0.9	977
36–47	2.0	0.3	1,011
48–59	0.9	0.1	960
0–23	1.5	0.4	2,097
24–59	1.4	0.4	2,948
Sex			
Male	1.0	0.5	2,600
Female	1.9	0.4	2,445
Residence			
Urban	1.8	0.4	2,078
Rural	1.1	0.5	2,967
Region			
Western	2.6	0.4	234
Central	2.6	0.0	269
Greater Accra	1.2	0.4	243
Volta	1.0	1.4	209
Eastern	0.8	0.8	239
Ashanti	1.6	0.3	320
Western North	2.8	0.0	218
Ahafo	0.4	1.1	278
Bono	3.3	0.5	213
Bono East	1.8	0.6	328
Oti	0.3	0.0	307
Northern	1.5	0.8	517
Savannah	1.4	0.0	435
North East	0.2	0.2	537
Upper East	2.6	0.6	351
Upper West	0.6	0.3	347
Measurer			
Measurer 1	1.2	1.2	83
Measurer 2	3.8	0.0	131
Measurer 3	0.0	0.0	110
Measurer 4	5.8	0.0	120
Measurer 5	0.0	0.0	104
Measurer 6	3.3	0.0	90
Measurer 7	0.0	1.3	79
Measurer 8	0.0	0.0	73
Measurer 9	0.0	3.0	100
Measurer 10	2.5	2.5	79
Measurer 11	0.0	0.0	108
Measurer 12	0.0	0.0	99
Measurer 13	2.5	0.0	120
Measurer 14	1.7	0.8	118
Measurer 15	2.4	0.0	84
Measurer 16	3.7	0.0	107
Measurer 17	0.0	0.0	124
Measurer 18	0.8	0.0	121
Measurer 19	2.4	1.2	165
Measurer 20	0.7	0.0	148
Measurer 21	1.4	0.0	148
Measurer 22	0.0	0.0	102
Measurer 23	0.5	0.5	214
Measurer 24	3.1	2.0	196
Measurer 25	0.0	0.6	171

Continued...

Table C.10—*Continued*

Background characteristic	Percentage of children for whom hairstyle or ornamentation interfered with height measurement	Percentage of children who were not minimally dressed or who wore heavy permanent ornaments during weight measurement	Number of children
Measurer 26	0.5	0.0	199
Measurer 27	0.6	0.0	181
Measurer 28	4.0	0.5	201
Measurer 29	0.5	0.5	222
Measurer 30	0.0	0.0	201
Measurer 31	0.0	0.0	196
Measurer 32	7.0	1.6	129
Measurer 33	0.7	0.7	142
Measurer 34	1.9	0.0	160
Measurer 35	1.4	0.7	144
Measurer 36	0.6	0.0	157
Measurer 37	0.9	0.0	115
Total	1.4	0.4	5,045

Table C.11 Interference in height and weight measurements of women and men

Among women age 15–49 measured for height or weight, percentage for whom hairstyle or ornamentation interfered with height measurement and percentage who were not wearing lightweight clothing or who wore heavy permanent ornaments during weight measurement, according to background characteristics (unweighted), Ghana DHS 2022

Background characteristic	Percentage for whom hairstyle or ornamentation interfered with height measurement	Percentage who were not wearing lightweight clothing or who wore heavy permanent ornaments during weight measurement	Number of women
Age			
15–19	11.5	1.9	1,441
20–29	10.0	1.4	2,558
30–39	7.4	1.3	2,195
40–49	6.0	1.3	1,482
Residence			
Urban	9.3	1.9	3,776
Rural	8.2	1.1	3,900
Region			
Western	16.2	1.0	421
Central	18.2	2.1	522
Greater Accra	3.8	1.3	521
Volta	6.0	2.0	400
Eastern	3.1	1.6	450
Ashanti	2.6	0.5	583
Western North	7.7	1.3	375
Ahafo	2.5	0.7	438
Bono	22.1	1.1	435
Bono East	5.2	0.8	478
Oti	9.3	0.0	452
Northern	4.9	2.7	590
Savannah	6.4	1.9	535
North East	16.6	0.8	475
Upper East	14.5	2.4	510
Upper West	3.5	2.4	491
Measurer			
Measurer 1	10.2	1.5	197
Measurer 2	23.8	0.0	193
Measurer 3	5.3	3.2	187
Measurer 4	33.3	2.0	252
Measurer 5	2.6	0.5	196
Measurer 6	5.6	1.0	195
Measurer 7	3.2	2.7	187
Measurer 8	2.6	2.6	155
Measurer 9	3.9	1.7	180
Measurer 10	4.4	3.3	180
Measurer 11	0.5	0.0	184
Measurer 12	0.5	0.5	200
Measurer 13	2.1	0.5	193
Measurer 14	4.6	0.5	218
Measurer 15	13.5	1.4	148
Measurer 16	5.1	1.7	178
Measurer 17	1.5	0.0	197
Measurer 18	1.6	0.5	192
Measurer 19	3.2	1.8	218
Measurer 20	6.2	0.0	210
Measurer 21	20.1	0.0	229
Measurer 22	1.1	1.1	180
Measurer 23	1.5	0.0	272
Measurer 24	7.5	5.9	255
Measurer 25	0.0	1.5	204
Measurer 26	10.2	2.4	245
Measurer 27	1.7	0.4	241
Measurer 28	9.8	1.3	234
Measurer 29	8.4	1.9	215
Measurer 30	26.1	0.0	203

Continued...

Table C.11—*Continued*

Background characteristic	Percentage for whom hairstyle or ornamentation interfered with height measurement	Percentage who were not wearing lightweight clothing or who wore heavy permanent ornaments during weight measurement	Number of women
Measurer 31	20.2	0.0	213
Measurer 32	47.0	3.2	253
Measurer 33	0.9	3.3	215
Measurer 34	3.7	0.9	217
Measurer 35	5.0	3.8	239
Measurer 36	10.1	1.1	189
Measurer 37	1.4	0.5	212
Total	8.8	1.4	7,676

Table C.12 Heaping in anthropometric measurements for children (digit preference)

Distribution of weight and height/length measurements by decimal digit recorded (unweighted), Ghana DHS 2022

	Weight		Height or length	
Digit	Number	Percent	Number	Percent
0	499	10.0	441	8.9
1	525	10.6	540	10.9
2	525	10.6	558	11.2
3	514	10.4	563	11.3
4	496	10.0	544	11.0
5	501	10.1	597	12.0
6	485	9.8	474	9.6
7	469	9.4	439	8.8
8	466	9.4	427	8.6
9	486	9.8	380	7.7
Total	4,966	100.0	4,963	100.0
Index of dissimilarity[1]	na	1.6	na	6.5

Note: Table includes all children with weight and height/length measurements, regardless of the completeness of date of birth information and cases with implausible data. Both weight and length/height measurements were recorded with one decimal digit.
na = not applicable
[1] The index of dissimilarity is a measure of digit preference calculated as one-half of the sum of absolute differences between the observed and expected percentage. It can be interpreted as the percentage of values that would need to be redistributed in order to achieve a uniform distribution.

Table C.13 Observation of mosquito nets

Percentage of all mosquito nets observed by the interviewers, according to background characteristics (weighted), Ghana DHS 2022

Background characteristic	Percentage of mosquito nets observed by interviewers	Number of mosquito nets
Residence		
Urban	80.0	13,556
Rural	84.6	15,054
Region		
Western	81.3	1,905
Central	77.9	3,329
Greater Accra	73.5	3,249
Volta	91.9	1,775
Eastern	84.9	2,772
Ashanti	81.0	5,653
Western North	85.5	978
Ahafo	91.0	810
Bono	85.7	1,128
Bono East	88.3	1,281
Oti	93.4	1,011
Northern	82.0	1,748
Savannah	86.4	681
North East	88.9	382
Upper East	76.7	1,309
Upper West	85.3	601
Wealth quintile		
Lowest	85.9	5,798
Second	84.8	6,232
Middle	84.6	6,067
Fourth	78.7	5,511
Highest	76.9	5,003
Total	82.4	28,611

Table C.14 Observation of handwashing facility

Percent distribution of handwashing facilities in all households by whether or not they were observed by the interviewers, according to background characteristics (weighted), Ghana DHS 2022

Background characteristic	Handwashing facility observed		Handwashing facility not observed			Total	Number of households
	Fixed place	Mobile	Not in dwelling, yard, or plot	No permission to see	Other reason		
Residence							
Urban	27.7	62.6	7.9	0.6	1.2	100.0	10,320
Rural	10.0	77.1	10.6	0.6	1.7	100.0	7,613
Region							
Western	27.1	71.6	0.6	0.1	0.7	100.0	1,282
Central	20.2	66.6	12.9	0.1	0.2	100.0	1,950
Greater Accra	37.2	60.6	1.7	0.3	0.2	100.0	3,183
Volta	15.7	81.8	2.5	0.0	0.0	100.0	888
Eastern	16.1	79.9	1.3	0.3	2.3	100.0	1,701
Ashanti	20.3	66.6	7.2	1.8	4.0	100.0	3,469
Western North	9.3	80.5	7.9	0.7	1.6	100.0	521
Ahafo	10.2	66.7	22.5	0.2	0.5	100.0	388
Bono	12.6	67.6	18.9	0.2	0.7	100.0	668
Bono East	8.5	57.2	31.5	0.4	2.3	100.0	693
Oti	6.3	82.8	10.8	0.1	0.1	100.0	444
Northern	14.8	64.8	19.6	0.2	0.7	100.0	1,064
Savannah	5.5	85.7	8.2	0.4	0.1	100.0	316
North East	9.7	65.7	21.1	0.6	2.9	100.0	287
Upper East	13.3	59.2	25.4	0.4	1.7	100.0	654
Upper West	6.9	83.2	7.8	1.9	0.2	100.0	427
Wealth quintile							
Lowest	5.3	76.7	16.3	0.5	1.2	100.0	2,797
Second	5.9	79.4	11.9	0.6	2.2	100.0	3,151
Middle	8.6	80.1	9.2	0.6	1.5	100.0	3,762
Fourth	17.0	73.8	7.2	0.4	1.6	100.0	4,204
Highest	55.9	38.9	3.7	0.9	0.7	100.0	4,020
Total	20.2	68.7	9.1	0.6	1.4	100.0	17,933

Table C.15 School attendance by single year of age

Percent distribution of the de jure population age 4–24 by educational level and grade attended in the current school year (weighted), Ghana DHS 2022

Age in years at beginning of school year	Not attending school	Early childhood education program	Primary school grade						Secondary school grade						More than secondary	Don't know	Total	Number of persons age 4–24
			1	2	3	4	5	6	1	2	3	4	5	6				
4	15.5	78.6	4.5	1.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,657
5	11.5	67.1	15.1	5.3	0.7	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,802
6	9.4	32.7	38.9	15.4	2.3	0.9	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,742
7	7.6	14.1	31.5	33.8	10.4	1.5	0.2	0.4	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	100.0	1,739
8	8.1	5.5	14.2	33.0	29.2	7.7	1.5	0.4	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.1	100.0	1,700
9	7.3	2.5	7.4	18.2	29.1	25.8	7.4	1.8	0.1	0.1	0.1	0.3	0.0	0.0	0.0	0.0	100.0	1,756
10	7.3	1.7	3.3	9.5	21.2	26.3	23.0	5.7	0.6	0.0	0.2	0.8	0.3	0.0	0.1	0.0	100.0	1,533
11	7.1	0.5	1.2	4.5	9.8	21.4	27.8	19.1	6.6	1.2	0.2	0.1	0.2	0.2	0.0	0.1	100.0	1,707
12	8.8	0.1	0.5	1.9	6.0	11.3	18.4	26.3	18.8	6.0	1.0	0.5	0.2	0.1	0.1	0.0	100.0	1,721
13	11.8	0.2	0.2	0.9	3.1	6.3	11.4	19.4	24.6	17.9	3.5	0.3	0.4	0.1	0.0	0.0	100.0	1,619
14	15.1	0.0	0.1	0.2	1.3	1.9	6.1	12.4	21.8	23.9	15.2	0.9	0.6	0.4	0.1	0.0	100.0	1,402
15	22.8	0.0	0.1	0.2	0.6	1.3	2.6	6.8	13.1	23.1	21.3	5.0	2.7	0.3	0.0	0.0	100.0	1,200
16	30.2	0.0	0.0	0.2	0.4	0.8	0.9	3.3	6.8	15.6	17.5	12.3	8.5	2.9	0.7	0.0	100.0	1,059
17	44.9	0.0	0.0	0.0	0.0	0.2	0.5	0.6	2.9	6.4	14.9	9.3	10.8	8.3	1.2	0.0	100.0	1,057
18	52.6	0.0	0.0	0.1	0.1	0.3	0.3	0.4	1.3	5.1	4.7	6.2	8.1	17.6	3.3	0.0	100.0	967
19	68.5	0.0	0.0	0.1	0.2	0.1	0.4	0.8	0.8	1.7	2.5	2.5	6.1	10.8	5.2	0.1	100.0	1,071
20	76.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	1.7	1.1	3.0	7.7	9.3	0.0	100.0	837
21	80.6	0.0	0.0	0.2	0.0	0.0	0.1	0.1	0.5	0.5	1.5	0.3	1.8	4.0	10.2	0.0	100.0	1,083
22	84.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.5	1.3	0.4	1.0	3.9	8.5	0.0	100.0	981
23	88.2	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.6	0.5	0.6	0.1	0.1	3.9	5.5	0.0	100.0	868
24[a]	83.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.6	3.7	0.0	0.4	2.2	8.1	0.0	100.0	227

Note: Age at the beginning of the school year is calculated from dates of birth of household members or by rejuvenating household members based on the date of the survey, the date after the start of the school year, and completed age at the time of the survey. Levels and grades refer to the current school year or the most recent school year if data collection was completed between school years.

[a] Those age 25 at the time of the interview who were age 24 at the beginning of the school year are excluded from the table since data on current attendance were collected only for those age 4–24 at the time of the interview.

Table C.16 Vaccination cards photographed

Percentage of children under age 3 reported to have a vaccination card, percentage whose vaccination card was seen by the interviewer, percentage whose vaccination card was photographed or was not photographed by reason, and among children with a vaccination card seen, percentage of cards photographed, according to background characteristics (weighted), Ghana DHS 2022

Background characteristic	Percentage of children reported to have a vaccination card	Percentage of children whose vaccination card was seen by interviewer	Percentage of children whose vaccination card was photographed	Percentage of children whose vaccination card was not photographed as permission was not received	Percentage of children whose vaccination card was not photographed for other reasons	Number of children	Among children with a vaccination card seen	
							Percentage of vaccination cards photographed	Number of children
Age in months								
0–11	91.6	88.6	83.1	1.5	4.0	1,718	93.8	1,522
12–23	90.6	87.9	83.7	0.9	3.3	1,823	95.2	1,602
24–35	83.5	78.5	74.3	1.0	3.2	1,546	94.6	1,213
Residence								
Urban	88.9	84.5	80.4	1.4	2.7	2,437	95.2	2,058
Rural	88.6	86.0	80.8	0.9	4.3	2,650	94.0	2,279
Region								
Western	86.7	81.6	80.5	0.4	0.7	309	98.7	253
Central	89.9	82.6	76.9	2.5	3.2	519	93.0	429
Greater Accra	93.4	89.2	84.5	1.0	3.6	626	94.8	559
Volta	92.1	88.9	76.2	1.1	11.6	193	85.7	172
Eastern	88.4	83.8	71.5	0.3	12.0	360	85.3	301
Ashanti	89.3	85.5	82.6	2.3	0.6	892	96.7	762
Western North	93.0	92.1	87.9	1.2	3.1	142	95.4	131
Ahafo	86.9	85.2	84.5	0.0	0.6	115	99.3	98
Bono	90.4	87.9	84.4	0.0	3.5	171	96.0	151
Bono East	88.5	86.7	86.4	0.0	0.3	273	99.7	237
Oti	87.0	84.1	81.6	1.8	0.8	172	97.0	144
Northern	81.8	79.7	74.4	0.8	4.6	569	93.3	454
Savannah	88.5	87.7	83.1	0.3	4.4	158	94.7	138
North East	92.0	91.5	89.7	1.0	0.8	171	98.0	157
Upper East	84.1	80.6	80.0	0.2	0.4	267	99.2	215
Upper West	92.9	91.3	79.2	0.6	11.6	150	86.7	137
Wealth quintile								
Lowest	85.8	84.4	80.4	0.8	3.2	1,207	95.3	1,019
Second	89.2	85.9	80.9	0.4	4.6	1,055	94.2	906
Middle	90.3	85.4	81.2	1.0	3.2	1,012	95.1	864
Fourth	88.4	83.2	77.7	1.8	3.8	961	93.3	800
Highest	91.2	87.7	83.1	1.9	2.8	851	94.7	747
Total	88.8	85.2	80.6	1.1	3.5	5,087	94.6	4,337

Note: Vaccination cards include cards, booklets, and other home-based records.

Table C.17 Number of enumeration areas completed by month and region

During the period of fieldwork, number of enumeration areas (EAs) completed by month, according to region, and percent distribution of EAs completed by month, Ghana DHS 2022

Region	Month of fieldwork				Number of EAs
	January	October	November	December	
Western	5	7	14	11	37
Central	7	7	15	11	40
Greater Accra	6	6	16	20	48
Volta	7	5	13	12	37
Eastern	4	6	14	17	41
Ashanti	5	9	19	15	48
Western North	5	7	13	12	37
Ahafo	9	3	8	16	36
Bono	21	0	0	15	36
Bono East	16	3	5	12	36
Oti	0	8	20	8	36
Northern	0	7	23	9	39
Savannah	0	6	18	13	37
North East	0	8	17	11	36
Upper East	0	8	20	9	37
Upper West	0	11	20	6	37
Total number of EAs	85	101	235	197	618
Percent distribution	13.8	16.3	38.0	31.9	100.0

Note: EAs are classified by month according to the date by which the last Biomarker Questionnaire in the EA was completed.

Table C.18 Positive rapid diagnostic test (RDT) results by month and region

Among children age 6–59 months tested for malaria by RDT, percentage who tested positive by month of fieldwork, according to region, Ghana DHS 2022

Region	Percentage of children classified as having malaria by month of fieldwork				Total percentage	Number of children
	January	October	November	December		
Western	(6.6)	(24.0)	32.3	16.8	22.5	241
Central	(2.8)	(9.8)	23.8	18.4	16.1	397
Greater Accra	(0.0)	(0.0)	6.8	3.1	3.4	462
Volta	(6.6)	(4.7)	18.9	11.2	11.5	154
Eastern	*	(5.2)	17.5	18.3	14.8	294
Ashanti	(7.9)	(5.1)	10.1	16.9	11.1	705
Western North	*	(7.9)	14.4	12.2	11.4	91
Ahafo	(11.9)	(24.6)	31.2	20.3	21.4	87
Bono	10.4	*	*	20.8	15.1	124
Bono East	21.3	*	(15.7)	27.7	22.1	185
Oti	*	14.9	19.7	40.0	22.6	119
Northern	*	7.8	25.4	14.6	18.8	430
Savannah	*	17.2	30.0	28.0	26.6	113
North East	*	26.9	25.8	28.7	26.9	130
Upper East	*	32.9	29.3	42.1	33.6	184
Upper West	*	23.6	27.6	42.1	30.2	122
Total	8.9	11.3	20.1	18.1	16.5	3,838

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table C.18a Positive rapid diagnostic test (RDT) results by month and region (unweighted)

Among children age 6–59 months tested for malaria by RDT, number who tested positive by month of fieldwork, according to region, Ghana DHS 2022

Region	Number of children classified as having malaria by month of fieldwork				Total
	January	October	November	December	
Western	25	40	76	71	212
Central	38	38	75	87	238
Greater Accra	31	29	70	72	202
Volta	43	28	54	67	192
Eastern	19	34	67	90	210
Ashanti	39	48	105	93	285
Western North	22	49	55	57	183
Ahafo	45	25	50	117	237
Bono	104	0	0	89	193
Bono East	117	15	44	111	287
Oti	0	64	147	52	263
Northern	0	94	259	99	452
Savannah	0	78	185	112	375
North East	0	118	220	124	462
Upper East	0	81	144	74	299
Upper West	0	91	155	61	307
Total	483	832	1,706	1,376	4,397

Table C.19 Concordance and discordance between RDT and microscopy results

Among children age 6–59 months tested for malaria, percent distribution of results according to concordance and discordance between RDT and microscopy test results, Ghana DHS 2022

	Concordance		Discordance			
	RDT+/ microscopy+	RDT−/ microscopy−	RDT+/ microscopy−	RDT−/ microscopy+	Total percentage	Number of children
Total	7.6	82.4	9.0	1.1	100.0	3,838

PERSONS INVOLVED IN THE 2022 GHANA DEMOGRAPHIC AND HEALTH SURVEY

Appendix D

GHANA STATISTICAL SERVICE TEAM

Samuel Kobina Anim	Government Statistician and Project Director
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Elizabeth Arhin-Donkor	Project Accountant
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Mabruk Fuseini	Director of Procurement
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QUESTIONNAIRES

Appendix **E**

FORMATTING DATE: 8 Apr 2022
ENGLISH LANGUAGE: 8 Apr 2022

2022 GHANA DEMOGRAPHIC AND HEALTH SURVEYS
HOUSEHOLD QUESTIONNAIRE

GHANA
GHANA STATISTICAL SERVICE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD SELECTED FOR MAN'S SURVEY? (1=YES, 2=NC . . . . . [ ]

HOUSEHOLD SELECTED FOR DV? (1=YES, 2=NO . . . . . [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
				MONTH [ ][ ]
				YEAR [ ][ ][ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NO. [ ][ ][ ][ ]
RESULT*	_____	_____	_____	RESULT* [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES:

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD [ ][ ]

TOTAL ELIGIBLE WOMEN [ ][ ]

TOTAL ELIGIBLE MEN [ ][ ]

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE [ ][ ]

LANGUAGE OF QUESTIONNAIRE** **0 1** LANGUAGE OF INTERVIEW** [ ][ ] NATIVE LANGUAGE OF RESPONDENT** [ ][ ] TRANSLATOR USED (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH 03 GA 05 DAGBANI
02 AKAN 04 EWE

TEAM NUMBER [ ][ ]

TEAM SUPERVISOR
NAME _____ NUMBER [ ][ ][ ][ ]

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INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Ghana Statistical Service (GSS). We are conducting a survey about health and other topics all over Ghana. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time. In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

100	RECORD THE TIME.	HOURS . . . . . MINUTES . . . . .

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP, SEX, RESIDENCE, AND AGE FOR EACH PERSON, ASK QUESTIONS 7A-7C TO BE SURE THAT THE THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 8-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	**IF HOUSE-HOLD SELEC-TED FOR MAN'S SURVEY** CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		01	01	01
02			1 2	1 2	1 2			02	02	02
03			1 2	1 2	1 2			03	03	03
04			1 2	1 2	1 2			04	04	04
05			1 2	1 2	1 2			05	05	05
06			1 2	1 2	1 2			06	06	06
07			1 2	1 2	1 2			07	07	07
08			1 2	1 2	1 2			08	08	08
09			1 2	1 2	1 2			09	09	09
10			1 2	1 2	1 2			10	10	10

7A)	Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed?	YES ☐ → ADD TO TABLE	NO ☐
7B)	Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?	YES ☐ → ADD TO TABLE	NO ☐
7C)	Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?	YES ☐ → ADD TO TABLE	NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

HOUSEHOLD SCHEDULE

	IF AGE 0-17 YEARS				IF AGE 4 YEARS OR OLDER		IF AGE 4-24 YEARS		IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BIRTH REGISTRATION
	12	13	14	15	16	17	18	19	20
	Is (NAME)'s biological mother alive?	Does (NAME)'s biological mother usually live in this household or was she a guest last night? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s biological father alive?	Does (NAME)'s biological father usually live in this household or was he a guest last night? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school or any early childhood education program?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school or any early childhood education program at any time during the 2022 school year?	During [this/that] school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 GO TO 20	LEVEL GRADE	Y N 1 2 GO TO 20	LEVEL GRADE	
02	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		
03	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		
04	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		
05	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		
06	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		
07	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		
08	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		
09	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		
10	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 20		1 2 GO TO 20		

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL

0 =PRE- PRIMARY
1 = PRIMARY
2 = MIDDLE
3 = JSS/JHS
4=SECONDARY
5=SSS/SHS
6 = HIGHER
8 = DON'T KNOW

GRADE

00 = LESS THAN 1 YEAR COMPLETED (USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
98 = DON'T KNOW

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOR . . . . . 13 PUBLIC TAP/STANDPIPE . . . . . 14 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 SACHET WATER . . . . . 92 OTHER _____ 96 (SPECIFY)	→ 106 → 103 → 103
102	What is the main source of water used by your household for other purposes such as cooking and handwashing?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOR . . . . . 13 PUBLIC TAP/STANDPIPE . . . . . 14 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 OTHER _____ 96 (SPECIFY)	→ 106
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	→ 106
104	How long does it take to go there, get water, and come back?	MINUTES . . . . . ☐☐☐ DON'T KNOW 998	
105	Who usually goes to this source to collect the water for your household? RECORD THE PERSON'S NAME AND LINE NUMBER FROM THE HOUSEHOLD SCHEDULE. IF THE PERSON IS NOT LISTED IN THE HOUSEHOLD ROSTER, RECORD '00'.	NAME _____ LINE NUMBER . . . . . ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106	In the last month, has there been any time when your household did not have sufficient quantities of drinking water when needed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
107	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 109
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F CAMPHOR/ NAPHTHALENE . . . . . G PURIFICATION TABLET . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
109	What kind of toilet facility do members of your household usually use? IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	**FLUSH OR POUR FLUSH TOILET** FLUSH TO PIPED SEWER SYSTEM . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, BIO-DIGESTER (BIOFIL) . . . . . 15 FLUSH, DON'T KNOW WHERE . . . . . 16 **PIT LATRINE** VENTILATED IMPROVED PIT LATRINE . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/OPEN PIT . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE . . . . 51 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 117
110	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 112
111	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . 0 ☐ 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
111A	What kind of shared toilet is it?	PUBLIC TOILET/ COMMUNAL TOILET . . . . . 1 COMPOUND TOILET 2	
111B	How much do you pay to use the facility?	GH₵ . . . . . ☐☐	
112	Where is this toilet facility located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	
113	CHECK 109: CODES 12, 13, 21, 22, 23, OR 31 CIRCLED ☐ ↓ OTHER ☐		→ 117
114	Has your (septic tank/pit latrine/composting toilet) ever been emptied?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 117

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
115	The last time the (septic tank/pit latrine/composting toilet) was emptied, was it emptied by a service provider?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
116	Where were the contents emptied to?	A TREATMENT PLAN . . . . . 1 BURIED IN A COVERED PIT . . . . . 2 UNCOVERED PIT/BUSH/FIELD/ OPEN GROUN . . . . . 3 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
117	In your household, what type of cookstove is mainly used for cooking?	ELECTRIC STOVE . . . . . 01 SOLAR COOKER . . . . . 02 LIQUEFIED PETROLEUM GAS (LPG)/ COOKING GAS STOVE . . . . . 03 PIPED NATURAL GAS STOVE . . . . . 04 BIOGAS STOVE . . . . . 05 LIQUID FUEL STOVE . . . . . 06 MANUFACTURED SOLID FUEL STOVE . . . . 07 TRADITIONAL SOLID FUEL STOVE . . . . . 08 THREE STONE STOVE/OPEN FIRE . . . . . 09 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 121 → 120 → 120 → 123 → 120
118	Does the stove have a chimney?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
120	What type of fuel or energy source is used in this cookstove?	ALCOHOL/ETHANOL . . . . . 01 GASOLINE/DIESEL . . . . . 02 KEROSENE/PARAFFIN . . . . . 03 COOKING GEL . . . . . 04 CHARCOAL . . . . . 05 WOOD . . . . . 06 STRAW/SHRUBS/GRASS . . . . . 07 AGRICULTURAL CROP . . . . . 08 ANIMAL DUNG/WASTE . . . . . 09 PROCESSED BIOMASS (PELLETS) OR WOODCHIPS . . . . . 10 GARBAGE/PLASTIC . . . . . 11 SAWDUST . . . . . 12 OTHER _____ 96 (SPECIFY)	
121	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 123
122	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
123	What does this household use to heat the home when needed? IF THE RESPONDENT SAYS ELECTRICITY OR GAS, ASK: What type of heater is the (electricity/gas) used in?	CENTRAL HEATING . . . . . 01 MANUFACTURED SPACE HEATER . . . . . 02 TRADITIONAL SPACE HEATER . . . . . 03 MANUFACTURED COOKSTOVE . . . . . 04 TRADITIONAL COOKSTOVE . . . . . 05 THREE STONE STOVE/OPEN FIRE . . . . . 06 NO SPACE HEATING IN HOUSEHOLD/NO NEED . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 125 → 125 → 126 → 125

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
124	Does it have a chimney?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
125	What type of fuel or energy source is used in this heater?	ELECTRICITY . . . . . 01 PIPED NATURAL GAS . . . . . 02 SOLAR AIR HEATER . . . . . 03 LIQUEFIED PETROLEUM GAS (LPG)/ COOKING GAS . . . . . 04 BIOGAS . . . . . 05 ALCOHOL/ETHANOL . . . . . 06 GASOLINE/DIESEL . . . . . 07 KEROSENE/PARAFFIN . . . . . 08 COAL/LIGNITE . . . . . 09 CHARCOAL . . . . . 10 WOOD . . . . . 11 STRAW/SHRUBS/GRASS . . . . . 12 AGRICULTURAL CROP . . . . . 13 ANIMAL DUNG/WASTE . . . . . 14 PROCESSED BIOMASS (PELLETS) OR WOODCHIPS . . . . . 15 GARBAGE/PLASTIC . . . . . 16 SAWDUST . . . . . 17 OTHER _____ 96 (SPECIFY)	
126	At night, what does your household mainly use to light the home?	ELECTRICITY . . . . . 01 SOLAR LANTERN . . . . . 02 RECHARGEABLE FLASHLIGHT, TORCH OR LANTERN . . . . . 03 BATTERY POWERED FLASHLIGHT, TORCH OR LANTERN . . . . . 04 BIOGAS LAMP . . . . . 05 GASOLINE LAMP . . . . . 06 KEROSENE OR PARAFFIN LAMP . . . . . 07 CHARCOAL . . . . . 08 WOOD . . . . . 09 STRAW/SHRUBS/GRASS . . . . . 10 AGRICULTURAL CROP . . . . . 11 ANIMAL DUNG/WASTE . . . . . 12 OIL LAMP . . . . . 13 CANDLE . . . . . 14 NO LIGHTING IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	
127	How many rooms in this household are used for sleeping?	ROOMS	
128	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 130
129	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 95 OR MORE, RECORD '95'. IF UNKNOWN, RECORD '98'. a) Milk cows or bulls? b) Other cattle? c) Horses, donkeys, or mules? d) Goats? e) Sheep? f) Chickens or other poultry? g) Rabbits? h) Grasscutters? i) Pigs?	a) COWS/BULLS . . . . . b) OTHER CATTLE . . . . . c) HORSES/DONKEYS/MULES . . . . d) GOATS . . . . . e) SHEEP . . . . . f) CHICKENS/POULTRY . . . . . g) RABBITS . . . . . h) GRASCUTTERS . . . . . i) PIGS	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
130	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 132
131	How many hectares of agricultural land do members of this household own? IF 95 OR MORE HECTARES, RECORD '950' IF 95 OR MORE ACRES, RECORD IN HECTARES IF 95 OR MORE PLOTS, RECORD IN ACRES	HECTARES . . . . . 1 ☐☐.☐ ACRES . . . . . 2 ☐☐.☐ PLOTS . . . . . 3 ☐☐.☐ 95 OR MORE HECTARES . . . . . 950 DON'T KNOW 998	
132	Does your household have:		
	a) Electricity?	a) ELECTRICITY 1 2	
	b) A radio?	b) RADIO 1 2	
	c) A television?	c) TELEVISION 1 2	
	d) A non-mobile telephone?	d) NON-MOBILE TELEPHONE . . 1 2	
	e) A computer?	e) COMPUTER 1 2	
	f) A refrigerator?	f) REFRIGERATOR 1 2	
	g) A freezer?	g) FREEZER 1 2	
	h) An electric generator/Invertor?	h) GENERATOR 1 2	
	i) A washing machine?	i) WASHING MACHINE 1 2	
	j) A photo camera? (NOT ON PHONE)	j) CAMERA 1 2	
	k) A video deck/DVD/VCD?	k) VIDEO/DVD/VCD 1 2	
	l) A sewing machine?	l) SEWING MACHINE 1 2	
	m) A bed?	m) BED 1 2	
	n) A table?	n) TABLE 1 2	
	o) A chair?	o) CHAIR 1 2	
	p) A cabinet/cupboard?	p) CABINET 1 2	
133	Does any member of this household own:		
	a) A watch?	a) WATCH 1 2	
	b) A mobile phone?	b) MOBILE PHONE 1 2	
	c) A bicycle?	c) BICYCLE 1 2	
	d) A motorcycle or motor scooter?	d) MOTORCYCLE/SCOOTER . . 1 2	
	e) An animal-drawn cart?	e) ANIMAL-DRAWN CART 1 2	
	f) A car or truck?	f) CAR/TRUCK 1 2	
	g) A boat with a motor?	g) BOAT WITH MOTOR 1 2	
	h) A boat without a motor?	h) BOAT WITHOUT MOTOR . . 1 2	
134	Does any member of this household have an account in a bank or other financial institution?	YES . . . . . 1 NO 2	
135	Does any member of this household use a mobile phone to make financial transactions such as sending or receiving money, paying bills, purchasing goods or services, or receiving wages?	YES . . . . . 1 NO 2	
136	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less often than once a month, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS OFTEN THAN ONCE A MONTH . . . . . 4 NEVER 5	
136A	At any time in the past 12 months, has anyone come into your dwelling to spray the interior walls against mosquitoes?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 137
136B	Who sprayed the dwelling?	GOVERNMENT WORKER/PROGRAM . . . . A PRIVATE COMPANY . . . . . B NONGOVERNMENTAL ORGANIZATION (NGO) . . . . . C OTHER _____ (SPECIFY) X DON'T KNOW . . . . . Z	
137	Does your household have any mosquito nets?	YES . . . . . 1 NO 2	→ 149
138	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS . . . . . ☐	

MOSQUITO NETS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	ASK THE RESPONDENT TO SHOW YOU ALL THE NETS IN THE HOUSEHOLD. OBSERVE AND ANSWER THE QUESTIONS FOR EACH NET, ONE BY ONE.		
139	ASSIGN EACH NET A SEQUENTIAL NUMBER AND RECORD THE NUMBER HERE.	NET NUMBER	
140	WAS THIS NET OBSERVED?	OBSERVED . . . . . 1 NOT OBSERVED 2	
141	How many months ago did your household get the mosquito net? IF LESS THAN ONE MONTH AGO, RECORD '00'.	MONTHS AGO . . . . . MORE THAN 36 MONTHS AGO . . . . . 95 NOT SURE 98	
142	OBSERVE OR ASK BRAND/TYPE OF MOSQUITO NET. IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.	**INSECTICIDE TREATED NET (ITN)** OLYSET . . . . . 11 PERMANET . . . . . 12 INTERCEPTOR . . . . . 13 INTERCEPTOR G2 . . . . . 14 ROYAL SENTRY . . . . . 15 DURANET . . . . . 16 LIFE NET . . . . . 17 DAWA PLUS . . . . . 18 MAGNET . . . . . 19 YORKOOL . . . . . 20 OLYSET PLUS . . . . . 21 DAWA . . . . . 22 OTHER/DON'T KNOW BRAND (ITN) . . . . 23 OTHER TYPE (NOT ITN) . . . . . 96 DON'T KNOW TYPE 98	
143	Did you get the net through the 2021/2022 mass distribution campaign, during an antenatal care visit, or during an immunization visit?	YES, 2021/2022 MASS DIST. CAMPAIGN . . . . . 1 YES, ANC . . . . . 2 YES, IMMUNIZATION VISIT . . . . . 3 YES, SCHOOL DIST. . . . . 4 NO 5	→ 145
144	Where did you get the net?	PRIVATE HEALTH FACILITY . . . . . 01 PHARMACY/ CHEMIST/DRUG STORE . . . . . 02 SHOP/MARKET . . . . . 03 RELIGIOUS INSTITUTION . . . . . 04 NGO . . . . . 05 COMMUNITY VOLUNTEERS . . . . 06 PETROL STATION/MOBILE MART . . . . . 07 PRIOR MASS DIST. CAMPAIGN . . . . . 08 OTHER . . . . . 96 DON'T KNOW 98	
145	Did anyone sleep under this mosquito net last night?	YES . . . . . 1 NO . . . . . 2 NOT SURE 8	→ 147 → 148

MOSQUITO NETS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
146	Who slept under this mosquito net last night? RECORD THE PERSON'S NAME AND LINE NUMBER FROM HOUSEHOLD SCHEDULE.	NAME _____ LINE NUMBER . . . . . [ ][ ] NAME _____ LINE NUMBER . . . . . [ ][ ] NAME _____ LINE NUMBER . . . . . [ ][ ] NAME _____ LINE NUMBER . . . . . [ ][ ]	→ 148
147	What was the main reason this net was not used last night?	TOO HOT . . . . . 01 NO MOSQUITOES . . . . . 02 NO MALARIA . . . . . 03 PREFER OTHER METHOD (COILS, SPRAY, FANS) . . . . . 04 NET TOO OLD/TORN . . . . . 05 CHEMICALS IN NET ARE UNSAFE . . . . . 06 DON'T LIKE SMELL . . . . . 07 NET TOO SHORT/SMALL . . . . . 08 USUAL USER DID NOT SLEEP HERE . . . . . 09 EXTRA NET/SAVING FOR LATER 10 NET WAS BEING WASHED/DRIED/ AIRED . . . . . 11 SLEPT OUTSIDE . . . . . 12 NET BROUGHT BUGS . . . . . 13 DON'T LIKE SHAPE . . . . . 14 DO NOT LIKE TEXTURE . . . . . 15 OTHER _____ 96 (SPECIFY)	
148 (9)	GO BACK TO 139 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 149.		

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
149	We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands?	OBSERVED, FIXED PLACE . . . . . 1 OBSERVED, MOBILE . . . . . 2 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . . 3 NOT OBSERVED, NO PERMISSION TO SEE . . 4 NOT OBSERVED, OTHER REASON 5	→ 152
150	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
151	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . . A ASH, MUD, SAND . . . . . B NONE . . . . . Y	
152	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. RECORD OBSERVATION.	**NATURAL FLOOR** EARTH/SAND . . . . . 11 DUNG . . . . . 12 **RUDIMENTARY FLOOR** WOOD PLANKS . . . . . 21 PALM/BAMBOO . . . . . 22 **FINISHED FLOOR** PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR ASPHALT STRIPS . . . . . 32 CERAMIC/MARBLE/PORCELAIN TILES/TERRAZO . . . . . 33 CEMENT . . . . . 34 WOOLEN CARPET/SYNTHETIC CARPET . . 35 LINOLEUM/RUBBER CARPET . . . . . 36 OTHER _____ 96 (SPECIFY)	
153	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. RECORD OBSERVATION.	**NATURAL ROOFING** NO ROOF . . . . . 11 THATCH/PALM LEAF . . . . . 12 SOD . . . . . 13 **RUDIMENTARY ROOFING** RUSTIC MAT . . . . . 21 PALM/BAMBOO . . . . . 22 WOOD PLANKS . . . . . 23 CARDBOARD . . . . . 24 **FINISHED ROOFING** ZINC/ALUMINIUM . . . . . 31 WOOD . . . . . 32 CERAMIC/BRICK TILES . . . . . 33 CEMENT . . . . . 34 ROOFING SHINGLES . . . . . 35 ASBESTOS/SLATE ROOFING SHEETS . . 36 OTHER _____ 96 (SPECIFY)	

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
154	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. RECORD OBSERVATION.	**NATURAL WALLS** NO WALLS . . . . . 11 CANE/PALM/TRUNKS . . . . . 12 DIRT . . . . . 13 **RUDIMENTARY WALLS** BAMBOO WITH MUD . . . . . 21 STONE WITH MUD . . . . . 22 UNCOVERED ADOBE . . . . . 23 PLYWOOD . . . . . 24 CARDBOARD . . . . . 25 REUSED WOOD . . . . . 26 **FINISHED WALLS** CEMENT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BRICKS . . . . . 33 CEMENT BLOCKS . . . . . 34 COVERED ADOBE . . . . . 35 WOOD PLANKS/SHINGLES . . . . . 36 OTHER _____ 96 (SPECIFY)	
155	I would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household? TEST SALT FOR IODINE.	**SALT TESTED** IODINE PRESENT . . . . . 1 NO IODINE . . . . . 2 **SALT NOT TESTED** HOUSEHOLD USES SALT BUT THERE IS NO SALT IN THE HOUSEHOLD . . . . . 3 HOUSEHOLD DOES NOT USE SALT . . . . 4 SALT NOT TESTED _____ 6 (SPECIFY REASON)	
156	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

FORMATTING DATE: 8 Apr 2022
ENGLISH LANGUAGE: 8 Apr 2022

2022 GHANA DEMOGRAPHIC AND HEALTH SURVEYS
WOMAN'S QUESTIONNAIRE

GHANA
GHANA STATISTICAL SERVICE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ][ ]

NAME AND LINE NUMBER OF WOMAN _____ [ ][ ]

HOUSEHOLD SELECTED FOR MAN'S SURVEY? (1=YES, 2=NO) . . . . . [ ]

CHECK COVER PAGE OF HOUSEHOLD QUESTIONNAIRE: HOUSEHOLD SELECTED FOR DV MODULE? (1=YES, 2=NO) [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY [ ][ ]
				MONTH [ ][ ]
				YEAR [ ][ ][ ][ ]
INTERVIEWER'S NAME				INT. NO. [ ][ ][ ][ ]
RESULT*				RESULT* [ ]
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS [ ]
TIME				

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE** [0][1] LANGUAGE OF INTERVIEW** [ ][ ] NATIVE LANGUAGE OF RESPONDENT** [ ][ ] TRANSLATOR USED (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** ENGLISH

**LANGUAGE CODES:
01 ENGLISH; 02 AKAN; 03 GA; 04 EWE; 05 DAGBANI

TEAM NUMBER [ ][ ]

TEAM SUPERVISOR
NAME _____ NUMBER [ ][ ][ ][ ]

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with Ghana Statistical Service (GSS). We are conducting a survey about health and other topics all over Ghana. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	What REGION were you born in?	WESTERN . . . . . 01 CENTRAL . . . . . 02 GREATER ACCRA . . . . . 03 VOLTA . . . . . 04 EASTERN . . . . . 05 ASHANTI . . . . . 06 WESTERN NORTH . . . . . 07 AHAFO . . . . . 08 BONO . . . . . 09 BONO EAST . . . . . 10 OTI . . . . . 11 NORTHERN . . . . . 12 SAVANNAH . . . . . 13 NORTH EAST . . . . . 14 UPPER EAST . . . . . 15 UPPER WEST . . . . . 16 OUTSIDE OF GHANA 96	→ 104
103	What country were you born in?	COUNTRY _____ ☐☐	
104	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 110
105	CHECK 104: 00 - 04 YEARS ☐ ↓ 05 YEARS OR MORE ☐ → 107		
106	In what month and year did you move here?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
107	Just before you moved here, which REGION did	WESTERN 01	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
	you live in?	CENTRAL	02	
		GREATER ACCRA	03	
		VOLTA	04	
		EASTERN	05	
		ASHANTI	06	
		WESTERN NORTH	07	
		AHAFO	08	
		BONO	09	
		BONO EAST	10	
		OTI	11	
		NORTHERN	12	
		SAVANNAH	13	
		NORTH EAST	14	
		UPPER EAST	15	
		UPPER WEST	16	
		OUTSIDE OF GHANA	96	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA 3	
109	Why did you move to this place?	EMPLOYMENT . . . . . 01 EDUCATION/TRAINING . . . . . 02 MARRIAGE FORMATION . . . . . 03 FAMILY REUNIFICATION/OTHER FAMILY-RELATED REASON . . . . . 04 FORCED DISPLACEMENT . . . . . 05 OTHER _____ 96 (SPECIFY)	
110	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
111	How old were you at your last birthday? COMPARE AND CORRECT 110 AND/OR 111 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . ☐☐	
112	In general, would you say your health is very good, good, moderate, bad, or very bad?	VERY GOOD . . . . . 1 GOOD . . . . . 2 MODERATE . . . . . 3 BAD . . . . . 4 VERY BAD 5	
113	Have you ever attended school?	YES . . . . . 1 NO 2	→ 117
114	What is the highest level of school you attended:pre-primary, primary, middle, JSS/JHS, secondary, SSS/SHS, or higher?	PRE- PRIMARY . . . . . 1 PRIMARY . . . . . 2 MIDDLE . . . . . 3 JSS/JHS . . . . . 4 SECONDARY . . . . . 5 SSS/SHS . . . . . 6 HIGHER 7	
115	What is the highest [GRADE/FORM/YEAR] you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	[GRADE/FORM/YEAR] . . . . . ☐☐	
116	CHECK 114: PRIMARY, MIDDLE, JSS/JHS, SECONDARY, OR SSS/SHS ☐ ↓ HIGHER ☐ →		119
117	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
118	CHECK 117: CODE '2', '3' OR '4' CIRCLED ☐ ↓ CODE '1' OR '5' CIRCLED ☐ →		120

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
119	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
120	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
121	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
122	Do you own a mobile phone?	YES . . . . . 1 NO 2	→ 127
123	Is your mobile phone a smart phone?	YES . . . . . 1 NO 2	
127	Have you ever used the Internet from any location on any device?	YES . . . . . 1 NO 2	→ 130
128	In the last 12 months, have you used the Internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	→ 130
129	During the last one month, how often did you use the Internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
130	What is your religion?	CATHOLIC . . . . . 01 ANGLICAN . . . . . 02 METHODIST . . . . . 03 PRESBYTERIAN . . . . . 04 PENTECOSTAL/CHARISMATIC . . . . . 05 OTHER CHRISTIA . . . . . 06 ISLAM . . . . . 07 TRADITIONAL/SPIRITUALIS . . 08 NO RELIGION . . . . . 95 OTHER _____ 96 (SPECIFY)	
131	What is your ethnic group?	AKAN . . . . . 01 GA/DANGME . . . . . 02 EWE . . . . . 03 GUAN . . . . . 04 MOLE-DAGBANI 05 GRUSI . . . . . 06 GURMA . . . . . 07 MANDE . . . . . 08 OTHER _____ 96 (SPECIFY)	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO 2	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL LIVE BIRTHS . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES → ☐ NO ☐ → PROBE AND CORRECT 201-208 AS		
210	Women sometimes have a pregnancy that does not result in a live birth. For example, a pregnancy can end in a miscarriage, an abortion, or the child can be born dead. Have you ever had a pregnancy that did not end in a live birth?	YES . . . . . 1 NO 2	→ 212
211	How many miscarriages, abortions, and stillbirths have you had?	PREGNANCY LOSSES . . . . . [ ][ ]	
212	SUM ANSWERS TO 208 AND 211 AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL PREGNANCY OUTCOMES . . [ ][ ]	
213	CHECK 212: ONE OR MORE PAST PREGNANCIES ☐ → NO PAST PREGNANCIES ☐ →		→ 232

214 Now I would like to record all your pregnancies including live births, stillbirths, miscarriages, and abortions, starting with your first pregnancy.
RECORD ALL PREGNANCIES IN 215-228. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. IF THERE ARE MORE THAN 3 PREGNANCIES, USE AN ADDITIONAL QUESTIONNAIRE.

215	216	217	218	219	220	221	222
Think back to your (first/next) pregnancy. Was that a single pregnancy, twins, or triplets? IF MULTIPLE PREG-NANCY: COPY VALUE FOR 215 IN NEXT ROW(S). PREG-NANCY HISTORY LINE NUMBER	IF 215=1, ASK: Was the baby born alive, born dead, or did you have a miscarriage or abortion? IF 215 > 1, ASK: Was the (first/next) baby in this pregnancy born alive or born dead?	Did the baby cry, move, or breathe?	What name was given to the baby? RECORD NAME.	Is (NAME) a boy or a girl?	CHECK 216 AND 217: TYPE OF PREGNANCY OUTCOME. NOTE: IF 217=1, THEN PREGNANCY OUTCOME= BORN ALIVE. IF BORN ALIVE, ASK: On what day, month, and year was (NAME) born? IF BORN DEAD, A MISCARRIAGE, OR AN ABORTION, ASK: On what day, month, and	How long did this pregnancy last in weeks or months? RECORD IN COMPLETED WEEKS OR MONTHS.	FOR ROW 01, ASK: Were there any other pregnancies before this pregnancy? AFTER ROW 01: IF 215=1 OR THIS IS THE FIRST BIRTH OF A MULTIPLE PREGNANCY, ASK: Were there any other pregnancies between the previous pregnancy and this pregnancy? IF 215 > 1 AND THIS IS NOT THE FIRST BIRTH OF
01 SING 1 TWINS 2 TRIP 3 NO. OF OUT-	BORN ALIVE 1 (SKIP TO 218) BORN DEAD 2 MISCARRIAG 3 ABORTION 4 (SKIP TO 220)	YES 1 NO 2 (SKIP TO 220)	NAME	BOY 1 GIRL 2	DAY MONTH YEAR	WEEKS 1 MONTHS 2	YES 1 (ADD PREGNANCY) NO 2 (NEXT ROW)
02 SING 1 TWINS 2 TRIP 3 NO. OF OUT-	BORN ALIVE 1 (SKIP TO 218) BORN DEAD 2 MISCARRIAG 3 ABORTION 4 (SKIP TO 220)	YES 1 NO 2 (SKIP TO 220)	NAME	BOY 1 GIRL 2	DAY MONTH YEAR	WEEKS 1 MONTHS 2	YES 1 (ADD PREGNANCY) NO 2 (NEXT ROW)
03 SING 1 TWINS 2 TRIP 3 NO. OF OUT-	BORN ALIVE 1 (SKIP TO 218) BORN DEAD 2 MISCARRIAG 3 ABORTION 4 (SKIP TO 220)	YES 1 NO 2 (SKIP TO 220)	NAME	BOY 1 GIRL 2	DAY MONTH YEAR	WEEKS 1 MONTHS 2	YES 1 (ADD PREGNANCY) NO 2 (NEXT ROW)

222A	Have you had any pregnancies that ended since the last pregnancy mentioned?	YES . . . . . 1→ADD TO TABLE NO 2	
222B	READ THE LIST OF PREGNANCY OUTCOMES IN ORDER TO THE RESPONDENT AND ASK IF THEY ARE ALL THAT SHE HAS EVER HAD, AND IF THEY ARE LISTED IN ORDER STARTING FROM THE FIRST ONE. DOES THE RESPONDENT AGREE? IF NOT, PROBE FOR THE CORRECT INFORMATION AND REVISE THE PREGNANCY HISTORY ACCORDINGLY. IF YES, PROCEED TO 223 ROW 1.		

	223	224	225	226	227	228
			IF BORN ALIVE AND STILL LIVING:			IF BORN ALIVE AND NOW DEAD:
	CHECK 216, 217 AND 221: IF 216=1 OR 217=1, THEN PREGNANCY OUTCOME = BORN ALIVE. IF 216=2 OR 3, THEN CHECK 221. IF 221 ≥ 7 MONTHS OR 28 WEEKS, THEN PREGNANCY OUTCOME = BORN DEAD. IF 221 < 7 MONTHS OR 28 WEEKS, FINAL PREGNANCY OUTCOME = MISCARRIAGE. IF 216=4, THEN PREGNANCY	Is (NAME) still alive?	How old was (NAME) at (his/her) last birthday? RECORD AGE IN COMP-LETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.
01	BORN ALIVE 1 1 BORN DEAD 2 MISCARRIAGE 3 ABORTION 4	YES 1 NO 2 (SKIP TO 228)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ (SKIP TO 223 IN NEXT ROW)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐ (SKIP TO 223 IN NEXT ROW)
02	BORN ALIVE 1 BORN DEAD 2 MISCARRIAGE 3 ABORTION 4	YES 1 NO 2 (SKIP TO 228)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ (SKIP TO 223 IN NEXT ROW)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐ (SKIP TO 223 IN NEXT ROW)
03	BORN ALIVE 1 BORN DEAD 2 MISCARRIAGE 3 ABORTION 4	YES 1 NO 2 (SKIP TO 228)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ (SKIP TO 223 IN NEXT ROW)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐ (SKIP TO 223 IN NEXT ROW)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
230	COMPARE 212 WITH NUMBER OF PREGNANCY OUTCOMES IN PREGNANCY HISTORY NUMBER IN PREGNANCY HISTORY IS GREATER THAN OR EQUAL TO 212 ☐↓ NUMBER IN PREGNANCY HISTORY IS LESS THAN 212 ☐↓ (PROBE AND RECONCILE)		
231	**C** FOR EACH LIVE BIRTH IN 2017-2022, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH LIVE BIRTH, RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH IN 2017-2022, ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY. IF DURATION OF PREGNANCY WAS REPORTED IN WEEKS, MULTIPLY THE NUMBER OF WEEKS BY 0.23 TO CONVERT TO THE NUMBER OF MONTHS. ROUND DOWN TO THE NEAREST WHOLE NUMBER TO GET THE NUMBER OF COMPLETED MONTHS.		
232	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 236
233	How many weeks or months pregnant are you? RECORD NUMBER OF COMPLETED WEEKS OR MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS. IF DURATION OF PREGNANCY WAS REPORTED IN WEEKS, MULTIPLY THE NUMBER OF WEEKS BY 0.23 TO CONVERT TO THE NUMBER OF MONTHS. ROUND DOWN TO THE NEAREST WHOLE NUMBER TO GET THE NUMBER OF COMPLETED MONTHS.	WEEKS . . . . . 1 ☐☐ MONTHS . . . . . 2 ☐☐	
234	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 236
235	CHECK 208: TOTAL NUMBER OF LIVE BIRTHS ONE OR MORE ☐↓ a) Did you want to have a baby later on or did you not want any more children? NONE ☐↓ b) Did you want to have a baby later on or did you not want any children?	LATER . . . . . 1 NO MORE/NONE 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
236	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . . . 994 BEFORE LAST PREGNANCY . . . . . 995 → 240 NEVER MENSTRUATED . . . . . 996 → 241	
237	CHECK 236: WAS THE LAST MENSTRUAL PERIOD WITHIN THE LAST YEAR? YES, WITHIN LAST YEAR ☐ ↓ NO, ONE YEAR OR MORE ☐ → 240		
238	During your last menstrual period, what did you use to collect or absorb your menstrual blood? Anything else?	REUSABLE SANITARY PADS . . . . . A DISPOSABLE SANITARY PADS . . . . . B TAMPONS . . . . . C MENSTRUAL CUP . . . . . D CLOTH . . . . . E TOILET PAPER . . . . . F COTTON WOOL . . . . . G UNDERWEAR ONLY . . . . . H OTHER _____ (SPECIFY) X NOTHING . . . . . Y	
239	During your last menstrual period, were you able to wash and change in privacy while at home?	YES . . . . . 1 NO . . . . . 2 AWAY FROM HOME DURING LAST MENSTRUAL PERIOD 3	
240	How old were you when you had your first menstrual period?	AGE . . . . . [ ][ ] DON'T KNOW 98	
241	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 → 243	
242	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ (SPECIFY) 6 DON'T KNOW 8	
243	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more	YES . . . . . 1 NO 2
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within 3 days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to 6 months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . . . . 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get	YES . . . . . 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO . . . . . Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	CHECK 232: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐ → 317		
303	Are you or your partner currently doing something or using any method to delay or avoid getting	YES . . . . . 1 NO 2	→ 307
304	Are you or your partner sterilized? IF YES: Who is sterilized, you or your partner?	YES, RESPONDENT STERILIZED ONLY . . . . 1 YES, PARTNER STERILIZED ONLY . . . . . 2 YES, BOTH STERILIZED . . . . . 3 NO, NEITHER STERILIZED 4	→ 306
305	CHECK 304: RESPONDENT STERILIZED ONLY ☐ ↓ — PROCEED TO 307. CIRCLE CODE 'A' AND FOLLOW THE SKIP INSTRUCTION. PARTNER STERILIZED ONLY ☐ ↓ — PROCEED TO 307. CIRCLE CODE 'B' AND FOLLOW THE SKIP INSTRUCTION. BOTH STERILIZED ☐ ↓ — PROCEED TO 307. CIRCLE CODE 'A' AND CODE 'B' AND FOLLOW THE SKIP INSTRUCTION.		
306	Just to check, are you or your partner doing any of the following to avoid pregnancy: deliberately avoiding sex on certain days, using a condom, using withdrawal or using emergency contraception?	YES . . . . . 1 NO 2	→ 317
307	Which method are you using? RECORD ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	A → 312 B → 312 C → 314 D E → 314 F → 310 G → 311 H I J K L M X Y → 314
308	Now I'm going to show you two pictures. Please point to the picture that best matches what was used the last time you received your injectable. SHOW IMAGES OF SAYANA PRESS AND REGULAR SYRINGE.	DMPA-SC/SAYANA PRESS . . . . . 1 NEEDLE AND SYRINGE . . . . . 2 DON'T KNOW 8	1 → 314 2 → 314 8 → 314
309	The last time you received your injectable, did you inject DMPA-SC/Sayana Press yourself or did a health care provider do it for you?	SELF-INJECTION . . . . . 1 INJECTION GIVEN BY HEALTH CARE PROVIDER . . . . . 2 DON'T KNOW 8	→ 314
310	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	SECURE . . . . . 01 MICROGYNON . . . . . 02 DUOFEM . . . . . 03 N/M TABLETS . . . . . 04 MICROLUT . . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 314

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
311	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	FIESTA . . . . . 01 KISS . . . . . 02 DUREX . . . . . 03 GOLD CIRCLE . . . . . 04 BE SAFE/ NO LOGO . . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 314
312	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 OTHER PUBLIC SECTOR _____ 17 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 24 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR _____ 32 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
313	In what month and year was the sterilization performed?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	→ 315
314	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
315	CHECK 313 AND 314, AND 220: ANY LIVE BIRTH, STILLBIRTH, MISSCARRIAGE OR ABORTION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 313 OR 314? NO ☐ ↓ YES ☐ → GO BACK TO 313 OR 314, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).		

SECTION 3. CONTRACEPTION (CAPI OPTION) **(8)**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316 (9)	CHECK 313 AND 314: YEAR IS 2017-2022 ☐ **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. THEN CONTINUE YEAR IS 2016 OR EARLIER ☐ **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2017 . THEN (SKIP TO 329)		
317 (9)	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. **C** USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2017. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.		
317A	MONTH AND YEAR OF START OF INTERVAL OF USE OR NON-USE.	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
317B	Between (EVENT) in (MONTH/YEAR) and (EVENT) in (MONTH/YEAR), did you or your partner use any method of contraception?	YES . . . . . 1 NO 2	→ 317I
317C	Which method was that?	METHOD CODE . . . . . ☐	
317D	How many months after (EVENT) in (MONTH/YEAR) did you start to use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF STARTING TO USE THE METHOD.	IMMEDIATELY . . . . . 00 MONTHS . . . . . ☐☐ DATE GIVEN 95	→ 317F
317E	RECORD MONTH AND YEAR RESPONDENT STARTED USING METHOD.	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
317F	For how many months did you use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF TERMINATION OF USE.	MONTHS . . . . . ☐☐ DATE GIVEN 95	→ 317H
317G	RECORD MONTH AND YEAR RESPONDENT STOPPED USING METHOD.	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
317H	Why did you stop using (METHOD)?	REASON STOPPED . . . . . ☐	
317I	GO BACK TO 317A FOR NEXT GAP; OR, IF NO MORE GAPS, GO TO 318.		

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
318 (1)	Have you used emergency contraception in the last 12 months? That is, have you taken special pills within 3 days after having unprotected sexual intercourse to prevent pregnancy?	YES . . . . . 1 NO 2	
319	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ↓ ANY METHOD USED ☐ →		321
320	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	331
321	CHECK 307: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 307, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 LACTATIONAL AMENORRHEA METHOD . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 331 → 324 → 332 → 332 → 332
322	You first started using (CURRENT METHOD) in (DATE FROM 314). Where did you get it at that time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . . . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 OTHER PUBLIC SECTOR _____ (SPECIFY) 17 **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 PHARMACY . . . . . 23 DRUG STORE . . . . . 24 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 25 MATERNITY HOME . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) 27 **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR _____ (SPECIFY) 32 **OTHER SOURCE** SHOP . . . . . 41 CHURCH . . . . . 42 FRIEND/RELATIVE . . . . . 43 OTHER _____ (SPECIFY) 96	

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
323	At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 325
324	When you got sterilized, were you told about side effects or problems you might have with the	YES . . . . . 1 NO 2	
325	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
326	At that time, were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
327	CHECK 307: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 307, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 OTHER MODERN METHOD 95	→ 332
328	At that time, were you told that you could switch to another method if you wanted to or needed to?	YES . . . . . 1 NO 2	→ 330
329	CHECK 307: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 307, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 EMERGENCY CONTRACEPTION . . . . . 09 STANDARD DAYS METHOD . . . . . 10 LACTATIONAL AMENORRHEA METHOD . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 332 → 332 → 332

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
330	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 OTHER PUBLIC SECTOR _____ 17 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 PHARMACY . . . . . 23 DRUG STORE . . . . . 24 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 25 MATERNITY HOME . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR _____ 32 (SPECIFY) **OTHER SOURCE** SHOP . . . . . 41 CHURCH . . . . . 42 FRIEND/RELATIVE . . . . . 43 DRUG PEDDLERS . . . . . 44 OTHER _____ 96 (SPECIFY)	→ 332
331	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	
332	In the last 12 months, were you visited by a fieldworker?	YES . . . . . 1 NO 2	→ 334
333	Did the fieldworker talk to you about family planning?	YES . . . . . 1 NO 2	
334	CHECK 202: CHILDREN LIVING WITH YES ☐ ↓ NO ☐ ↓ a) In the last 12 months, have you visited a health facility for care for yourself or your children? b) In the last 12 months, have you visited a health facility for care for yourself?	YES . . . . . 1 NO 2	→ 401
335	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	CHECK 220 AND 225: ONE OR MORE PREGNANCY OUTCOMES 0-35 MONTHS BEFORE THE SURVEY ☐ ↓ NO PREGNANCY OUTCOMES 0-35 MONTHS BEFORE THE SURVEY ☐ → 601		→ 601
402	CHECK 220. LIST THE PREGNANCY HISTORY NUMBER IN 215 FOR EACH PREGNANCY OUTCOME 0-35 MONTHS BEFORE THE SURVEY, STARTING FROM THE LAST ONE. CLASSIFY EACH PREGNANCY OUTCOME BY TYPE USING 223 AND THE ORDER OF OUTCOMES IN THE PREGNANCY HISTORY. **PREGNANCY OUTCOME TYPE** MOST RECENT LIVE BIRTH 1 PRIOR LIVE BIRTH 2 MOST RECENT STILLBIRTH 3 PRIOR STILLBIRTH 4 ABORTION OR MISCARRIAGE 5 PREGNANCY HISTORY NUMBER . . ☐☐ PREGNANCY OUTCOME TYPE . . . . ☐ PREGNANCY HISTORY NUMBER . . ☐☐ PREGNANCY OUTCOME TYPE . . . . ☐ PREGNANCY HISTORY NUMBER . . ☐☐ PREGNANCY OUTCOME TYPE . . . . ☐ PREGNANCY HISTORY NUMBER . . ☐☐ PREGNANCY OUTCOME TYPE . . . . ☐ PREGNANCY HISTORY NUMBER . . ☐☐ PREGNANCY OUTCOME TYPE . . . . ☐ PREGNANCY HISTORY NUMBER . . ☐☐ PREGNANCY OUTCOME TYPE . . . . ☐		
403	Now I would like to ask some questions about your pregnancies in the last 3 years. (We will talk about each separately, starting with the last one you had.)		
404	PREGNANCY HISTORY NUMBER FROM 402.	PREGNANCY HISTORY NUMBER . . . . ☐☐	
405	PREGNANCY OUTCOME TYPE FROM 402.	MOST RECENT LIVE BIRTH . . . . 1 PRIOR LIVE BIRTH . . . . 2 MOST RECENT STILLBIRTH . . . . 3 PRIOR STILLBIRTH . . . . 4 MISCARRIAGE/ABORTION 5	1, 2 → 407
406	RECORD DATE PREGNANCY ENDED FROM 220.	DAY . . . . ☐☐ MONTH . . . . ☐☐ YEAR . . . . ☐☐☐☐	→ 408
407	RECORD NAME FROM 218. NAME ________________________________		
408	CHECK 405: PREGNANCY TYPE 1 OR 2 ☐ ↓ / PREGNANCY TYPE 3, 4, OR 5 ☐ ↓ a) When you got pregnant with (NAME), did you want to get pregnant at that time? b) When you got pregnant with the pregnancy that ended in (DATE FROM 406), did you want to get pregnant at that	YES . . . . 1 NO 2	1 → 411

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
409	Did you want to have a baby later on, or not at all?	LATER . . . . . 1 NOT AT ALL 2	→ 411
410	How much longer did you want to wait?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998	
411	CHECK 405: PREGNANCY OUTCOME TYPE	MOST RECENT LIVE BIRTH . . . . . 1 PRIOR LIVE BIRTH . . . . . 2 MOST RECENT STILLBIRTH . . . . . 3 PRIOR STILLBIRTH . . . . . 4 ABORTION/MISCARRIAGE 5	→ 434 → 434 → 475
412	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO 2	→ 414
413	CHECK 405: PREGNANCY OUTCOME TYPE MOST RECENT LIVE BIRTH (SKIP TO 420) ☐ ←	MOST RECENT STILLBIRTH ☐	→ 426
414	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	**HEALTH PERSONNEL** DOCTOR . . . . . A MIDWIFE/NURSE (CHN/CHO/EN/PHN, GN) B **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . C COMMUNITY HEALTH WORKER/ VOLUNTEER . . . . . D OTHER _____ X (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
415	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**HOME** HER HOME . . . . . A OTHER HOME . . . . . B **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . C GOVERNMENT POLYCLINIC . . . . . D GOVERNMENT HEALTH CENTER . . E GOVERNMENT CLINIC . . . . . F CHPS CENTER/GOVERNMENT HEALTH POST . . . . . G COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . H OTHER PUBLIC SECTOR _____ (SPECIFY) I **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . J PRIVATE CLINIC . . . . . K MATERNITY HOME . . . . . L COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . M OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) N **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . O OTHER NGO MEDICAL SECTOR _____ (SPECIFY) P OTHER _____ (SPECIFY) X	
416	How many weeks or months pregnant were you when you first received antenatal care for this pregnancy?	WEEKS . . . . . 1 ☐☐ MONTHS . . . . . 2 ☐☐ DON'T KNOW 998	
417	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . . . . . ☐☐ DON'T KNOW 98	
418	As part of your antenatal care during this pregnancy, did a healthcare provider do any of the following:	YES NO DK a) BP . . . . . 1 2 8 b) URINE . . . . . 1 2 8 c) BLOOD . . . . . 1 2 8 d) HEARTBEA . . . . . 1 2 8 e) FOODS . . . . . 1 2 8 f) BREASTFEED . . . . . 1 2 8 g) BLEEDING 1 2 8	
419	CHECK 405: PREGNANCY OUTCOME TYPE MOST RECENT LIVE BIRTH ☐ ↓ MOST RECENT STILLBIRTH ☐ → 426		

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
420	During this pregnancy, were you given an injection (Tetanus-Diphtheria) in the arm to prevent the baby from getting tetanus after birth?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 423
421	During this pregnancy, how many times did you get a tetanus injection?	TIMES . . . . . ☐ DON'T KNOW 8	
422	CHECK 421: ONE TIME OR DK ☐ ↓ TWO OR MORE TIMES ☐ →		426
423	At any time before this pregnancy, did you receive any tetanus injections?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 426
424	Before this pregnancy, how many times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . ☐ DON'T KNOW 8	
425	CHECK 424: ONLY ONE TIME ☐ ↓ a) How many years ago did you receive that tetanus injection? MORE THAN ONE ☐ ↓ b) How many years ago did you receive the last tetanus injection prior to this	YEARS AGO . . . . . ☐☐	
426	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLETS/SYRUP	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 429
427	Where did you get the iron tablets or syrup? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT POLYCLINIC . . . . . B GOVERNMENT HEALTH CENTER . . C GOVERNMENT CLINIC . . . . . D CHPS CENTER/GOVERNMENT HEALTH POST . . . . . E COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . F OTHER PUBLIC SECTOR _____ G (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . H PRIVATE CLINIC . . . . . I MATERNITY HOME . . . . . J COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ L (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . M OTHER NGO MEDICAL SECTOR _____ N (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
		OTHER SOURCE SHOP . . . . . O MARKET . . . . . P OTHER _____ X (SPECIFY)	
428	During the whole pregnancy, for how many days did you take the iron tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS . . . . . ☐☐☐ DON'T KNOW 998	
429	During this pregnancy, did you take any medicine for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
431	During this pregnancy, did you take SP/Fansidar to keep you from getting malaria?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 434
432	How many times did you take SP/Fansidar during this pregnancy?	TIMES . . . . . ☐☐	
432A	CHECK 432: CODE '01' OR '02' TIMES ENTERED ☐ OTHER ☐		→ 433
432B	Why did you take SP/Fansidar only one or two times during this pregnancy? RECORD ALL MENTIONED.	FACILITY TOO FAR . . . . . A HAD NO MONEY . . . . . B SIDE EFFECTS . . . . . C NOT AWARE HAD TO TAKE MORE . . . . . D DID NOT WANT TO TAKE . . . . . E NOT GIVEN . . . . . F NOT AVAILABLE . . . . . G OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
433	Did you get the SP/Fansidar during any antenatal care visit, during another visit to a health facility or from another source? IF MORE THAN ONE SOURCE, RECORD THE HIGHEST SOURCE ON THE LIST.	ANTENATAL VISIT . . . . . 1 ANOTHER FACILITY VISIT . . . . . 2 OTHER SOURCE 6	
434	CHECK 405: PREGNANCY TYPE 1 OR 2 ☐ → a) Who assisted with the delivery of (NAME)? Anyone else? PREGNANCY TYPE 3 OR 4 ☐ → b) Who assisted with the delivery of the stillbirth you had in (DATE FROM 406)? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	**HEALTH PERSONNEL** DOCTOR . . . . . A MIDWIFE/NURSE (CHN/CHO/EN/PHN, G . . B **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . C COMMUNITY HEALTH WORKER/ VOLUNTEER . . . . . D OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
435	CHECK 405: PREGNANCY TYPE 1 OR 2 → a) Where did you give birth to (NAME)? PREGNANCY TYPE 3 OR 4 → b) Where did you deliver this stillbirth? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 → 437 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 21 GOVERNMENT POLYCLINIC . . . . . 22 GOVERNMENT HEALTH CENTER . . . . . 23 GOVERNMENT CLINIC . . . . . 24 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 25 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . 26 OTHER PUBLIC SECTOR _____ (SPECIFY) 27 **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 31 PRIVATE CLINIC . . . . . 32 MATERNITY HOME . . . . . 33 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 34 OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) 35 **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 41 OTHER NGO MEDICAL SECTOR _____ (SPECIFY) 42 OTHER _____ (SPECIFY) 96 → 437	
436	CHECK 405: PREGNANCY TYPE 1 OR 2 → a) Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out? PREGNANCY TYPE 3 OR 4 → b) Was this stillbirth delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO 2	
437	CHECK 405: PREGNANCY OUTCOME TYPE	MOST RECENT LIVE BIRTH . . . . . 1 PRIOR LIVE BIRTH . . . . . 2 → 441 MOST RECENT STILLBIRTH . . . . . 3 → 445 PRIOR STILLBIRTH . . . . . 4 → 487	
438	After the birth, was (NAME) put on your chest?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 → 441	
439	Was (NAME)'s bare skin touching your bare skin?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 → 441	
440	How long after birth was (NAME) put on the bare skin of your chest? PROBE FOR A NUMERIC RESPONSE. IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF 24 HOURS OR MORE, RECORD 24.	IMMEDIATELY . . . . . 000 HOURS . . . . . ☐☐	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
441	When (NAME) was born, was (NAME) very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	
442	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 444
443	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 ☐.☐☐☐ KG FROM RECALL 2 ☐.☐☐☐ DON'T KNOW 99998	
444	CHECK 405: PREGNANCY OUTCOME TYPE MOST RECENT LIVE BIRTH ☐↓	PRIOR LIVE BIRTH ☐	→ 480
445	CHECK 435: PLACE OF DELIVERY FACILITY BIRTH: ANY CODE 21 THROUGH 46 CIRCLED ☐↓	CODE 11, 12, OR 96 CIRCLED ☐	→ 464
447	CHECK 405: PREGNANCY TYPE 1 ☐↓ / PREGNANCY TYPE 3 ☐↓ a) How long after (NAME) was delivered did you stay in (FACILITY IN 435)? b) For the stillbirth you had in (DATE FROM 406), how long after the baby was born did you stay in (FACILITY IN 435)? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
448	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Before you left the facility, did anyone check on your health?	YES . . . . . 1 NO 2	→ 451
449	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
450	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 MIDWIFE/NURSE (CHN/CHO/EN/PHN, G . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . 21 COMMUNITY HEALTH WORKER/ VOLUNTEER . . . . . 22 OTHER _____ 96 (SPECIFY)	
451	CHECK 405: PREGNANCY OUTCOME TYPE MOST RECENT LIVE BIRTH ☐ ↓ MOST RECENT STILLBIRTH ☐ → 455		
452	Now I would like to talk to you about checks on (NAME'S) health -- for example, someone examining (NAME), checking the cord, or talking to you about how to care for (NAME). Before (NAME) left the facility, did anyone check on (NAME'S) health?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 455
453	How long after delivery was (NAME)'s health first checked? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
454	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 MIDWIFE/NURSE (CHN/CHO/EN/PHN, G . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . 21 COMMUNITY HEALTH WORKER/ VOLUNTEER . . . . . 22 OTHER _____ 96 (SPECIFY)	
455	Now I would like to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES . . . . . 1 NO 2	→ 459
456	How long after delivery did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
457	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 MIDWIFE/NURSE (CHN/CHO/EN/PHN, G . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . 21 COMMUNITY HEALTH WORKER/ VOLUNTEER . . . . . 22 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
458	Where did the check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 21 GOVERNMENT POLYCLINIC . . . . . 22 GOVERNMENT HEALTH CENTER . . . . . 23 GOVERNMENT CLINIC . . . . . 24 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 25 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . 26 OTHER PUBLIC SECTOR _____ (SPECIFY) 27 **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 31 PRIVATE CLINIC . . . . . 32 MATERNITY HOME . . . . . 33 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 34 OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) 35 **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 41 OTHER NGO MEDICAL SECTOR _____ (SPECIFY) 42 OTHER _____ (SPECIFY) 96	
459	CHECK 405: PREGNANCY OUTCOME TYPE MOST RECENT LIVE BIRTH ☐↓ MOST RECENT STILLBIRTH ☐ → 474		
460	After (NAME) left (FACILITY IN 435) did any health care provider or a traditional birth attendant check on (NAME)'s health?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 473
461	How long after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
462	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 MIDWIFE/NURSE (CHN/CHO/EN/PHN, G . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . 21 COMMUNITY HEALTH WORKER/ VOLUNTEER . . . . . 22 OTHER _____ (SPECIFY) 96	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
463	Where did this check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 21 GOVERNMENT POLYCLINIC . . . . . 22 GOVERNMENT HEALTH CENTER . . . . . 23 GOVERNMENT CLINIC . . . . . 24 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 25 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . 26 OTHER PUBLIC SECTOR _____ 27 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 31 PRIVATE CLINIC . . . . . 32 MATERNITY HOME . . . . . 33 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 34 OTHER PRIVATE MEDICAL SECTOR _____ 35 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 41 OTHER NGO MEDICAL SECTOR _____ 42 (SPECIFY) OTHER _____ 96 (SPECIFY)	→ 473
464	CHECK 405: PREGNANCY TYPE 1 → a) I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)? PREGNANCY TYPE 3 → b) I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you delivered the stillbirth you had in (DATE FROM	YES . . . . . 1 NO 2	→ 468
465	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
466	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 MIDWIFE/NURSE (CHN/CHO/EN/PHN, G . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . 21 COMMUNITY HEALTH WORKER/ VOLUNTEER . . . . . 22 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
467	Where did this first check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 21 GOVERNMENT POLYCLINIC . . . . . 22 GOVERNMENT HEALTH CENTER . . . . . 23 GOVERNMENT CLINIC . . . . . 24 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 25 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . 26 OTHER PUBLIC SECTOR _____ 27 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 31 PRIVATE CLINIC . . . . . 32 MATERNITY HOME . . . . . 33 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 34 OTHER PRIVATE MEDICAL SECTOR _____ 35 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 41 OTHER NGO MEDICAL SECTOR _____ 42 (SPECIFY) OTHER _____ 96 (SPECIFY)	
468	CHECK 405: PREGNANCY OUTCOME TYPE MOST RECENT LIVE BIRTH ☐↓	MOST RECENT STILLBIRTH ☐ → 474	
469	I would like to talk to you about checks on (NAME's) health -- for example, someone examining (NAME), checking the cord, or talking to you about how to care for (NAME). After (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME's) health?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	☐ → 473
470	How long after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
471	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR . . . . . 11 MIDWIFE/NURSE (CHN/CHO/EN/PHN, G . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . 21 COMMUNITY HEALTH WORKER/ VOLUNTEER . . . . . 22 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
472	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 21 GOVERNMENT POLYCLINIC . . . . . 22 GOVERNMENT HEALTH CENTER . . . . . 23 GOVERNMENT CLINIC . . . . . 24 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 25 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . 26 OTHER PUBLIC SECTOR _____ (SPECIFY) 27 **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 31 PRIVATE CLINIC . . . . . 32 MATERNITY HOME . . . . . 33 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 34 OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) 35 **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 41 OTHER NGO MEDICAL SECTOR _____ (SPECIFY) 42 OTHER _____ (SPECIFY) 96	

473	During the first 2 days after (NAME)'s birth, did any health care provider do the following:	YES	NO	DK	
	a) Examine the cord?	a) CORD	1	2	8
	b) Measure (NAME)'s temperature?	b) TEMPERATURE	1	2	8
	c) Tell you how to recognize if your baby needs immediate medical attention?	c) MEDICAL ATTENTION	1	2	8
	d) Talk with you about breastfeeding?	d) TALK ABOUT BREASTFEEDING	1	2	8
	e) Observe (NAME) breastfeeding to see if you are doing it correctly?	e) OBSERVE BREASTFEEDING	1	2	8

474	During the first 2 days after the birth, did any healthcare provider do the following to you:	YES	NO	DK	
	a) Measure your blood pressure?	a) BLOOD PRESSURE	1	2	8
	b) Discuss your vaginal bleeding with you?	b) BLEEDING	1	2	8
	c) Discuss family planning with you?	c) FAMILY PLANNING	1	2	8

475	CHECK 215: IS THIS PREGNANCY THE WOMAN'S LAST PREGNANCY?	
	YES ☐ ↓	NO ☐ → 479

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OR DATE _____	PREGNANCY HISTORY NUMBER . . ☐☐	
476	CHECK 405: PREGNANCY TYPE 1 ☐ → a) Has your menstrual period returned since the birth of (NAME)? PREGNANCY TYPE 3 OR 5 ☐ → b) Has your menstrual period returned since the pregnancy that ended in (DATE FROM 406)?	YES . . . . . 1 NO 2	
477	CHECK 232: IS RESPONDENT PREGNANT? NOT PREGNANT ☐	PREGNANT OR UNSURE ☐	→ 479
478	CHECK 405: PREGNANCY TYPE 1 ☐ → a) Have you had sexual intercourse since the birth of (NAME)? PREGNANCY TYPE 3 OR 5 ☐ → b) Have you had sexual intercourse since the pregnancy that ended in (DATE FROM	YES . . . . . 1 NO 2	
479	CHECK 405: PREGNANCY OUTCOME TYPE	MOST RECENT LIVE BIRTH . . . . . 1 MOST RECENT STILLBIRTH . . . . . 3 MISCARRIAGE/ABORTION 5	→ 487
480	Did you ever breastfeed (NAME)?	YES . . . . . 1 NO 2	→ 482
481	CHECK 224 FOR CHILD:	LIVING ☐ → 486 DEAD ☐ → 487	
482	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . . . 000 HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐	
483	In the first 2 days after delivery, was (NAME) given anything other than breastmilk to eat or drink – anything at all like water, milk for babies, Nido, fresh milk, herbal treatments?	YES . . . . . 1 NO 2	
484	CHECK 224 FOR CHILD: LIVING ☐	DEAD ☐	→ 487
485	Are you still breastfeeding (NAME)?	YES . . . . . 1 NO 2	
486	Did (NAME) drink anything from a bottle with a nipple yesterday during the day or at night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
487	CHECK 402: ANY MORE PREGNANCY OUTCOMES 0-35 MONTHS BEFORE THE SURVEY? MORE PREGNANCY OUTCOMES 0-35 MONTHS BEFORE THE SURVEY ☐ → (GO TO 404 FOR THE NEXT PREGNANCY OUTCOME)	NO MORE PREGNANCY OUTCOMES 0-35 MONTHS BEFORE THE SURVEY ☐	→ 501

SECTION 5. CHILD IMMUNIZATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 220, 224 AND 225 IN THE PREGNANCY HISTORY: ANY SURVIVING CHILDREN BORN 0-35 MONTHS BEFORE THE SURVEY? ONE OR MORE SURVIVING CHILDREN BORN 0-35 MONTHS BEFORE THE SURVEY ☐ NO SURVIVING CHILDREN BORN 0-35 MONTHS BEFORE THE SURVEY ☐ → 601		
502	Now I would like to ask some questions about vaccinations received by your children born in the last 3 years. (We will talk about each separately, starting with the youngest.)		
503	RECORD THE NAME AND PREGNANCY HISTORY NUMBER FROM 215 AND 218 OF THE SURVIVING CHILDREN BORN 0-35 MONTHS BEFORE THE SURVEY, STARTING WITH THE LAST ONE. NAME OF CHILD _____	PREGNANCY HISTORY NUMBER . . ☐☐	
504	Do you have a card, such as a weighing card, or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD . . . . . 1 → 507 YES, HAS ONLY ANOTHER DOCUMENT . . . . 2 YES, HAS CARD AND OTHER DOCUMENT . . 3 → 507 NO, NO CARD AND NO OTHER DOCUMENT 4	
505	Did you ever have a vaccination card, or a weighing card, for (NAME)?	YES . . . . . 1 NO 2	
506	CHECK 504: CODE '2' CIRCLED ☐ CODE '4' CIRCLED ☐ → 513		
507	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . 2 YES, CARD AND OTHER DOCUMENT SEEN 3 NO CARD AND NO OTHER DOCUMENT SEEN 4 → 513	
508	RECORD (NAME'S) DATE OF BIRTH FROM THE VACCINATION CARD OR OTHER DOCUMENT.	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐ DATE OF BIRTH NOT ON CARD 95	

SECTION 5. CHILD IMMUNIZATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LIVE BIRTH _____ PREGNANCY HISTORY NUMBER . . ☐☐		
509	COPY VACCINATION DATES FROM THE CARD FOR (NAME). RECORD '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED. RECORD '00' IN 'DAY' COLUMN IF CARD IS BLANK FOR THE DOSE.		
510	ASK THE RESPONDENT FOR PERMISSION TO PHOTOGRAPH VACCINATION CARD OR OTHER DOCUMENT WHERE VACCINATIONS ARE WRITTEN. IF PERMISSION IS GRANTED, PHOTOGRAPH CARD.	PHOTOGRAPH TAKEN . . . . . 1 PHOTOGRAPH NOT TAKEN, PERMISSION NOT RECEIVED . . . . . 2 PHOTOGRAPH NOT TAKEN, OTHER REASON _____ 6 (SPECIFY)	
511	CHECK 509: 'BCG' TO 'MENINGITIS A' ALL HAVE A DATE RECORDED OR '44' RECORDED IN THE 'DAY' COLUMN? NO ☐ YES ☐ → 529		

	DAY		MONTH		YEAR			
BCG								
POLIO 0/ OPV 0								
HEPATITIS B AT BIRTH								
POLIO 1/ OPV 1								
DPT-HEP.B-HIB (PENTAVALENT) 1								
PNEUMOCOCCAL 1								
ROTAVIRUS 1								
POLIO 2/ OPV 2								
DPT-HEP.B-HIB (PENTAVALENT) 2								
PNEUMOCOCCAL 2								
ROTAVIRUS 2								
POLIO 3/ OPV 3								
DPT-HEP.B-HIB (PENTAVALENT) 3								
PNEUMOCOCCAL 3								
IPV (INACTIVATED POLIO VACCINE)								
MEASLES-RUBELLA 1								
YELLOW FEVER								
MEASLES-RUBELLA 2								
MENINGITIS A								
VITAMIN A (MOST RECENT)								

SECTION 5. CHILD IMMUNIZATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LIVE BIRTH _____	PREGNANCY HISTORY NUMBER . . ☐☐	
512	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 509 THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES . . . . . 1 (USE THE LIST SHOWN IN CAPI TO SELECT THE OTHER VACCINATIONS GIVEN. NOTE THAT CAPI WILL CHANGE THE ANSWER IN 509 IN THE 'DAY' COLUMN FROM '00' TO '66' FOR THE SELECTED VACCINATIONS.) (THEN SKIP TO 529) NO . . . . . 2 DON'T KNOW 8	
512A	CHECK 509: ANY VACCINATIONS RECORDED ON THE CARD? YES ☐ → SKIP TO 529 NO ☐ →		530
513	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 530
514	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
515	At or soon after birth, did (NAME) receive a Hepatitis B vaccination, that is, an injection in the thigh to prevent Hepatitis B?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517
516	Did (NAME) receive it within 24 hours of birth?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
517	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521
518	Did (NAME) receive the first oral polio vaccine in the first 2 weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
519	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES . . . . . ☐☐	
520	The last time (NAME) received the polio drops, did (NAME) also get an IPV injection on the RIGHT thigh, to protect against polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
521	Has (NAME) ever received a penta vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523
522	How many times did (NAME) receive the penta vaccine?	NUMBER OF TIMES . . . . . ☐☐	
523	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the RIGHT thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525

SECTION 5. CHILD IMMUNIZATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LIVE BIRTH _____	PREGNANCY HISTORY NUMBER . . ☐☐	
524	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES . . . . . ☐	
525	Has (NAME) ever received a rotavirus vaccination to prevent diarrhea, that is, a liquid suspension administered from the vial in the mouth to swallow	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 527
526	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES . . . . . ☐	
527	Has (NAME) ever received a measles-rubella vaccination, that is, an injection in the arm to prevent measles and rubella?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 528A
528	How many times did (NAME) receive a measles-rubella vaccine?	NUMBER OF TIMES . . . . . ☐	
528A	Has (NAME) ever received an injection to prevent yellow fever- a shot in the arm at the age of 9 months or older (sometimes given at the same time as measles-rubella)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
528B	Has (NAME) ever received a meningitis A vaccination, that is, an injection in the RIGHT upper arm to prevent meningitis A?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
529	Where did (NAME) receive most of his/her vaccinations? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . . . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 OTHER PUBLIC SECTOR _____ 17 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 PHARMACY . . . . . 23 DRUG STORE . . . . . 24 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 25 MATERNITY HOME . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR _____ 32 (SPECIFY) **OTHER SOURCE** DRUG PEDDLERS . . . . . 41 OTHER _____ 96 (SPECIFY)	
530	CHECK 220 AND 224 IN PREGNANCY HISTORY: ANY MORE SURVIVING CHILDREN BORN 0-35 MONTHS BEFORE THE SURVEY? MORE SURVIVING CHILDREN BORN 0-35 MONTHS BEFORE THE SURVEY ☐ → (GO TO 503 FOR THE NEXT SURVIVING CHILD) NO MORE SURVIVING CHILDREN BORN 0-35 MONTHS BEFORE THE SURVEY ☐		→ 601

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 220, 224, AND 225 IN THE PREGNANCY HISTORY: ANY SURVIVING CHILDREN BORN 0-59 MONTHS BEFORE THE SURVEY? ONE OR MORE SURVIVING CHILDREN BORN 0-59 MONTHS BEFORE THE SURVEY ☐ NO SURVIVING CHILDREN BORN 0-59 MONTHS BEFORE THE SURVEY ☐ → 643		
602	Now I would like to ask some questions about the health of your children born in the last 5 years. (We will talk about each separately, starting with the youngest.)		
603	RECORD THE NAME FROM 218 AND PREGNANCY HISTORY NUMBER FROM 215 OF THE SURVIVING CHILDREN BORN 0-59 MONTHS BEFORE THE SURVEY, STARTING WITH THE LAST ONE. NAME OF CHILD _____ PREGNANCY HISTORY NUMBER . . ☐☐		
604	In the last 12 months, was (NAME) given any of the following: a) Iron pills, sprinkles with iron, or iron syrup? SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUP.	YES NO DK a) PILLS/SPRINKLES/SYRUP . . 1 2 8	
605	In the last 6 months, was (NAME) given a vitamin A dose like (this/any of these)? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
606	In the last 6 months, was (NAME) given any medicine for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
607	In the last 3 months, has any healthcare provider or community health worker measured: a) (NAME)'s weight? b) (NAME)'s length or height? c) Around (NAME)'s upper arm? SHOW IMAGE OF MUAC TAPE.	YES NO DK a) WEIGHT . . . . . 1 2 8 b) LENGTH/HEIGHT . . . . . 1 2 8 c) UPPER ARM 1 2 8	
608	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 618

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OF LIVE BIRTH _____	PREGNANCY HISTORY NUMBER . . ☐☐	
609	CHECK 485: CURRENTLY BREASTFEEDING? YES ☐ → a) Now I would like to know how much (NAME) was given to drink during the diarrhea, including breast milk. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? NO. NOT ASKED ☐ → b) Now I would like to know how much (NAME) was given to drink during the diarrhea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8	
610	When (NAME) had diarrhea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8	
611	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . . 1 NO 2	→ 615
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT POLYCLINIC . . . . . B GOVERNMENT HEALTH CENTER . . . . . C GOVERNMENT CLINIC . . . . . D CHPS CENTER/GOVERNMENT HEALTH POST . . . . . E COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . F OTHER PUBLIC SECTOR _____ (SPECIFY) G **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . H PRIVATE CLINIC . . . . . I MATERNITY HOME . . . . . J COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) L **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . M OTHER NGO MEDICAL SECTOR _____ (SPECIFY) O **OTHER SOURCE** SHOP/MARKET . . . . . P TRADITIONAL PRACTITIONER . . . . . Q DRUG PEDDLER . . . . . R OTHER _____ (SPECIFY) X	

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OF LIVE BIRTH _____	PREGNANCY HISTORY NUMBER . . ☐☐	
613	CHECK 612: TWO OR MORE CODES CIRCLED ☐ ↓	ONLY ONE CODE CIRCLED ☐ →	→ 615
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE . . . . . ☐	
615	Was (NAME) given any of the following at any time since (NAME) started having the diarrhea:	YES NO DK	
	a) A fluid made from a special ORS packet?	a) FLUID FROM ORS PACKET . . 1 2 8	
	c) Zinc tablets or syrup?	c) ZINC 1 2 8	
	d) A homemade fluid ?	d) HOMEMADE FLUID 1 2 8	
616	CHECK 615: ANY 'YES' ☐ ↓ a) Was anything else given to treat the diarrhea? ALL 'NO' OR 'DK' ☐ ↓ b) Was anything given to treat the diarrhea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 618
617	CHECK 615: ANY 'YES' ☐ ↓ a) What else was given to treat the diarrhea? ALL 'NO' OR 'DK' ☐ ↓ b) What was given to treat the diarrhea? RECORD ALL TREATMENTS GIVEN.	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/HERBAL MEDICINE . . . . . I OTHER _____ X (SPECIFY)	
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 621
619	At any time during the illness, did (NAME) have blood taken from (NAME)'s finger or heel for testing?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
620	Were you told by a healthcare provider that (NAME) had malaria?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
621	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
622	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 624
623	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	→ 625

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OF LIVE BIRTH _____	PREGNANCY HISTORY NUMBER . . ☐☐	
624	CHECK 618: HAD FEVER?	YES ☐ ↓ NO OR DON'T KNOW ☐ → 634	
625	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 → 630	
626	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT POLYCLINIC . . . . . B GOVERNMENT HEALTH CENTER . . . . . C GOVERNMENT CLINIC . . . . . D CHPS CENTER/GOVERNMENT HEALTH POST . . . . . E COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . F OTHER PUBLIC SECTOR _____ (SPECIFY) G **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . H PRIVATE CLINIC . . . . . I MATERNITY HOME . . . . . J COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . K OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) L **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . M OTHER NGO MEDICAL SECTOR _____ (SPECIFY) O **OTHER SOURCE** SHOP/MARKET . . . . . P TRADITIONAL PRACTITIONER . . . . . Q DRUG PEDDLER . . . . . R OTHER _____ (SPECIFY) X	
627	CHECK 626:	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ → 629	
628	Where did you first seek advice or treatment? USE LETTER CODE FROM 626.	FIRST PLACE . . . . . ☐	
629	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS . . . . . ☐☐	
630	At any time during the illness, did (NAME) take any medicine for the illness?	YES . . . . . 1 NO . . . . . 2 → 634 DON'T KNOW 8	

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
NO.	NAME OF LIVE BIRTH _____	PREGNANCY HISTORY NUMBER . . ☐☐	
631	What medicine did (NAME) take? Any other medicine? RECORD ALL MENTIONED. IF MEDICINE NOT KNOWN, ASK TO SEE THE PACKAGE OR PRESCRIPTION.	**ANTIMALARIAL MEDICINE** ARTEMISININ COMBINATION THERAPY (ACT) . . . . . A SP/FANSIDAR . . . . . B CHLOROQUINE . . . . . C AMODIAQUINE . . . . . D QUININE PILLS . . . . . E INJECTION/IV . . . . . F ARTESUNATE RECTAL . . . . . G INJECTION/IV . . . . . H OTHER ANTIMALARIAL _____ (SPECIFY) I **ANTIBIOTIC MEDICINE** AMOXICILLIN . . . . . J COTRIMOXAZOLE . . . . . K OTHER PILL/SYRUP . . . . . L OTHER INJECTION/IV . . . . . M **OTHER MEDICINE** ASPIRIN . . . . . N ACETAMINOPHEN . . . . . O IBUPROFEN . . . . . P HERBAL MEDICINE . . . . . Q OTHER _____ (SPECIFY) X DON'T KNOW . . . . . Z	
632	CHECK 631: ARTEMISININ COMBINATION THERAPY ('A') GIVEN CODE 'A' CIRCLED ☐↓ CODE 'A' NOT CIRCLED ☐ → 634		
633	How long after the fever started did (NAME) first take an artemisinin combination therapy?	SAME DAY . . . . . 0 NEXT DAY . . . . . 1 TWO DAYS AFTER FEVER . . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . . 3 DON'T KNOW 8	
634	CHECK 220, 224, AND 225 IN PREGNANCY HISTORY: ANY MORE SURVIVING CHILDREN BORN 0-59 MONTHS BEFORE THE SURVEY? MORE SURVIVING CHILDREN BORN 0-59 MONTHS BEFORE THE SURVEY ☐↓ (GO TO 603 FOR THE NEXT SURVIVING CHILD) NO MORE SURVIVING CHILDREN BORN 0-59 MONTHS BEFORE THE SURVEY ☐ → 635		

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
635	CHECK 220, 225 AND 226, ALL ROWS: NUMBER OF CHILDREN BORN 0-23 MONTHS BEFORE THE SURVEY LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ NONE ☐ → 643 (NAME OF YOUNGEST CHILD LIVING WITH HER) ↓		
636	Now I would like to ask you about liquids that (NAME FROM 635) had yesterday during the day or at night. Please tell me about all drinks, whether (NAME) had them at home, or somewhere else. Yesterday during the day or at night, did (NAME)	YES NO DK	
	a) Plain water?	a) 1 2 8	
	b) Infant formula, such as, Cerelac, NAN, or SMA?	b) 1 2 8	
	IF YES: How many times did (NAME) drink milk for babies? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK MILK FOR BABIES ☐ 8	
	c) Fresh milk, tinned milk, or powdered milk?	c) 1 2 8	
	IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK MILK ☐ 8	
	IF YES: Was the milk a sweet or flavored type of milk?	SWEET/ FLAVORED . . . 1 2 8	
	f) Milo?	f) 1 2 8	
	g) Fruit juice, fruit drinks, or sobolo?	g) 1 2 8	
	h) Soft drinks or malts, such as, Coke, Fanta,	h) 1 2 8	
	i) Tea, coffee, or herbal drinks?	i) 1 2 8	
	IF YES: Was the drink sweetened?	SWEETENED . 1 2 8	
	j) Clear broth or clear soup?	j) 1 2 8	
	k) Any other liquids?	k) 1 2 8	
	IF YES: What was the drink?	OTHER DRINK(S) _____ (SPECIFY)	
	IF YES: Was the drink sweetened?	SWEETENED . 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
637	Now I would like to ask you about foods that (NAME) had yesterday during the day or at night. I am interested in foods your child ate whether at home or somewhere else. Please think about snacks and small meals as well as main meals. I will ask you about different foods, and I would like to know whether your child ate the food even if it was combined with other foods. Please do not answer 'yes' for any food or ingredient only used in a small amount to add flavor to a dish. Yesterday during the day or at night, did (NAME) have:	YES NO DK	
	a) Brukina or drink yogurt?	a) 1 2 8	
	IF YES:		
	IF YES: How many times did (NAME) have brukina or drink yogurt?	NUMBER OF TIMES HAD BRUKINA OR DRINK YOGURT ☐ 8	
	IF 7 OR MORE TIMES, RECORD '7'.		
	Did (NAME) have any brukina as a drink or drink yogurt?	HAD YOGURT AS A DRINK . . 1 2 8	
	IF 7 OR MORE TIMES, RECORD '7'.		
	IF YES: Was it a sweet or flavored type of drink?	SWEETENED . 1 2 8	
	b) Bread, rice, maize, kenkey, banku, akple, tuo zaafi, Hausa koko, or tom brown?	b) 1 2 8	
	c) Carrots, or sweet potatoes that are yellow or orange inside?	c) 1 2 8	
	d) Fufu, gari, kokonte, cassava, yam, cocoyam, plantain, or white sweet potato?	d) 1 2 8	
	e) Any other dark green leafy vegetables, such as cocoyam leaves, amaranth leaves, ademe, ayoyo, cassava leaves or other dark green leafy vegetables?	e) 1 2 8	
	f) Any other vegetables, such as tomatoes, okro, garden eggs, cabbage, mushrooms or other vegetables?	f) 1 2 8	
	g) Ripe mango, ripe papaya, or African star apple?	g) 1 2 8	
	h) Any other fruits, such as banana, pineapple, avocado pear, watermelon, orange, or other	h) 1 2 8	
	i) Fish, dried fish, koobi, anchovies, smoked herring, crab, or shrimp?	i) 1 2 8	

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES				SKIP
			YES	NO	DK	
	j) Gizzard or liver?	j)	1	2	8	
	k) Sausages or corned beef?	k)	1	2	8	
	l) Any other meat, such as beef, goat, sheep, pork , grasscutter, chicken, or Guinea fowl?	l)	1	2	8	
	m) Eggs?	m)	1	2	8	
	n) Beans or bambara beans?	n)	1	2	8	
	o) Groundnuts, kuli kuli, groundnut paste, groundnut soup, agushi stew, neri soup, or	o)	1	2	8	
	p) Cheese curds or wagashi?	p)	1	2	8	
	q) Termites?	q)	1	2	8	
	r) Cakes, biscuits, rock bun, toogbee or bofrot?	r)	1	2	8	
	s) Toffees, chocolates, ice cream, or FanYogo?	s)	1	2	8	
	t) Packaged yellow plantain chips or potato chips, Indomie, French fries , fried yam, fried potato, atomo, or spring rolls?	t)	1	2	8	
	u) Red palm oil?	u)	1	2	8	
	v) Any other solid, semi-solid, or soft food? IF YES: What was the food? MARK THE APPROPRIATE FOOD GROUP FOR EACH ADDITIONAL FOOD, IF THE GROUP IS NOT YET CODED 'YES'. IF UNABLE TO DETERMINE WHICH GROUP THE ADDITIONAL FOOD BELONGS TO, RECORD THE NAME OF THE FOOD.	v)	1	2	8	
		OTHER FOOD(S) _____ (SPECIFY)				
638	CHECK 637 (CATEGORIES 'a' THROUGH 'v'): NOT A SINGLE 'YES' ☐ ↓ AT LEAST ONE 'YES' ☐ →					640

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
639	Did (NAME) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 (GO BACK TO 637 TO RECORD FOOD EATEN YESTERDAY) (THEN CONTINUE TO 640) NO 2	→ 641
640	How many times did (NAME) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . ☐ DON'T KNOW 8	
641	In the last 6 months, did any healthcare provider or community health worker talk with you about how or what to feed (NAME)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
642	The last time (NAME) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . . . 01 PUT/RINSED INTO TOILET OR LATRIN . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEI . . . . . 06 OTHER _____ 96 (SPECIFY)	
643	Now I'd like to ask you about foods and drinks that you consumed yesterday during the day or night, whether you ate or drank it at home or somewhere else. Please think about snacks and small meals as well as main meals. I will ask you about different foods and drinks, and I would like to know whether you ate the food even if it was combined with other foods. Please do not answer 'yes' for any food or ingredient only used in a small amount to add flavor to a dish. Yesterday during the day or at night, did you eat or	YES NO DK	
	a) Bread, rice, maize, kenkey, banku, akple, tuo zaafi, Hausa koko, or tom brown?	a) 1 2 8	
	b) Carrots, or sweet potatoes that are yellow or orange inside?	b) 1 2 8	
	c) Fufu, gari, kokonte, cassava, yam, cocoyam, plantain, or white sweet potato?	c) 1 2 8	
	d) Any other vegetables, such as tomatoes, okro, garden eggs, cabbage, mushrooms or other vegetables?	d) 1 2 8	
	e) Any other dark green leafy vegetables, such as cocoyam leaves, amaranth leaves, ademe, ayoyo, cassava leaves or other dark green leafy vegetables?	e) 1 2 8	

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES				SKIP
			YES	NO	DK	
	f) Ripe mango, ripe papaya, or African star apple?	f)	1	2	8	
	g) Any other fruits, such as banana, pineapple, avocado pear, watermelon, orange or other	g)	1	2	8	
	h) Fish, dried fish, koobi, anchovies, smoked herring, crab, or shrimp?	h)	1	2	8	
	i) Gizzard or liver?	i)	1	2	8	
	j) Sausages or corned beef?	j)	1	2	8	
	k) Any other meat, such as beef, goat, sheep, pork, grasscutter, chicken, or guinea fowl?	k)	1	2	8	
	l) Eggs?	l)	1	2	8	
	m) Beans or bambara beans?	m)	1	2	8	
	n) Groundnuts, kuli kuli, groundnut paste, groundnut soup, agushi stew, neri soup, or	n)	1	2	8	
	o) Tin milk, powdered milk, cheese curds, wagashi, brukina, or drink yogurt?	o)	1	2	8	
(11)	p) Termites?	p)	1	2	8	
	q) Cakes, biscuits, rock bun, toogbee or bofrot?	q)	1	2	8	
(12)	r) Toffees, chocolates, ice cream, or FanYogo?	r)	1	2	8	
	s) Packaged yellow plantain chips or potato chips, Indomie, French fries , fried yam, fried potato, atomo, spring rolls?	s)	1	2	8	
	t) Fruit juice, fruit drinks, or sobolo?	t)	1	2	8	
	u) Soft drinks or malts, such as, Coke, Fanta,	u)	1	2	8	
	v) Milo, tea with sugar, or coffee with sugar?	v)	1	2	8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		YES NO DK	
(11)	w) Red palm oil?	w) 1 2 8	
	x) Any other liquids? IF YES: What was the drink?	x) . . . . . 1 2 8 OTHER DRINK(S) _____ (SPECIFY)	
	IF YES: Was the drink sweetened?	SWEETENED . 1 2 8	
	y) Any other food? IF YES: What was the food? MARK THE APPROPRIATE FOOD GROUP FOR EACH ADDITIONAL FOOD, IF THE GROUP IS NOT YET CODED 'YES'. IF UNABLE TO DETERMINE WHICH GROUP THE ADDITIONAL FOOD BELONGS TO, RECORD THE NAME OF THE FOOD.	y) . . . . . 1 2 8 OTHER FOOD(S) _____ (SPECIFY)	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 706A
702	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN 2 NO 3	→ 721
703	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 714
706A	Do you have a marriage certificate or other document recognizing this (marriage/union)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 707
706B	What document or documents do you have? Any other document? RECORD ALL MENTIONED.	MARRIAGE CERTIFICATE FROM A CHURCH, MOSQUE OR OTHER RELIGIOUS INSTITUTION . . . . . A MARRIAGE CERTIFICATE FROM A CIVIL AUTHORITY . . . . . B OTHER DOCUMENT FROM A RELIGIOUS INSTITUTION . . . . . C OTHER DOCUMENT FROM A CIVIL AUTHORITY . . . . . D OTHER _____ X (SPECIFY)	→ 709
707	Was this marriage ever registered with the civil authority?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
709	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
710	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
711	Does your (husband/partner) have other wives or does he live with other women as if married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 714
712	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . . DON'T KNOW 98	
713	Are you the first, second, … wife?	RANK . . . . . DON'T KNOW 98	
714	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715	CHECK 714: MARRIED/ LIVED WITH A MAN ONLY ONCE → a) In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → b) Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 717
716	How old were you when you first started living with him?	AGE . . . . . ☐☐	
717	CHECK 714: MARRIED/LIVED WITH A MAN MORE THAN ONCE MARRIED/LIVED WITH A MAN ONLY ONCE		→ 721
718	CHECK 701: YES, CURRENTLY MARRIED YES, LIVING WITH A MAN NO, NOT IN A UNION		→ 721
719	Now I'd like to ask you about your current (husband/partner). In what month and year did you start living with him?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 721
720	How old were you when you first started living with your current (husband/partner)?	AGE . . . . . ☐☐	
721	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE**		
722	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . ☐☐	→ 738
723	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	→ 737

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
724	CHECK 232: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 727
725	The last time you had sexual intercourse, did you or your partner do something or use any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 727
726	Which method did you use? RECORD ALL MENTIONED. IF CODES 'G' OR 'H' ARE CIRCLED, SKIP TO 728 EVEN IF ANOTHER METHOD WAS ALSO USED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	→ 728
727	The last time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 730
728	What is the brand name of the condom used? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	FIESTA . . . . . 01 KISS . . . . . 02 DUREX . . . . . 03 GOLD CIRCLE . . . . . 04 BE SAFE/ NO LOGO . . . . . 05 CUPID . . . . . 06 FC2 . . . . . 07 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
729	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . . . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 OTHER PUBLIC SECTOR _____ 17 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 PHARMACY . . . . . 23 DRUG STORE . . . . . 24 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 25 MATERNITY HOME . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR 32	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		(SPECIFY) **OTHER SOURCE** SHOP/MARKET . . . . . 41 CHURCH . . . . . 42 FRIEND/RELATIVE . . . . . 43 DRUG PEDDLERS . . . . . 44 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
730	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 CLIENT/SEX WORKER . . . . . 5 OTHER _____ 6 (SPECIFY)	
731	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 NO 2	→ 737
732	The last time you had sexual intercourse with this second person, was a condom used?	YES . . . . . 1 NO 2	
733	What was your relationship to this second person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 CLIENT/SEX WORKER . . . . . 5 OTHER _____ 6 (SPECIFY)	
734	Apart from these two people, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 NO 2	→ 737
735	The last time you had sexual intercourse with this third person, was a condom used?	YES . . . . . 1 NO 2	
736	What was your relationship to this third person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 CLIENT/SEX WORKER . . . . . 5 OTHER _____ 6 (SPECIFY)	
737	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	
738	PRESENCE OF OTHERS DURING THIS SECTION.	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 307: NOT ASKED ☐ ↓ NEITHER ARE STERILIZED ☐ ↓	HE OR SHE STERILIZED ☐	→ 813
802	CHECK 232: PREGNANT ☐ ↓	NOT PREGNANT OR UNSURE ☐	→ 804
803	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 805 → 812
804	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . . . . . 3 UNDECIDED/DON'T KNOW 8	→ 807 → 813 → 811
805	CHECK 232: NOT PREGNANT OR UNSURE ☐ ↓ a) How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ ↓ b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT . . . . . 994 AFTER MARRIAGE . . . . . 995 OTHER _____ (SPECIFY) 996 DON'T KNOW 998	→ 811 → 813 → 811
806	CHECK 232: NOT PREGNANT OR UNSURE ☐ ↓	PREGNANT ☐	→ 812
807	CHECK 307: USING A CONTRACEPTIVE NOT ASKED ☐ ↓	CURRENTLY USING ☐	→ 813
808	CHECK 805: '24' OR MORE MONTHS OR '02' OR MORE YEARS ☐ ↓ NOT ASKED ☐ ↓	'00-23' MONTHS OR '00-01' YEAR ☐	→ 812
809	CHECK 723: DAYS, WEEKS OR MONTHS AGO ☐ ↓	YEARS AGO ☐ → 811 NOT ASKED ☐ → 811	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	CHECK 804: WANTS TO HAVE A/ANOTHER CHILD → a) You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE → b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A **FERTILITY-RELATED REASONS** NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . . . . . D CAN'T GET PREGNANT . . . . . E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H **OPPOSITION TO USE** RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITIO . . . . . L **LACK OF KNOWLEDGE** KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N **METHOD-RELATED REASONS** INCONVENIENT TO USE . . . . . O CHANGES IN MENSTRUAL BLEEDIN(. . . . P METHODS COULD CAUSE INFERTILITY . . Q INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . R OTHER SIDE EFFECTS . . . . . S **COST/ACCESS/AVAILABILITY** LACK OF ACCESS/TOO FAR . . . . . T COSTS TOO MUCH . . . . . U PREFERRED METHOD NOT AVAILABLE . . . . . V NO METHOD AVAILABLE . . . . . W OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
811	CHECK 307: USING A CONTRACEPTIVE NOT ASKED ↓ YES, CURRENTLY USING →		813
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
813	CHECK 224: HAS LIVING CHILDREN → a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN → b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 815 NUMBER . . . . . ☐☐ OTHER _____ 96 → 815 (SPECIFY)	
814	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815	In the last 12 months have you:	YES NO	
	a) Heard about family planning on the radio?	a) RADIO 1 2	
	b) Seen anything about family planning on the television?	b) TELEVISION 1 2	
	c) Read about family planning in a newspaper or magazine?	c) NEWSPAPER OR MAGAZINE 1 2	
	d) Received a voice or text message about family planning on a mobile phone?	d) MOBILE PHONE 1 2	
	e) Seen anything about family planning on social media such as Facebook, Twitter, or Instagram?	e) FACEBOOK/TWITTER/ INSTAGRAM 1 2	
	f) Seen anything about family planning on a poster, leaflet or brochure?	f) POSTER/LEAFLET/BROCHURE 1 2	
	g) Seen anything about family planning on an outdoor sign or billboard?	g) OUTDOOR SIGN/BILLBOAR 1 2	
	h) Heard anything about family planning at community meetings or events?	h) COMMUNITY MEETINGS/EVENTS . . 1 2	
817	CHECK 701: YES, CURRENTLY MARRIED ☐ ↓ / YES, LIVING WITH A MAN ☐ ↓ / NO, NOT IN A UNION ☐ →		901
818	Who usually makes the decision on whether or not you should use contraception, you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 (SPECIFY)	820 820
819	When making this decision with your (husband/partner), would you say that your opinion is more important, equally important, or less important than your (husband's/partner's) opinion?	MORE IMPORTANT . . . . . 1 EQUALLY IMPORTANT . . . . . 2 LESS IMPORTANT 3	
820	Has your (husband/partner) or any other family member ever tried to force or pressure you to become pregnant when you did not want to become	YES . . . . . 1 NO 2	
821	CHECK 307: NOT ASKED ☐ ↓ / NEITHER ARE STERILIZED ☐ ↓ / HE OR SHE ARE STERILIZED ☐ →		901
822	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐		→ 909
902	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS . . . . . ☐☐	
903	Did your (husband/partner) ever attend school?	YES . . . . . 1 NO 2	→ 906
904	What is the highest level of school he attended: primary, middle, JSS/JHS, secondary, SSS/SHS, or higher?	PRE-PRIMARY . . . . . 1 PRIMARY . . . . . 1 MIDDLE . . . . . 2 JSS/JHS . . . . . 3 SECONDARY . . . . . 4 SSS/SHS . . . . . 5 HIGHER . . . . . 6 DON'T KNOW 8	→ 906
905	What was the highest [GRADE/FORM/YEAR] he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	[GRADE/FORM/YEAR . . . . . ☐☐ DON'T KNOW 98	
906	Has your (husband/partner) done any work in the last 7 days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 908
907	Has your (husband/partner) done any work in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 909
908	What is your (husband's/partner's) occupation? That is, what kind of work does he mainly do?	_____ _____ ☐☐ _____	
909	Aside from your own housework, have you done any work in the last 7 days?	YES . . . . . 1 NO 2	→ 913
910	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last 7 days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 913
911	Although you did not work in the last 7 days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 913
912	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 917
913	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ ☐☐ _____	
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
916	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
917	CHECK 701: CURRENTLY MARRIED/LIVING WITH A MAN ☐ ↓	NOT IN UNION ☐ →	→ 925
918	CHECK 916: CODE '1' OR '2' CIRCLED ☐ ↓	OTHER ☐ →	→ 921
919	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 OTHER _____ (SPECIFY) 6	
920	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 DON'T KNOW 8	→ 922
921	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ (SPECIFY) 6	
922	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
923	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
925	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 01 JOINTLY WITH HUSBAND/PARTNER ONLY . . 02 JOINTLY WITH SOMEONE ELSE ONLY . . . . 03 JOINTLY WITH HUSBAND/PARTNER AND SOMEONE ELSE . . . . . 04 BOTH ALONE AND JOINTLY . . . . . 05 DOES NOT OWN 06	→ 928
926	Do you have a title deed or other government recognized document for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 928
927	Is your name on this document?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
928	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY . . . . . 01 JOINTLY WITH HUSBAND/PARTNER ONLY . . 02 JOINTLY WITH SOMEONE ELSE ONLY . . . . 03 JOINTLY WITH HUSBAND/PARTNER AND SOMEONE ELSE . . . . . 04 BOTH ALONE AND JOINTLY . . . . . 05 DOES NOT OWN 06	→ 930A
929	Do you have a title deed or other government recognized document for any land you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 930A
930	Is your name on this document?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
930A	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	→ 930C
930B	Did you yourself put money in or take money out of this account in the last 12 months?	YES . . . . . 1 NO 2	
930C	In the last 12 months, have you used a mobile phone to make financial transactions such as sending or receiving money, paying bills, purchasing goods or services, or receiving wages?	YES . . . . . 1 NO 2	
931	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 / 2 / 3 HUSBAND . . . . . 1 / 2 / 3 OTHER MALES . . . . . 1 / 2 / 3 OTHER FEMALES . . . . . 1 / 2 / 3	
932	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	YES / NO / DK a) GOES OUT . . . . . 1 / 2 / 8 b) NEGLECTS CHILDREN 1 / 2 / 8 c) ARGUES . . . . . 1 / 2 / 8 d) REFUSES SEX . . . . . 1 / 2 / 8 e) BURNS FOOD . . . . . 1 / 2 / 8	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1000	Now I would like to talk about HIV and AIDS.		
1001	Have you ever heard of HIV or AIDS?	YES . . . . . 1 NO 2	→ 1040
1002	CHECK 111: AGE	15-24 YEARS ☐ ↓ 25 YEARS OR OLDER ☐ →	1008
1003	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1004	Can people get HIV from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1005	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1006	Can people get HIV by sharing food with a person who has HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1007	Is it possible for a healthy-looking person to have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1008	Have you heard of ARVs, that is, antiretroviral medicines that treat HIV?	YES . . . . . 1 NO 2	
1009	Are there any special medicines that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1010	Have you heard of PrEP, a medicine taken daily that can prevent a person from getting HIV?	YES . . . . . 1 NO 2	→ 1012
1011	Do you approve of people who take a pill every day to prevent getting HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1012	CHECK 220 AND 223:	NO LIVE BIRTHS ☐ → LAST LIVE BIRTH 0-23 MONTHS BEFORE THE ☐ ↓ LAST LIVE BIRTH 24 MONTHS OR MORE BEFORE ☐ →	1024 1024
1013	CHECK 412 FOR LAST LIVE BIRTH ('TYPE 1'):	HAD ANTENATAL CARE ☐ ↓ NO ANTENATAL CARE ☐ →	1018

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1014	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
1015	Were you tested for HIV as part of your antenatal care while you were pregnant with (NAME)?	YES . . . . . 1 NO 2	→ 1018
1016	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . . . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 PUBLIC LABORATORY/ DIAGNOSTIC CENTERS . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 PHARMACY . . . . . 23 DRUG STORE . . . . . 24 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 25 MATERNITY HOME . . . . . 26 PRIVATE LABORATORY/ DIAGNOSTIC CENTERS . . . . . 27 OTHER PRIVATE MEDICAL SECTOR _____ 28 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR _____ 32 (SPECIFY) **OTHER SOURCE** HOME . . . . . 41 WORKPLACE . . . . . 42 CORRECTIONAL FACILITY/ BORSTAL HOME . . . . . 43 OTHER _____ 96 (SPECIFY)	
1017	Did you get the results of the test?	YES . . . . . 1 NO 2	
1018	CHECK 435 FOR LAST LIVE BIRTH ('TYPE 1'): ANY CODE '21-42' CIRCLED ☐ ↓ OTHER ☐		→ 1021
1019	Between the time you went for delivery but before the baby was born, were you tested for HIV?	YES . . . . . 1 NO 2	→ 1021
1020	Did you get the results of the test?	YES . . . . . 1 NO 2	→ 1022

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1021	CHECK 1015: YES ☐ (↓) NO OR NOT ASKED ☐ → 1024		
1022	Have you been tested for HIV since that time you were tested during your pregnancy?	YES . . . . . 1 NO 2	→ 1025
1023	In what month and year was your most recent HIV test?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 1028
1024	Have you ever been tested for HIV?	YES . . . . . 1 NO 2	→ 1032
1025	In what month and year was your most recent HIV test?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
1026	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . . . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 PUBLIC LABORATORY/ DIAGNOSTIC CENTERS . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 PHARMACY . . . . . 23 DRUG STORE . . . . . 24 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 25 MATERNITY HOME . . . . . 26 PRIVATE LABORATORY/ DIAGNOSTIC CENTERS . . . . . 27 OTHER PRIVATE MEDICAL SECTOR _____ 28 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR _____ 32 (SPECIFY) **OTHER SOURCE** HOME . . . . . 41 WORKPLACE . . . . . 42 CORRECTIONAL FACILITY/ BORSTAL HOME . . . . . 43 OTHER _____ 96 (SPECIFY)	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1027	Did you get the results of the test?	YES . . . . . 1 NO 2	→ 1031
1028	What was the result of the test?	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 INDETERMINATE . . . . . 3 DECLINED TO ANSWER . . . . . 4 DID NOT RECEIVE TEST RESULT 5	→ 1031
1029	In what month and year did you receive your first HIV-positive test result?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR . . . . . 9998 SAME DATE AS LAST HIV TES 95	
1030	Are you currently taking ARVs, that is antiretroviral medicines? By currently, I mean that you may have missed some doses but you are still taking ARVs.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1031	How many times have you been tested for HIV in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE, IF NUMBER OF TESTS IS 95 OR MORE, RECORD '95'.	NUMBER OF HIV TESTS . . . . . ☐☐	
1032	Have you heard of test kits people can use to test themselves for HIV?	YES . . . . . 1 NO 2	→ 1034
1033	Have you ever tested yourself for HIV using a self-test kit?	YES . . . . . 1 NO 2	
1034	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1035	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
1036	CHECK 1028: CODE '1' CIRCLED ☐ ↓ OTHER/ NOT ASKED ☐ →		1040
1037	Now I would like to ask you a few questions about your experiences living with HIV. Have you disclosed your HIV status to anyone other than me?	YES . . . . . 1 NO 2	
1038	Do you agree or disagree with the following statement: I have felt ashamed because of my HIV	AGREE . . . . . 1 DISAGREE 2	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1039	Please tell me if the following things have happened to you, or if you think they have happened to you, because of your HIV status in the last 12 months: a) People have talked badly about me because of my HIV status. b) Someone else disclosed my HIV status without my permission. c) I have been verbally insulted, harassed, or threatened because of my HIV status. d) Healthcare workers talked badly about me because of my HIV status. e) Healthcare workers yelled at me, scolded me, called me names, or verbally abused me in another way because of my HIV status.	YES NO a) PEOPLE TALK BADLY . . . . . 1 2 b) DISCLOSED STATUS . . . . . 1 2 c) VERBALLY INSULTED . . . . . 1 2 d) HEALTHCARE WORKERS TALKED BADLY . . . . . 1 2 e) HEALTHCARE WORKERS VERBALLY ABUSED 1 2	
1040	CHECK 1001: HEARD ABOUT HIV OR AIDS ☐ → a) Apart from HIV, have you heard about other infections that can be transmitted through sexual NOT HEARD ABOUT HIV OR AIDS ☐ → b) Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
1041	CHECK 722: HAS HAD SEXUAL INTERCOURSE ☐ NEVER HAD SEXUAL INTERCOURSE ☐ →		1046
1042	CHECK 1040: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ NO ☐ →		1044
1043	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1044	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1045	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1046	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1047	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1048	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ NOT IN UNION ☐ →		1101
1049	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	
1050	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	How long does it take in minutes to go from your home to the nearest healthcare facility, which could be a hospital, a health clinic, a medical doctor, or a health post?	MINUTES . . . . . [ ][ ][ ]	
1102	How do you travel to this healthcare facility from your home? IF MORE THAN ONE WAY OF TRAVEL IS MENTIONED, CIRCLE THE ONE HIGHEST ON THE LIST.	**MOTORIZED** CAR/TRUCK . . . . . 01 PUBLIC BUS . . . . . 02 MOTORCYCLE/SCOOTER . . . . . 03 BOAT WITH MOTOR . . . . . 04 **NOT MOTORIZED** ANIMAL-DRAWN CART . . . . . 05 BICYCLE . . . . . 06 BOAT WITHOUT MOTOR . . . . . 07 WALKING . . . . . 08 OTHER _____ 96 (SPECIFY)	
1103	Has a doctor or other healthcare provider examined your breasts to check for breast cancer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1104	Now I'm going to ask you about tests a healthcare worker can do to check for cervical cancer, which is cancer in the cervix. The cervix connects the womb to the vagina. To be checked for cervical cancer, a woman is asked to lie on her back with her legs apart. Then the healthcare worker will use a brush or swab to collect a sample from inside her. The sample is sent to a laboratory for testing. This test is called a Pap smear or HPV test. Another method is called a VIA or Visual Inspection with Acetic Acid. In this test, the healthcare worker puts vinegar on the cervix to see if there is a reaction.		
1105	Has a doctor or other healthcare worker ever tested you for cervical cancer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1106	Now I would like to ask you some questions on smoking and tobacco use. Do you currently smoke cigarettes every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1108
1107	On average, how many cigarettes do you currently smoke each day?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
1108	Do you currently smoke or use any other type of tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1110
1109	What other type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	KRETEKS . . . . . A PIPES FULL OF TOBACCO . . . . . B CIGARS, CHEROOTS, OR CIGARILLO . . . . . C WATER/ SHISHA . . . . . D SNUFF BY MOUTH . . . . . E SNUFF BY NOSE . . . . . F CHEWING TOBACCO . . . . . G BETEL QUID WITH TOBACCO . . . . . H OTHER _____ X (SPECIFY)	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1110	Now I would like to ask you some questions about drinking alcohol. Have you ever consumed any alcohol, such as beer, wine, spirits, akpeteshie, palm wine, pito, etc?	YES . . . . . 1 NO 2	→1113
1111	During the last one month, on how many days did you have an alcoholic drink? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF RESPONDENT ANSWERS 'EVERY DAY' OR 'ALMOST EVERY DAY,' CODE '95'.	DID NOT DRINK ALCOHOL . . . . . 00 NUMBER OF DAYS . . . . . [ ][ ] EVERY DAY/ALMOST EVERY DAY 95	→1113
1112	We count one drink of alcohol as one can or bottle of beer, one glass of wine, one shot of spirits, or one shot of akpeteshie, a calabash of palm wine or pito. In the last one month, on the days that you drank alcohol, how many drinks did you usually have per day? SHOW PICTURES OF SIZES OF STANDARD DRINKS.	LESS THAN ONE STANDARD DRINK . . . . . 00 NUMBER OF DRINKS . . . . . [ ][ ]	
1113	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not a big problem: a) Getting permission to go to the doctor? b) Getting money needed for advice or treatment? c) The distance to the health facility? d) Not wanting to go alone?	BIG PROBLEM / NOT A BIG PROBLEM a) PERMISSION TO GO . . . . 1 2 b) GETTING MONEY . . . . . 1 2 c) DISTANCE . . . . . 1 2 d) GO ALONE 1 2	
1114	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→1116
1115	What type of health insurance are you covered by? RECORD ALL MENTIONED.	NATIONAL /DISTRICT HEALTH INSURANCE(NHIS) . . . . . A MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . B HEALTH INSURANCE THROUGH EMPLOYER . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . . . . D OTHER _____ X (SPECIFY)	→1119
1116	Have you ever been registered with the National Health Insurance Scheme or NHIS?	YES . . . . . 1 NO 2	→1118

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1117	Why have you not registered with the National Health Insurance Scheme (NHIS)? RECORD ALL MENTIONED.	NOT HEARD OF NHIS . . . . . A CANNOT AFFORD PREMIUM . . . . . B DO NOT TRUST . . . . . C DON'T NEED HEALTH INSURANCE . . D NHIS DOES NOT COVER HEALTH SERVICES I NEED . . . . E DON'T UNDERSTANDS SCHEME . . F DON'T KNOW WHERE TO REGISTER G NO EASY ACCESS TO A HEALTH FACILITY . . . . . H DO NOT LIKE THE ATTITUDE OF STAFF IN A HEALTH FACILITY . . I THOSE WITH INSURANCE ARE GIVEN SUBSTANDARD SERVICES AND MEDICINE . . . . . J OTHER _____ X (SPECIFY)	→ 1121
1118	What is the reason for dropping out of National Health Insurance Scheme? RECORD ALL MENTIONED.	CANNOT AFFORD PREMIUM . . . . . A DO NOT TRUST . . . . . B DON'T NEED HEALTH INSURANCE . . . . . C NHIS DOES NOT COVER HEALTH SERVICES I NEED . . . . . D DON'T UNDERSTANDS SCHEME . . E DON'T KNOW WHERE TO REGISTER F NO EASY ACCESS TO A HEALTH FACILITY . . . . . G DO NOT LIKE THE ATTITUDE OF STAFF IN A HEALTH FACILITY . . H THOSE WITH INSURANCE ARE GIVEN SUBSTANDARD SERVICES AND MEDICINE . . . . . I OTHER _____ J (SPECIFY)	
1119	Do you hold a valid National Health Insurance Scheme (NHIS) card?	YES, CARD SEEN . . . . . 1 YES, CARD NOT SEEN . . . . . 2 NO 3	→ 1121
1120	Why do you not have a valid National Health Insurance Scheme (NHIS) card? RECORD ALL MENTIONED.	REGISTERED, NOT PAID FULLY . . . . . A REGISTERED, CARD NOT RECEIVED . . . . . B REGISTERED, WAITING PERIOD . . . . . C NOT RENEWED REGISTRATION . . . . . D LOST NHIS CARD . . . . . E OTHER _____ X (SPECIFY)	
1121	In the last 6 months, how many times have you visited any healthcare provider or a health care facility for your own health? IF NONE RECORD '00'	NUMBER OF TIMES . . . . . ☐☐ NONE . . . . . 00 DON'T KNOW 98	→ 1201
1121A	CHECK 1117: NOT ASKED ☐ ↓	ASKED ☐ →	1201
1121B	CHECK 1120: NOT ASKED ☐ ↓	ASKED ☐ →	1201

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1122	During these visits, how many times have you accessed the health care using your National Health Insurance Scheme (NHIS) card? IF NONE RECORD '00'	NUMBER OF TIMES . . . . . [ ][ ] NONE . . . . . 00 DON'T KNOW 98	

1123 A. The last time you accessed health services with your insurance card, did you make any out-of-pocket payments for the following?

B. Was it a co-payment or a full payment ?

	PAYMENT		CO-PAYMENT	FULL PAYMENT	DON'T REMEMBER
a) Consultation?	YES 1 → NO 2	a) CONSULTATION	1	2	3
b) Drugs?	YES 1 → NO 2	b) DRUGS . .	1	2	3
c) Diagnosis?	YES 1 → NO 2	c) DIAGNONIS	1	2	3
d) Admission?	YES 1 → NO 2	d) ADMISSION	1	2	3
e) Surgical?	YES 1 → NO 2	e) SURGICAL	1	2	3
f) Other?	YES 1 → NO 2	f) OTHER (SPECIFY)			96

SECTION 12. MALARIA KNOWLEDGE AND BELIEFS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1201	In the last six months, have you seen or heard any messages about malaria?	YES . . . . . 1 NO 2	→ 1203
1202	Where did you see or hear these messages? PROBE: Anywhere else? RECORD ALL MENTIONED.	RADIO . . . . . A TELEVISION . . . . . B POSTER/BILLBOARD . . . . . C NEWSPAPER/MAGAZINE . . . . . D LEAFLET/BROCHURE . . . . . E HEALTHCARE PROVIDER . . . . . F COMMUNITY HEALTH WORKER . . . . . G SOCIAL MEDIA . . . . . H OTHER _____ X (SPECIFY) DON'T REMEMBER . . . . . Z	
1202A	In the past six months, have you seen/heard any of the following malaria messages on television or radio:	YES, TV / YES, RADIO / YES, TV AND RADIO / NO a) Zero malaria starts with you and me ? — a) 1 2 3 4 b) Malaria 360, everything malaria ? — b) 1 2 3 4 c) Good life is an everyday thing ? — c) 1 2 3 4	
1203	Are there ways to avoid getting malaria?	YES . . . . . 1 NO 2	→ 1205
1204	What are the things that people can do to prevent themselves from getting malaria? RECORD ALL MENTIONED.	SLEEP UNDER A MOSQUITO NET . . . . . A SLEEP UNDER AN INSECTICIDE-TREATED MOSQUITO NET . . . . . B USE MOSQUITO REPELLENT . . . . . C TAKE PREVENTATIVE MEDICATIONS . . . . D SPRAY HOUSE WITH INSECTICIDE . . . . . E FILL IN STAGNANT WATERS (PUDDLES) . . F KEEP SURROUNDINGS CLEAN . . . . . G PUT MOSQUITO SCREEN ON WINDOWS . . H BURN MOSQUITO COIL . . . . . I OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1205	Now I am going to read some statements and I would like you to tell me whether you agree or disagree with each statement. If you don't know, say, don't know. People in this community only get malaria during the rainy season. Do you agree or disagree?	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1206	When a child has a fever, you almost always worry it might be malaria. Do you agree or disagree?	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1207	Getting malaria is not a problem because it can be easily treated. Do you agree or disagree?	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/UNCERTAIN 8	

SECTION 12. MALARIA KNOWLEDGE AND BELIEFS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1208	Only weak children can die from malaria. Do you agree or disagree?	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1209	You can sleep under a mosquito net for the entire night when there are lots of mosquitoes. Do you agree or disagree?	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1210	You can sleep under a mosquito net for the entire night when there are few mosquitoes Do you agree or disagree?	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1211	You do not like sleeping under a mosquito net when the weather is too warm. Do you agree or disagree?	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1212	When a child has a fever, it is best to start by giving them any medicine you have at home. Do you agree or disagree?	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1213	People in your community usually take their children to a health care provider on the same day or day after they develop a fever. Do you agree or disagree? IF RESPONDENT DOESN'T KNOW, PROBE: Would you say more than half or less than half of the community does this?	AGREE/MORE THAN HALF . . . . . 1 DISAGREE/LESS THAN HALF . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1214	People in your community who have a mosquito net usually sleep under a mosquito net every night. Do you agree or disagree? IF RESPONDENT DOESN'T KNOW, PROBE: Would you say more than half or less than half of the community does this?	AGREE/MORE THAN HALF . . . . . 1 DISAGREE/LESS THAN HALF . . . . . 2 DON'T KNOW/UNCERTAIN 8	
1214A	During the past six months, have you seen/heard any advert on the use of ACTs/ malaria medicines?	YES . . . . . 1 NO 2	→ 1300
1214B	Where did you see/hear the advert on the use of ACTs/ malaria medicines? Any other media? RECORD ALL MENTIONED.	TELEVISION . . . . . A RADIO . . . . . B NEWSPAPER/MAGAZINE . . . . . C POSTER /LEAFLETS . . . . . D BILLBOARD . . . . . E OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1300	CHECK COVER PAGE: WOMAN SELECTED FOR DV MODULE? WOMAN SELECTED FOR THIS SECTION ☐ ↓ WOMAN NOT SELECTED ☐ →		1137A
1301	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 →		1337
1302	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Ghana. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. If I ask you any question you don't want to answer, just let me know and I will go on to the next question.		
1303	CHECK 701 AND 702: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ → NEVER MARRIED/ NEVER LIVED WITH A MAN ☐ ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/ MALE PARTNER') ☐ →		1306 1306
1304	You have said that you are not married and are not living with a man as if married. Are you currently in an intimate relationship with a man even though you are not living with him?	YES . . . . . 1 NO 2	1306 →
1305	Have you ever been in an intimate relationship with a man even though you did not ever live with him?	YES . . . . . 1 NO 2	1319 →

1306 Now, I am going to ask you about some situations that can happen between some women and their (husband/male partner).

	A. Please tell me if these descriptions apply to your relationship with your (last) (husband/male partner).			B. How often did this happen during the last 12 months: often, only sometimes, or not at all?		
		EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a)	He (is/was) jealous or angry if you (talk/talked) to other men?	YES 1 NO 2 ↓	→	1	2	3
b)	He wrongly (accuses/accused) you of being unfaithful?	YES 1 NO 2 ↓	→	1	2	3
c)	He (does/did) not permit you to meet your female friends?	YES 1 NO 2 ↓	→	1	2	3
d)	He (tries/tried) to limit your contact with your family?	YES 1 NO 2 ↓	→	1	2	3
e)	He (insists/insisted) on knowing where you (are/were) at all times?	YES 1 NO 2 ↓	→	1	2	3

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1307	Now I need to ask some more questions about your relationship with your (last) (husband/male partner). A. Did your (last) (husband/male partner) ever:	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?	

	EVER			OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) say or do something to humiliate you in front of others?	YES NO	1 2	→	1	2	3
b) threaten to hurt or harm you or someone you care about?	YES NO	1 2	→	1	2	3
c) insult you or make you feel bad about yourself?	YES NO	1 2	→	1	2	3

1308	A. Did your (last) (husband/male partner) ever do any of the following things to you:	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?	

	EVER			OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) push you, shake you, or throw something at you?	YES NO	1 2	→	1	2	3
b) slap you?	YES NO	1 2	→	1	2	3
c) twist your arm or pull your hair?	YES NO	1 2	→	1	2	3
d) punch you with his fist or with something that could hurt you?	YES NO	1 2	→	1	2	3
e) kick you, drag you, or beat you up?	YES NO	1 2	→	1	2	3
f) try to choke you or burn you on purpose?	YES NO	1 2	→	1	2	3
g) attack you with a knife, gun, or other weapon?	YES NO	1 2	→	1	2	3
h) physically force you to have sexual intercourse with him when you did not want to?	YES NO	1 2	→	1	2	3
i) physically force you to perform any other sexual acts you did not want to?	YES NO	1 2	→	1	2	3
j) force you with threats or in any other way to perform sexual acts you did not want to?	YES NO	1 2	→	1	2	3

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1309	CHECK1308A (a-j): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1311
1310	Did the following ever happen as a result of what your (last) (husband/male partner) did to you:		
	a) You had cuts, bruises, or aches?	YES . . . . . 1 NO 2	
	b) You had eye injuries, sprains, dislocations, or burns?	YES . . . . . 1 NO 2	
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO 2	
1311	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/male partner) at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO 2	→ 1313
1312	In the last 12 months, how often have you done this to your (last) (husband/male partner): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1313	Does (did) your (last) (husband/male partner) drink alcohol?	YES . . . . . 1 NO 2	→ 1315
1314	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3	
1315	Are (Were) you afraid of your (last) (husband/male partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1316	A. So far we have been talking about the behavior of your (current/last) (husband/male partner). Now I want to ask you about the behavior of any previous husband or any other current or previous male partner that you may have ever had.	B. How long ago did this last happen?	

	EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER	
	HAS NEVER HAD ANOTHER HUSBAND/ MALE PARTNER 6					→ 1317
a) Did any previous husband or any other current or previous male partner ever hit, slap, kick, or do anything else to hurt you physically?	YES NO ↓	1 2	→ 1	2	3	
b) Did any previous husband or any other current or previous male partner physically force you to have intercourse or perform any other sexual acts that you did not want to?	YES NO ↓	1 2	→ 1	2	3	
c) Did any previous husband or any other current or previous male partner humiliate you in front of others, threaten to hurt you or someone you care about, or insult you or make you feel bad about yourself?	YES NO ↓	1 2	→ 1	2	3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1317	CHECK1308A (h-j) AND 1316A (b): AT LEAST ONE 'YES' ↓ NOT A SINGLE YES →		1319
1318	How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts that you did not want to by any current or previous husband or male partner?	AGE IN COMPLETED YEARS . . . . . ☐☐ DON'T KNOW 98	
1319	CHECK 212 AND 232: CURRENTLY PREGNANT 232=1 OR HAD ONE OR MORE PAST PREGNANCIES 212>0 ↓ NOT PREGNANT 232=2 AND NO PAST PREGNANCIES 212=0 →		1322
1320	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO . . . . . 2 →	1322
1321	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/PARTNER . . . . G CURRENT BOYFRIEND . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M SCHOOLMATE/CLASSMATE . . . . . N EMPLOYER/SOMEONE AT WORK . . O POLICE/SOLDIER . . . . . P OTHER _____ (SPECIFY) X	
1322	CHECK 701 AND 702 AND 1304 AND1305: EVER MARRIED/EVER LIVED WITH A MAN/ EVER HAD A MALE PARTNER ↓ a) From the time you were 15 years old, has anyone other than a husband or male partner, hit you, slapped you, kicked you, or done anything else to hurt you physically? Remember, I do not want you to include any husband or any other male partner. NEVER MARRIED/ NEVER HAD A MALE PARTNER ↓ b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER . . . . . 3 →	1325

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1323	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E CURRENT BOYFRIEND . . . . . F FORMER BOYFRIEND . . . . . G MOTHER-IN-LAW . . . . . H FATHER-IN-LAW . . . . . I OTHER IN-LAW . . . . . J TEACHER . . . . . K SCHOOLMATE/CLASSMATE . . . . . L EMPLOYER/SOMEONE AT WORK . . M POLICE/SOLDIER . . . . . N OTHER _____ X (SPECIFY)	
1324	In the last 12 months, how often (has this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1325	CHECK 701 AND 702 AND 1304 AND 1305: EVER MARRIED/ EVER LIVED WITH A MAN/ EVER HAD A MALE PARTNER ↓ NEVER MARRIED/ NEVER HAD A MALE PARTNER →		1327
1326	At any time in your life, as a child or as an adult, has anyone other than any previous husband or any other current or previous male partner ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to? Remember I do not want you to include any husband or male partner.	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1328 → 1331
1327	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1331
1328	CHECK 701 AND 702 AND 1304 AND 1305: EVER MARRIED/EVER LIVED WITH A MAN/ EVER HAD A MALE PARTNER ↓ a) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts that you did not want to by anyone, not including any husband or any other male partner? NEVER MARRIED/ NEVER HAD A MALE PARTNER ↓ b) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts that you did not want to?	AGE IN COMPLETED YEARS . . . . . ☐☐ DON'T KNOW 98	

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1329	Who has forced you to have sexual intercourse or perform any other sexual acts that you did not want to? Anyone else? RECORD ALL MENTIONED.	FATHER/STEP-FATHER . . . . . A BROTHER/STEP-BROTHER . . . . . B OTHER RELATIVE . . . . . C CURRENT BOYFRIEND . . . . . D FORMER BOYFRIEND . . . . . E IN-LAW . . . . . F OWN FRIEND/ACQUAINTANCE . . . . G FAMILY FRIEND . . . . . H TEACHER . . . . . I SCHOOLMATE/CLASSMATE . . . . . J EMPLOYER/SOMEONE AT WORK . . K POLICE/SOLDIER . . . . . L PRIEST/RELIGIOUS LEADER . . . . . M STRANGER . . . . . N OTHER _____ X (SPECIFY)	
1330	CHECK 701 AND 702 AND 1304 AND 1305: EVER MARRIED/EVER LIVED WITH A MAN/ EVER HAD A MALE PARTNER ☐ a) In the last 12 months, has anyone other than any previous husband or any other current or previous male partner forced you to have sexual intercourse or perform any other sexual acts that you did not want to? NEVER MARRIED/ NEVER HAD A MALE PARTNER ☐ b) In the last 12 months, has anyone forced you to have sexual intercourse or perform any other sexual acts that you did not want to?	YES . . . . . 1 NO 2	
1331	CHECK 1308A (a-j), 1316A (a,b), 1320, 1322, 1326, AND 1327: AT LEAST ONE 'YES' ☐ NOT A SINGLE 'YES' ☐ →		1335
1332	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1334
1333	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S/PARTNER'S FAMILY . . B CURRENT/FORMER HUSBAND/PARTNER . . . . . C CURRENT/FORMER BOYFRIEND . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . . . . H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANIZATION . . K OTHER _____ X (SPECIFY)	→ 1335
1334	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1335	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.		
1336	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES, ONCE / YES, MORE THAN ONCE / NO HUSBAND . . . . . 1 2 3 OTHER MALE ADULT . . 1 2 3 FEMALE ADULT 1 2 3	
1337	INTERVIEWER'S COMMENTS/EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE.		
1137A	CHECK 111: AGE 15-29 YEARS ☐ ↓ 29 YEARS OR OLDER ☐ →		1138
1137B	Thank you for taking the time to answer these questions. I would like to inform you that additional information will be collected in the near future to better understand the health and wellbeing of young people as they grow into adulthood. Another member of our team may return in a few days or weeks to ask you some additional questions about these topics. Do you agree to allow another member of our team to contact you about participating in a short interview? Your responses will remain confidential.	YES . . . . . 1 NO 2	
1138	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

CODES FOR EACH COLUMN:

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 EMERGENCY CONTRACEPTION
- J STANDARD DAYS METHOD
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 CHANGES IN MENSTRUAL BLEEDING
- 6 OTHER SIDE EFFECTS/HEALTH CONCERNS
- 7 LACK OF ACCESS/TOO FAR
- 8 COSTS TOO MUCH
- N INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER

_____
(SPECIFY)

- Z DON'T KNOW

				COL. 1	COL. 2	
	12	DEC	01			
	11	NOV	02			
	10	OCT	03			
	09	SEP	04			
2	08	AUG	05			2
0	07	JUL	06			0
2	06	JUN	07			2
2	05	MAY	08			2
	04	APR	09			
	03	MAR	10			
	02	FEB	11			
	01	JAN	12			
	12	DEC	13			
	11	NOV	14			
	10	OCT	15			
	09	SEP	16			
2	08	AUG	17			2
0	07	JUL	18			0
2	06	JUN	19			2
1	05	MAY	20			1
	04	APR	21			
	03	MAR	22			
	02	FEB	23			
	01	JAN	24			
	12	DEC	25			
	11	NOV	26			
	10	OCT	27			
	09	SEP	28			
2	08	AUG	29			2
0	07	JUL	30			0
2	06	JUN	31			2
0	05	MAY	32			0
	04	APR	33			
	03	MAR	34			
	02	FEB	35			
	01	JAN	36			
	12	DEC	37			
	11	NOV	38			
	10	OCT	39			
	09	SEP	40			
2	08	AUG	41			2
0	07	JUL	42			0
1	06	JUN	43			1
9	05	MAY	44			9
	04	APR	45			
	03	MAR	46			
	02	FEB	47			
	01	JAN	48			
	12	DEC	49			
	11	NOV	50			
	10	OCT	51			
	09	SEP	52			
2	08	AUG	53			2
0	07	JUL	54			0
1	06	JUN	55			1
8	05	MAY	56			8
	04	APR	57			
	03	MAR	58			
	02	FEB	59			
	01	JAN	60			
	12	DEC	61			
	11	NOV	62			
	10	OCT	63			
	09	SEP	64			
2	08	AUG	65			2
0	07	JUL	66			0
1	06	JUN	67			1
7	05	MAY	68			7
	04	APR	69			
	03	MAR	70			
	02	FEB	71			
	01	JAN	72			

FORMATTING DATE: 8 Apr 2022
ENGLISH LANGUAGE: 8 Apr 2022

2022 GHANA DEMOGRAPHIC AND HEALTH SURVEYS
MAN'S QUESTIONNAIRE

GHANA
GHANA STATISTICAL SERVICE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ][ ]

NAME AND LINE NUMBER OF MAN _____ [ ][ ]

HOUSEHOLD SELECTED FOR MAN'S SURVEY? (1=YES, 2=NO . . . . . [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
				MONTH [ ][ ]
				YEAR [ ][ ][ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NO. [ ][ ][ ][ ]
RESULT*	_____	_____	_____	RESULT* [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ SPECIFY

LANGUAGE OF QUESTIONNAIRE** [0 1] LANGUAGE OF INTERVIEW** [ ][ ] NATIVE LANGUAGE OF RESPONDENT** [ ][ ] TRANSLATOR USED (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH; 02 AKAN; 03 GA; 04 EWE; 05 DAGBANI

TEAM NUMBER [ ][ ]

TEAM SUPERVISOR NAME _____ NUMBER [ ][ ][ ][ ]

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with Ghana Statistical Service (GSS). We are conducting a survey about health and other topics all over Ghana. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	In what REGION do you live?	WESTERN . . . . . 01 CENTRAL . . . . . 02 GREATER ACCRA . . . . . 03 VOLTA . . . . . 04 EASTERN . . . . . 05 ASHANTI . . . . . 06 WESTERN NORTH . . . . . 07 AHAFO . . . . . 08 BONO . . . . . 09 BONO EAST . . . . . 10 OTI . . . . . 11 NORTHERN . . . . . 12 SAVANNAH . . . . . 13 NORTH EAST . . . . . 14 UPPER EAST . . . . . 15 UPPER WEST . . . . . 16 OUTSIDE OF GHANA 96	→ 104
103	What country were you born in?	COUNTRY _____ ☐☐	
104	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 110
105	CHECK 104: 00 - 04 YEARS ☐ ↓ 05 YEARS OR MORE ☐ →		→ 107
106	In what month and year did you move here?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	Just before you moved here, which REGION did you live in?	WESTERN . . . . . 01 CENTRAL . . . . . 02 GREATER ACCRA . . . . . 03 VOLTA . . . . . 04 EASTERN . . . . . 05 ASHANTI . . . . . 06 WESTERN NORTH . . . . . 07 AHAFO . . . . . 08 BONO . . . . . 09 BONO EAST . . . . . 10 OTI . . . . . 11 NORTHERN . . . . . 12 SAVANNAH . . . . . 13 NORTH EAST . . . . . 14 UPPER EAST . . . . . 15 UPPER WEST . . . . . 16 OUTSIDE OF GHANA 96	
108	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA 3	
109	Why did you move to this place?	EMPLOYMENT . . . . . 01 EDUCATION/TRAINING . . . . . 02 MARRIAGE FORMATION . . . . . 03 FAMILY REUNIFICATION/OTHER FAMILY RELATED REASON . . . . . 04 FORCED DISPLACEMENT . . . . . 05 OTHER _____ 96 (SPECIFY)	
110	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
111	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . [ ][ ]	
112	In general, would you say your health is very good, good, moderate, bad, or very bad?	VERY GOOD . . . . . 1 GOOD . . . . . 2 MODERATE . . . . . 3 BAD . . . . . 4 VERY BAD 5	
113	Have you ever attended school?	YES . . . . . 1 NO 2	→ 117
114	What is the highest level of school you attended:pre-primary, primary, middle, JSS/JHS, secondary, SSS/SHS, or higher?	PRE- PRIMARY . . . . . 1 PRIMARY . . . . . 2 MIDDLE . . . . . 3 JSS/JHS . . . . . 4 SECONDARY . . . . . 5 SSS/SHS . . . . . 6 HIGHER 7	
115	What is the highest [GRADE/FORM/YEAR] you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	[GRADE/FORM/YEAR] . . . . . [ ][ ]	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
116	CHECK 114: PRIMARY, MIDDLE, JSS/JHS, SECONDARY, OR SSS/SHS ☐ ↓ HIGHER ☐ → 119		
117	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
118	CHECK 117: CODE '2', '3' OR '4' CIRCLED ☐ ↓ CODE '1' OR '5' CIRCLED ☐ → 120		
119	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
120	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
121	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
122	Do you own a mobile phone?	YES . . . . . 1 NO . . . . . 2 → 127	
123	Is your mobile phone a smart phone?	YES . . . . . 1 NO 2	
127	Have you ever used the Internet from any location on any device?	YES . . . . . 1 NO . . . . . 2 → 130	
128	In the last 12 months, have you used the Internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO . . . . . 2 → 130	
129	During the last one month, how often did you use the Internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
130	What is your religion	CATHOLIC . . . . . 01 ANGLICAN . . . . . 02 METHODIST . . . . . 03 PRESBYTERIAN . . . . . 04 PENTECOSTAL/CHARISMA . . . . . 05 OTHER CHRIST . . . . . 06 ISLAM . . . . . 07 TRADITIONAL/SPIRITUAL . . . . . 08 NO RELIGION . . . . . 95 OTHER _____ 96 (SPECIFY)	
131	What is your ethnic group?	AKAN . . . . . 01 GA/DANGME . . . . . 02 EWE . . . . . 03 GUAN . . . . . 04 MOLE-DAGBAN . . . . . 05 GRUSI . . . . . 06 GURMA . . . . . 07 MANDE . . . . . 08 OTHER _____ 96 (SPECIFY)	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ HAS HAD ONLY ONE CHILD → 211 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	
211	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ a) How old were you when your first child was born? HAS HAD ONLY ONE CHILD ↓ b) How old were you when your child was born?	AGE IN YEARS . . . . . [ ][ ]	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
212	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ☐ ↓ NO LIVING CHILDREN ☐ →		301
213	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐ ↓ a) How old is your youngest child? ONLY ONE LIVING CHILD ☐ ↓ b) How old is your child?	AGE IN YEARS . . . . . ☐☐	
214	CHECK 213: (YOUNGEST) CHILD IS AGE 0-2 YEARS ☐ ↓ (YOUNGEST) CHILD IS AGE 3 YEARS OR OLDER ☐ →		301
215	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐ ↓ a) What is the name of your youngest child? ONLY ONE LIVING CHILD ☐ ↓ b) What is the name of your child?	_____ (NAME OF (YOUNGEST) CHILD)	
216	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	☐ → 218
217	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
218	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER 2	→ 301
219	Did you go with (NAME's) mother to the hospital or health facility where she gave birth to (NAME)?	YES . . . . . 1 NO 2	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?	
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more	YES . . . . . 1 NO 2
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within 3 days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Standard Days Method. PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, she uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2
11	Lactational Amenorrhea Method (LAM). PROBE: Up to 6 months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES . . . . . 1 NO 2
12	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO . . . . . Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last 12 months have you:	YES NO	
	a) Heard about family planning on the radio?	a) RADIO 1 2	
	b) Seen anything about family planning on the television?	b) TELEVISION 1 2	
	c) Read about family planning in a newspaper or magazine?	c) NEWSPAPER OR MAGAZINE . . 1 2	
	d) Received a voice or text message about family planning on a mobile phone?	d) MOBILE PHONE 1 2	
	e) Seen anything about family planning on social media such as Facebook, Twitter, or Instagram?	e) FACEBOOK/TWITTER/ INSTAGRAM 1 2	
	f) Seen anything about family planning on a poster, leaflet or brochure?	f) POSTER/LEAFLET/ BROCHURE 1 2	
	g) Seen anything about family planning on an outdoor sign or billboard?	g) OUTDOOR SIGN/BILLBOARD . . 1 2	
	h) Heard anything about family planning at community meetings or events?	h) COMMUNITY MEETINGS/ EVENTS 1 2	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . 3 HALFWAY BETWEEN TWO PERIODS . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
306	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one.	AGREE / DIS-AGREE / DK	
	a) Contraception is a woman's concern and a man should not have to worry about it.	a) CONTRACEPTION WOMAN'S CONCERN 1 2 8	
	b) Women who use contraception may become promiscuous.	b) WOMEN MAY BECOME PROMISCUOUS 1 2 8	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . 1 YES, LIVING WITH A WOMAN . . . . 2 NO, NOT IN UNION 3	1, 2 → 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . 1 YES, LIVED WITH A WOMAN . . . . 2 NO 3	3 → 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . 1 DIVORCED . . . . 2 SEPARATED 3	1, 2, 3 → 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . 1 STAYING ELSEWHERE 2	
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE WIFE) . . . . 1 NO (ONLY ONE WIFE) 2	2 → 407
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . ☐☐	
407	CHECK 405: ONE WIFE/ PARTNER ☐ ↓ a) Please tell me the name of (your wife/the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER ☐ ↓ b) Please tell me the name of your (first/next) wife or woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR THE (FIRST/NEXT) WIFE OR LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME / LINE NUMBER: ________ ☐☐ ________ ☐☐ ________ ☐☐ ________ ☐☐	408 (1) How old was (NAME/this wife or partner) on her last birthday? AGE ☐☐ ☐☐ ☐☐ ☐☐
408	How old was (NAME/this wife or partner) on her last birthday? RETURN TO 407 FOR THE NEXT WIFE OR LIVE-IN PARTNER.		
409	CHECK 407: ONE WIFE/ PARTNER ☐ ↓ MORE THAN ONE WIFE/ PARTNER ☐ →		411
410	Have you been married or lived with a woman only once or more than once?	MORE THAN ONCE . . . . 1 ONLY ONCE 2	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
411	CHECK 405 AND 410: BOTH ARE CODE '2' ↓ / OTHER ↓ a) In what month and year did you start living with your (wife/partner)? b) Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE . . . . . ☐☐	
413	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE**		
414	I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . ☐☐	→ 501
415	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	→ 429
416	The last time you had sexual intercourse, did you or your partner do something or use any method to delay or avoid a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 418
417	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 419
418	What method did you or your partner use? RECORD ALL MENTIONED. IF CODES 'G' OR 'H' ARE CIRCLED, SKIP TO 420 EVEN IF ANOTHER METHOD WAS ALSO USED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I STANDARD DAYS METHOD . . . . . J LACTATIONAL AMENORRHEA METHOD . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	→ 420
419	The last time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 422

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
420	What was the brand name of the condom used? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	FIESTA . . . . . 01 KISS . . . . . 02 DUREX . . . . . 03 GOLD CIRCLE . . . . . 04 BE SAFE/ NO LOGO . . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
421	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 OTHER PUBLIC SECTOR _____ 17 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 PHARMACY . . . . . 23 DRUG STORE . . . . . 24 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 25 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR _____ 32 (SPECIFY) **OTHER SOURCE** SHOP/MARKET . . . . . 41 CHURCH . . . . . 42 FRIEND/RELATIVE . . . . . 43 DRUG PEDDLERS . . . . . 44 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
422	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	WIFE . . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 CLIENT/SEX WORKER . . . . . 5 OTHER _____ 6 (SPECIFY)	
423	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 NO 2	→ 429
424	The last time you had sexual intercourse with this second person, was a condom used?	YES . . . . . 1 NO 2	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
425	What was your relationship to this second person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	WIFE . . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 CLIENT/SEX WORKER . . . . . 5 OTHER _____ 6 (SPECIFY)	
426	Apart from these two people, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 NO 2	→ 429
427	The last time you had sexual intercourse with this third person, was a condom used?	YES . . . . . 1 NO 2	
428	What was your relationship to this third person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	WIFE . . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . . . . 4 CLIENT/SEX WORKER . . . . . 5 OTHER _____ 6 (SPECIFY)	
429	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐	→ 514	
502	CHECK 418: MAN NOT STERILIZED OR QUESTION NOT ASKED ☐↓ MAN STERILIZED ☐	→ 514	
503	CHECK 407: ONE WIFE/ PARTNER ☐↓ MORE THAN ONE WIFE/ PARTNER ☐	→ 509	
504	Is your (wife/partner) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 507
505	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
506	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
507	CHECK 208: HAS FATHERED CHILDREN ☐↓ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐↓ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . 3 WIFE/PARTNER STERILIZED . . . . . 4 RESPONDENT STERILIZED . . . . . 5 UNDECIDED/DON'T KNOW 8	→ 514
508	CHECK 208: HAS FATHERED CHILDREN ☐↓ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐↓ b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
509 (1)	Are any of your (wives/partners) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 512

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
510	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
511	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
512	CHECK 208: HAS FATHERED CHILDREN ☐ ↓ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐ ↓ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . 3 (WIFE/WIVES/PARTNER(S)) STERILIZED . . 4 RESPONDENT STERILIZED . . . . . 5 UNDECIDED/DON'T KNOW 8	→ 514
513	CHECK 208: HAS FATHERED CHILDREN ☐ ↓ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐ ↓ b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	
514	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ ↓ a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ ↓ b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 601 NUMBER . . . . . ☐☐ OTHER _____ 96 → 601 (SPECIFY)	
515	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last 7 days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last 7 days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 607
604	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ _____ ☐☐	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ ↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ →		→ 612
608	CHECK 606: CODE '1' OR '2' CIRCLED ☐ ↓ OTHER ☐ →		→ 610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . 3 OTHER _____ 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 01 JOINTLY WITH WIFE/PARTNER ONLY . . . . 02 JOINTLY WITH SOMEONE ELSE ONLY . . . . 03 JOINTLY WITH WIFE/PARTNER AND SOMEONE ELSE . . . . . 04 BOTH ALONE AND JOINTLY . . . . . 05 DOES NOT OWN 06	→ 615
613	Do you have a title deed or other government recognized document for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 615
614	Is your name on this document?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
615	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY . . . . . 01 JOINTLY WITH WIFE/PARTNER ONLY . . . . 02 JOINTLY WITH SOMEONE ELSE ONLY . . . . 03 JOINTLY WITH WIFE/PARTNER AND SOMEONE ELSE . . . . . 04 BOTH ALONE AND JOINTLY . . . . . 05 DOES NOT OWN 06	→ 617A
616	Do you have a title deed or other government recognized document for any land you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 617A
617	Is your name on this document?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
617A	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	→ 617C
617B	Did you yourself put money in or take money out of this account in the last 12 months?	YES . . . . . 1 NO 2	
617C	In the last 12 months, have you used a mobile phone to make financial transactions such as sending or receiving money, paying bills, purchasing goods or services, or receiving wages?	YES . . . . . 1 NO 2	
618	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	YES NO DK a) GOES OUT . . . . . 1 2 8 b) NEGLECTS CHILDREN 1 2 8 c) ARGUES . . . . . 1 2 8 d) REFUSES SEX . . . . . 1 2 8 e) BURNS FOOD 1 2 8	
619	As far as you know did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
700	Now I would like to talk about HIV and AIDS.		
701	Have you ever heard of HIV or AIDS?	YES . . . . . 1 NO 2	→ 729
702	CHECK 111: AGE 15-24 YEARS ☐ ↓ 25 YEARS OR OLDER ☐ →		→ 708
703	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
704	Can people get HIV from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
706	Can people get HIV by sharing food with a person who has HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
707	Is it possible for a healthy-looking person to have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
708	Have you heard of ARVs, that is, antiretroviral medicines that treat HIV?	YES . . . . . 1 NO 2	
709	Are there any special medicines that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
710	Have you heard of PrEP, a medicine taken daily that can prevent a person from getting HIV?	YES . . . . . 1 NO 2	→ 712
711	Do you approve of people who take a pill every day to prevent getting HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
712	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
713	Have you ever been tested for HIV?	YES . . . . . 1 NO 2	→ 721
714	In what month and year was your most recent HIV test?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC, PRIVATE, OR NGO SECTOR, RECORD '96' AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT POLYCLINIC . . . . . 12 GOVERNMENT HEALTH CENTER . . . . . 13 GOVERNMENT CLINIC . . . . . 14 CHPS CENTER/GOVERNMENT HEALTH POST . . . . . 15 COMMUNITY HEALTH SERVICES (OUTREACH) . . . . . 16 PUBLIC LABORATORY/ DIAGNOSTIC CENTERS . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL . . . . . 21 PRIVATE CLINIC . . . . . 22 PHARMACY . . . . . 23 DRUG STORE . . . . . 24 COMMUNITY HEALTH SERVICES (MOBILE CLINIC) . . . . . 25 MATERNITY HOME . . . . . 26 PRIVATE LABORATORY/ DIAGNOSTIC CENTERS . . . . . 27 OTHER PRIVATE MEDICAL SECTOR _____ 28 (SPECIFY) **NGO MEDICAL SECTOR** NGO HOSPITAL/CLINIC . . . . . 31 OTHER NGO MEDICAL SECTOR _____ 32 (SPECIFY) **OTHER SOURCE** HOME . . . . . 41 WORKPLACE . . . . . 42 CORRECTIONAL FACILITY/ BORSTAL HOME . . . . . 43 OTHER _____ 96 (SPECIFY)	
716	Did you get the results of the test?	YES . . . . . 1 NO 2	→ 720
717	What was the result of the test?	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 INDETERMINATE . . . . . 3 DECLINED TO ANSWER 4	→ 720
718	In what month and year did you receive your first HIV-positive test result?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR . . . . . 9998 SAME DATE AS MOST RECENT HIV TEST . . 95	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
719	Are you currently taking ARVs, that is antiretroviral medicines? By currently, I mean that you may have missed some doses but you are still taking ARVs.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
720	How many times have you been tested for HIV in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE, IF NUMBER OF TESTS IS 95 OR MORE, RECORD '95'.	NUMBER OF HIV TESTS . . . . . ☐☐	
721	Have you heard of test kits people can use to test themselves for HIV?	YES . . . . . 1 NO 2	→ 723
722	Have you ever tested yourself for HIV using a self-test kit?	YES . . . . . 1 NO 2	
723	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
724	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/DEPENDS 8	
725	CHECK 717: CODE '1' CIRCLED ☐ ↓ OTHER ☐ →		729
726	Now I would like to ask you a few questions about your experiences living with HIV. Have you disclosed your HIV status to anyone other than me?	YES . . . . . 1 NO 2	
727	Do you agree or disagree with the following statement: I have felt ashamed because of my HIV status.	AGREE . . . . . 1 DISAGREE 2	
728	Please tell me if the following things have happened to you, or if you think they have happened to you, because of your HIV status in the last 12 months.	YES NO a) PEOPLE TALK BADLY . . . . . 1 2 b) DISCLOSED STATUS . . . . . 1 2 c) VERBALLY INSULTED . . . . . 1 2 d) HEALTHCARE WORKERS TALKED BADLY . . . . . 1 2 e) HEALTHCARE WORKERS VERBALLY ABUSED 1 2	
729	CHECK 701: HEARD ABOUT HIV OR AIDS ↓ / NOT HEARD ABOUT HIV OR AIDS ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual b) Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
730	CHECK 414: HAS HAD SEXUAL INTERCOURSE ☐ ↓ NEVER HAD SEXUAL INTERCOURSE ☐ → 735		
731	CHECK 729: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ ↓ NO ☐ → 733		
732	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
733	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
734	Sometimes men have a sore or ulcer on or near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
735	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
736	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised. Are you circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 806
802	Some men are traditionally circumcised by a traditional practitioner, family member or friend. Are you traditionally circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 804
803	How old were you when you got traditionally circumcised?	AGE IN COMPLETED YEARS . . . . [ ][ ] DURING CHILDHOOD (<5 YEARS) . . . . . 95 DON'T KNOW 98	
804	Some men are medically circumcised, that is, the foreskin is completely removed from the penis by a healthcare worker. Are you medically circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 806
805	How old were you when you got medically circumcised?	AGE IN COMPLETED YEARS . . . . [ ][ ] DURING CHILDHOOD (<5 YEARS) . . . . . 95 DON'T KNOW 98	
806	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 809 → 808
807	In the past, have you smoked tobacco every day?	YES . . . . . 1 NO 2	→ 810
808	In the past, have you ever smoked tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 811
809	On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Kreteks? d) Pipes full of tobacco? e) Cigars, cheroots, or cigarillos? f) Water/ chicha sessions? g) Any others? _____ (SPECIFY)	NUMBER DAILY a) MANUFACTURED CIGARETTES . . . . . [ ][ ][ ] b) HAND-ROLLED CIGARETTES . . . . . [ ][ ][ ] c) KRETEKS . . . . . [ ][ ][ ] d) PIPES FULL OF TOBACCO . . . . . [ ][ ][ ] e) CIGARS, CHEROOTS, OR CIGARILLOS . . . . [ ][ ][ ] f) WATER/SHISHA SESSIONS . . . . [ ][ ][ ] g) OTHERS . . . . . [ ][ ][ ]	→ 811

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'.	NUMBER WEEKLY	
	a) Manufactured cigarettes?	a) MANUFACTURED CIGARETTES . . . . . [ ][ ][ ]	
	b) Hand-rolled cigarettes?	b) HAND-ROLLED CIGARETTES . . . . . [ ][ ][ ]	
	c) Kreteks?	c) KRETEKS . . . . . [ ][ ][ ]	
	d) Pipes full of tobacco?	d) PIPES FULL OF TOBACCO . . . . . [ ][ ][ ]	
	e) Cigars, cheroots, or cigarillos?	e) CIGARS, CHEROOTS, OR CIGARILLOS . . . . [ ][ ][ ]	
	f) Water/ chicha sessions?	f) WATER/SHISHA SESSIONS . . . . [ ][ ][ ]	
	g) Any others? _____ (SPECIFY)	g) OTHERS . . . . . [ ][ ][ ]	
811	Do you currently use smokeless tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 813 → 814
812	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'.	TIMES DAILY	
	a) Snuff, by mouth?	a) SNUFF, BY MOUTH . . . . [ ][ ][ ]	
	b) Snuff, by nose?	b) SNUFF, BY NOSE . . . . . [ ][ ][ ]	
	c) Chewing tobacco?	c) CHEWING TOBACCO . . . . [ ][ ][ ]	→ 814
	d) Betel quid with tobacco?	d) BETEL QUID WITH TOBACCO . . . . [ ][ ][ ]	
	e) Any others? _____ (SPECIFY)	e) ANY OTHERS . . . . . [ ][ ][ ]	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
813	On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Betel quid with tobacco? e) Any others? _____ (SPECIFY)	TIMES WEEKLY a) SNUFF, BY MOUTH . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . [ ][ ][ ] d) BETEL QUID WITH TOBACCO . . . . [ ][ ][ ] e) ANY OTHERS . . . . . [ ][ ][ ]	
814	Now I would like to ask you some questions about drinking alcohol. Have you ever consumed any alcohol, such as beer, wine, spirits, akpeteshie, palm wine, pito, etc?	YES . . . . . 1 NO 2	→ 817
815	During the last one month, on how many days did you have an alcoholic drink? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF RESPONDENT ANSWERS 'EVERY DAY' OR 'ALMOST EVERY DAY,' CODE '95'.	DID NOT DRINK ALCOHOL . . . . . 00 NUMBER OF DAYS . . . . . [ ][ ] EVERY DAY/ALMOST EVERY DAY 95	→ 817
816	We count one drink of alcohol as one can or bottle of beer, one glass of wine, one shot of spirits, or one shot of akpeteshie, a calabash of palm wine or pito. In the last one month, on the days that you drank alcohol, how many drinks did you usually have per day? SHOW PICTURES OF SIZES OF STANDARD DRINKS.	LESS THAN ONE STANDARD DRINK . . . . . 00 NUMBER OF DRINKS . . . . . [ ][ ]	
817	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 819
818	What type of health insurance are you covered by? RECORD ALL MENTIONED.	NATIONAL /DISTRICT HEALTH INSURANCE(NHIS) . . . . . A MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . B HEALTH INSURANCE THROUGH EMPLOYER . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE . . . . D OTHER _____ (SPECIFY) X	→ 822
819	Have you ever been registered with the National Health Insurance Scheme or NHIS?	YES . . . . . 1 NO 2	→ 821

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
820	Why have you not registered with the National Health Insurance Scheme (NHIS)? RECORD ALL MENTIONED.	NOT HEARD OF NHIS . . . . . A CANNOT AFFORD PREMIUM . . . . . B DO NOT TRUST . . . . . C DON'T NEED HEALTH INSURANCE . . D NHIS DOES NOT COVER HEALTH SERVICES I NEED . . . . E DON'T UNDERSTANDS SCHEME . . F DON'T KNOW WHERE TO REGISTER G NO EASY ACCESS TO A HEALTH FACILITY . . . . . H DO NOT LIKE THE ATTITUDE OF STAFF IN A HEALTH FACILITY . . I THOSE WITH INSURANCE ARE GIVEN SUBSTANDARD SERVICES AND MEDICINE . . . . . J OTHER _____ X (SPECIFY)	→ 824
821	What is the reason for dropping out of National Health Insurance Scheme?	CANNOT AFFORD PREMIUM . . . . . A DO NOT TRUST . . . . . B DON'T NEED HEALTH INSURANCE . . C NHIS DOES NOT COVER HEALTH SERVICES I NEED . . . . D DON'T UNDERSTANDS SCHEME . . E DON'T KNOW WHERE TO REGISTER F NO EASY ACCESS TO A HEALTH FACILITY . . . . . G DO NOT LIKE THE ATTITUDE OF STAFF IN A HEALTH FACILITY . . H THOSE WITH INSURANCE ARE GIVEN SUBSTANDARD SERVICES AND MEDICINE . . . . . I OTHER _____ J (SPECIFY)	
822	Do you hold a valid National Health Insurance Scheme (NHIS) card?	YES, CARD SEEN . . . . . 1 YES, CARD NOT SEEN . . . . . 2 NO 3	→ 824
823	Why do you not have a valid National Health Insurance Scheme (NHIS) card? RECORD ALL MENTIONED.	REGISTERED, NOT PAID FULL` . . . . . A REGISTERED, CARD NOT RECEIVED . . . . . B REGISTERED, WAITING PERIOD . . . . . C NOT RENEWED REGISTRATION . . . . . D LOST NHIS CARD . . . . . E OTHER _____ X (SPECIFY)	
824	In the last 6 months, how many times have you visited any healthcare provider or a health care facility for your own health? IF NONE RECORD '00'	NUMBER OF TIMES . . . . . ☐☐ NONE . . . . . 00 DON'T KNOW 98	→ 827A
824A	CHECK 820: NOT ASKED ☐ ↓ ASKED ☐		→ 827A
824B	CHECK 823: NOT ASKED ☐ ↓ ASKED ☐		→ 827A

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
825	During these visits, how many times have you accessed the health care using your National Health Insurance Scheme (NHIS) card? IF NONE RECORD '00'	NUMBER OF TIMES . . . . . [ ][ ] NONE . . . . . 00 DON'T KNOW 98	

826 A. The last time you accessed health services with your insurance card, did you make any out-of-pocket payments for the following?

B. Was it a co-payment or a full payment ?

	PAYMENT		CO-PAYMENT	FULL PAYMENT	DON'T REMEMBER
a) Consultation?	YES 1 →	a) CONSULTATION	1	2	3
	NO 2 ↓				
b) Drugs?	YES 1 →	b) DRUGS . .	1	2	3
	NO 2 ↓				
c) Diagnosis?	YES 1 →	c) DIAGNONIS	1	2	3
	NO 2 ↓				
d) Admission?	YES 1 →	d) ADMISSION	1	2	3
	NO 2 ↓				
e) Surgical?	YES 1 →	e) SURGICAL	1	2	3
	NO 2 ↓				
f) Other?	YES 1 →	f) OTHER			
	NO 2				
		(SPECIFY)			96

827A	CHECK 111: AGE 15-29 YEARS ☐ ↓ 29 YEARS OR OLDER ☐ →		828
827B	Thank you for taking the time to answer these questions. I would like to inform you that additional information will be collected in the near future to better understand the health and wellbeing of young people as they grow into adulthood. Another member of our team may return in a few days or weeks to ask you some additional questions about these topics. Do you agree to allow another member of our team to contact you about participating in a short interview? Your responses will remain confidential.	YES . . . . . 1 NO 2	
828	RECORD THE TIME.	HOURS . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

FORMATTING DATE: 2 Jun 2020
ENGLISH LANGUAGE: 10 Oct 2019

2022 GHANA DEMOGRAPHIC AND HEALTH SURVEYS
BIOMARKER QUESTIONNAIRE

GHANA
GHANA STATISTICAL SERVICE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

HOUSEHOLD SELECTED FOR MAN'S SURVEY? (1=YES, 2=NO) . . . . . |_|

BIOMARKER TECHNICIAN VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
BIOMARKER'S NAME				YEAR
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

NOTES:

TOTAL ELIGIBLE WOMEN

TOTAL ELIGIBLE MEN

TOTAL ELIGIBLE CHILDREN

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** | | NATIVE LANGUAGE OF RESPONDENT** | | TRANSLATOR (YES = 1, NO = 2) |_|

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:
01 ENGLISH 03 GA 05 DAGBANI
02 AKAN 04 EWE

TEAM NUMBER |_|_|

TEAM SUPERVISOR
NAME _____ NUMBER |_|_|_|_|

101	CHECK CAPI OUTPUT FOR "LIST ELIGIBLE INDIVIDUALS/BIOMARKERS". RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN AGE 0-5 YEARS IN QUESTION 102 ON THIS PAGE AND SUBSEQUENT PAGES STARTING WITH THE FIRST ONE LISTED. IF MORE THAN THREE CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).		
	CHILD 1		SKIP
102	CHECK CAPI OUTPUT AND RECORD NAME AND LINE NUMBER OF CHILD.	NAME _____ LINE NUMBER	
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM PREGNANCY HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY . . . . . . MONTH . . . . . . YEAR	
104	IF MOTHER INTERVIEWED: COPY CHILD'S AGE FROM PREGNANCY HISTORY. IF MOTHER NOT INTERVIEWED ASK: How old was (NAME) at (NAME)'s last birthday? COMPARE AND CORRECT 103 AND/OR 104 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
105	CHECK 104: CHILD AGE 0-4 YEARS? YES ☐ NO ☐		→ 139
106	WEIGHT IN KILOGRAMS.	KG. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 108
107	WAS THE CHILD MINIMALLY DRESSED?	YES . . . . . 1 NO 2	
108	HEIGHT IN CENTIMETERS. IF CHILD IS AGE 0-1 YEARS, MEASURE LYING DOWN. IF CHILD IS AGE 2, 3, OR 4 YEARS, MEASURE STANDING UP.	CM. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 113
109	WAS THE CHILD MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	
110	CHECK 104 AND 109: BASED ON CHILD'S AGE, WAS CORRECT MEASUREMENT PROCEDURE FOLLOWED?	YES . . . . . 1 NO 2	→ 112
111	IF CHILD IS AGE 0-1 YEARS: WHY WAS (NAME) MEASURED STANDING UP? IF CHILD IS AGE 2-4 YEARS: WHY WAS (NAME) MEASURED LYING DOWN? _____ _____		
112	WAS THE RECORDED MEASUREMENT INTERFERED WITH BY BRAIDED OR ORNAMENTED HAIR?	YES . . . . . 1 NO 2	

113	ENTER BIOMARKER TECH NUMBER OF MEASURER.	☐☐☐☐ BIOMARKER TECH	
114	ENTER BIOMARKER TECH NUMBER OF ASSISTANT MEASURER.	☐☐☐☐ BIOMARKER TECH	
115	TODAY'S DATE:	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
	CHILD 1		SKIP
116	RECORD HEIGHT/LENGTH AND WEIGHT IN THE INFORMATIONAL PAMPHLET.		
117	CHECK 103: IS THE CHILD AGE 0-5 MONTHS OR IS THE CHILD OLDER?	OLDER ☐ AGE 0-5 MONTHS ☐ → 139	
118	RECORD NAME OF PARENT/RESPONSIBLE ADULT FOR THE CHILD.	NAME _____ LINE NUMBER . . . . . ☐☐	
119	ASK CONSENT FOR MALARIA AND ANEMIA TESTS FROM PARENT/RESPONSIBLE ADULT: As part of this survey, we are asking children all over the country to take a test to see if they have malaria and a test to see if they have anemia. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat malaria and anemia. We ask that all children age 6 months through 4 years take part in malaria and anemia testing. The tests require a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for malaria and anemia immediately, and the results will be told to you right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the malaria and anemia tests?		
120	CIRCLE THE CODE.	GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER . . . . 3 → 123	
121	SIGN NAME AND ENTER BIOMARKER TECH NUMBER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH	

	CHILD 1		SKIP
122	IF CONSENT GRANTED, PREPARE EQUIPMENT AND SUPPLIES FOR THE TESTS AND PROCEED WITH THE TESTS.		
123	PLACE 1ST BAR CODE LABEL FOR MALARIA LAB TEST IN SPACE TO THE RIGHT. PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	
124	RECORD HEMOGLOBIN LEVEL HERE AND IN THE INFORMATIONAL PAMPHLET.	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	
125	RECORD THE RESULT OF THE MALARIA RDT HERE AND THE INFORMATIONAL PAMPHLET.	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 NOT PRESENT . . . . . 4 REFUSED . . . . . 5 OTHER 6	→ 137 → 139 → 137
126	Does (NAME) suffer from any of the following illnesses or symptoms: a) Extreme weakness? b) Heart problems? c) Loss of consciousness? d) Rapid or difficult breathing? e) Seizures? f) Abnormal bleeding? g) Jaundice or yellow skin? h) Dark urine?	YES NO a) EXTREME WEAKNESS . . . . . 1 2 b) HEART PROBLEMS . 1 2 c) LOSS OF CONSCIOUS 1 2 d) RAPID BREATHING . 1 2 e) SEIZURES . . . . . 1 2 f) BLEEDING . . . . . 1 2 g) JAUNDICE . . . . . 1 2 h) DARK URINE 1 2	
127	CHECK 126: ANY 'YES' CIRCLED? NO ☐ YES ☐		→ 129
128	CHECK 124: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA . . . . . 1 8.0 G/DL OR ABOVE . . . . . 2 OTHER 6	→ 130
129	**SEVERE MALARIA REFERAL** The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taken to a health facility right away. RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.		→ 137
130	In the past two weeks has (NAME) taken or is taking ACT given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT.	YES . . . . . 1 NO 2	→ 132
131	**ALREADY TAKING ACT REFERRAL STATEMENT** You have told me that (NAME OF CHILD) had already received ACT for malaria. Therefore, I cannot give you additional ACT. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ACT, you should take the child to the nearest health facility for further examination.		→ 139

132	ASK CONSENT FOR MALARIA TREATMENT FROM PARENT/RESPONSIBLE ADULT: The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called ACT. ACT is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.		
133	CIRCLE THE APPROPRIATE CODE.	ACCEPTED MEDICINE . . . . . 1 REFUSED MEDICINE . . . . . 2 OTHER 6	→ 139
134	SIGN NAME AND ENTER BIOMARKER TECH NUMBER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH	

	CHILD 1	SKIP
135	CHECK 133: ACCEPTED MEDICINE? YES ☐ NO ☐	→ 139
136	TREATMENT WITH ARTEMETHER-LUMEFANTRINE (AL) TELL THE PARENT/RESPONSIBLE ADULT TO GIVE THE MEDICINE TO THE CHILD ACCORDING TO THE TREATMENT PROTOCOL BELOW. PAY SPECIAL ATTENTION TO THE AGE OF THE CHILD. Weight (in kg)-Approximate age — Dosage (AL 20mg/120mg) < 15kg (6months-2years) — DAY 1: 1 tablet AL for a start and 1 tablet AL after 8hrs. DAYS 2 & 3: 1 tablet AL in the morning and 1 tablet AL in the evening. 15-25kg (3-4years) — DAY 1: 2 tablets AL for a start and 2 tablets AL after 8hrs. DAYS 2 & 3: 2 tablets AL in the morning and 2 tablets AL in the evening. Give the medicine with fatty food or drinks like milk or breast milk. Put the tablet in a little water, dissolve it well and give it to the child. If your child vomits within an hour of taking the medicine, repeat the dose and get additional tablets TELL PARENT/RESPONSIBLE ADULT: IF (NAME OF CHILD) has a high fever, fast or difficulty breathing, is not able to drink or breastfeed, gets sicker, or does not get better in two days, you should take him or her to a health professional for treatment right away.	→ 139
137	CHECK 124: HEMOGLOBIN RESULT BELOW 8.0 G/DL, SEVERE ANEMIA . . . . . 1 8.0 G/DL OR ABOVE . . . . . 2 OTHER 6	→ 139
138	**SEVERE ANEMIA REFERAL** The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately. RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL FORM.	
139	IF ANOTHER CHILD, GO TO 103 ON THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.	

101	CHECK CAPI OUTPUT FOR "LIST ELIGIBLE INDIVIDUALS/BIOMARKERS". RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN AGE 0-5 YEARS IN QUESTION 102 ON THIS PAGE AND SUBSEQUENT PAGES STARTING WITH THE FIRST ONE LISTED. IF MORE THAN THREE CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).		
	CHILD 2		SKIP
102	CHECK CAPI OUTPUT AND RECORD NAME AND LINE NUMBER OF CHILD.	NAME _____ LINE NUMBER	
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM PREGNANCY HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY . . . . . MONTH . . . . . YEAR	
104	IF MOTHER INTERVIEWED: COPY CHILD'S AGE FROM PREGNANCY HISTORY. IF MOTHER NOT INTERVIEWED ASK: How old was (NAME) at (NAME)'s last birthday? COMPARE AND CORRECT 103 AND/OR 104 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
105	CHECK 104: CHILD AGE 0-4 YEARS? YES ☐ NO ☐		→ 139
106	WEIGHT IN KILOGRAMS.	KG. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 108
107	WAS THE CHILD MINIMALLY DRESSED?	YES . . . . . 1 NO 2	
108	HEIGHT IN CENTIMETERS. IF CHILD IS AGE 0-1 YEARS, MEASURE LYING DOWN. IF CHILD IS AGE 2, 3, OR 4 YEARS, MEASURE STANDING UP.	CM. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 113
109	WAS THE CHILD MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	
110	CHECK 104 AND 109: BASED ON CHILD'S AGE, WAS CORRECT MEASUREMENT PROCEDURE FOLLOWED?	YES . . . . . 1 NO 2	→ 112
111	IF CHILD IS AGE 0-1 YEARS: WHY WAS (NAME) MEASURED STANDING UP? IF CHILD IS AGE 2-4 YEARS: WHY WAS (NAME) MEASURED LYING DOWN? _____ _____		

112	WAS THE RECORDED MEASUREMENT INTERFERED WITH BY BRAIDED OR ORNAMENTED HAIR?	YES . . . . . 1 NO 2	
113	ENTER BIOMARKER TECH NUMBER OF MEASURER.	BIOMARKER TECH NUMBER	
114	ENTER BIOMARKER TECH NUMBER OF ASSISTANT MEASURER.	BIOMARKER TECH NUMBER	
115	TODAY'S DATE:	DAY . . . . . MONTH . . . . . YEAR	
	CHILD 2		SKIP
116	RECORD HEIGHT/LENGTH AND WEIGHT IN THE INFORMATIONAL PAMPHLET.		
117	CHECK 103: IS THE CHILD AGE 0-5 MONTHS OR IS THE CHILD OLDER? OLDER ☐ AGE 0-5 MONTHS ☐		→ 139
118	RECORD NAME OF PARENT/RESPONSIBLE ADULT FOR THE CHILD.	NAME _____ LINE NUMBER	
119	ASK CONSENT FOR MALARIA AND ANEMIA TESTS FROM PARENT/RESPONSIBLE ADULT: As part of this survey, we are asking children all over the country to take a test to see if they have malaria and a test to see if they have anemia. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat malaria and anemia. We ask that all children age 6 months through 4 years take part in malaria and anemia testing. The tests require a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for malaria and anemia immediately, and the results will be told to you right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the malaria and anemia tests?		
120	CIRCLE THE CODE.	GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3	→ 123
121	SIGN NAME AND ENTER BIOMARKER TECH NUMBER.	_____ (SIGN) BIOMARKER TECH NUMBER	

	CHILD 2		SKIP
122	IF CONSENT GRANTED, PREPARE EQUIPMENT AND SUPPLIES FOR THE TESTS AND PROCEED WITH THE TESTS.		
123	PLACE 1ST BAR CODE LABEL FOR MALARIA LAB TEST IN SPACE TO THE RIGHT. PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	
124	RECORD HEMOGLOBIN LEVEL HERE AND IN THE INFORMATIONAL PAMPHLET.	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	
125	RECORD THE RESULT OF THE MALARIA RDT HERE AND THE INFORMATIONAL PAMPHLET.	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 NOT PRESENT . . . . . 4 REFUSED . . . . . 5 OTHER 6	→ 137 → 139 → 137
126	Does (NAME) suffer from any of the following illnesses or symptoms: a) Extreme weakness? b) Heart problems? c) Loss of consciousness? d) Rapid or difficult breathing? e) Seizures? f) Abnormal bleeding? g) Jaundice or yellow skin? h) Dark urine?	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS . 1 2 c) LOSS OF CONSCIOUS 1 2 d) RAPID BREATHING . 1 2 e) SEIZURES . . . . . 1 2 f) BLEEDING . . . . . 1 2 g) JAUNDICE . . . . . 1 2 h) DARK URINE 1 2	
127	CHECK 126: ANY 'YES' CIRCLED? NO ☐ YES ☐		→ 129
128	CHECK 124: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA . . . . . 1 8.0 G/DL OR ABOVE . . . . . 2 OTHER 6	→ 130

129	**SEVERE MALARIA REFERAL** The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taken to a health facility right away. RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.		→ 137
130	In the past two weeks has (NAME) taken or is taking ACT given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT.	YES . . . . . 1 NO 2	→ 132
131	**ALREADY TAKING ACT REFERRAL STATEMENT** You have told me that (NAME OF CHILD) had already received ACT for malaria. Therefore, I cannot give you additional ACT. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ACT, you should take the child to the nearest health facility for further examination.		→ 139
132	ASK CONSENT FOR MALARIA TREATMENT FROM PARENT/RESPONSIBLE ADULT: The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called ACT. ACT is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.		
133	CIRCLE THE APPROPRIATE CODE.	ACCEPTED MEDICINE . . . . . 1 REFUSED MEDICINE. . . . . 2 OTHER 6	→ 139
134	SIGN NAME AND ENTER BIOMARKER TECH NUMBER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH NUMBER	

	CHILD 2	SKIP
135	CHECK 133: ACCEPTED MEDICINE? YES ☐ NO ☐	→ 139
136	TREATMENT WITH ARTEMETHER-LUMEFANTRINE (AL) TELL THE PARENT/RESPONSIBLE ADULT TO GIVE THE MEDICINE TO THE CHILD ACCORDING TO THE TREATMENT PROTOCOL BELOW. PAY SPECIAL ATTENTION TO THE AGE OF THE CHILD. Weight (in kg)-Approximate age — Dosage (AL 20mg/120mg) < 15kg (6months-2years) — DAY 1: 1 tablet AL for a start and 1 tablet AL after 8hrs. DAYS 2 & 3: 1 tablet AL in the morning and 1 tablet AL in the evening. 15-25kg (3-4years) — DAY 1: 2 tablets AL for a start and 2 tablets AL after 8hrs. DAYS 2 & 3: 2 tablets AL in the morning and 2 tablets AL in the evening. Give the medicine with fatty food or drinks like milk or breast milk. Put the tablet in a little water, dissolve it well and give it to the child. If your child vomits within an hour of taking the medicine, repeat the dose and get additional tablets TELL PARENT/RESPONSIBLE ADULT: IF (NAME OF CHILD) has a high fever, fast or difficulty breathing, is not able to drink or breastfeed, gets sicker, or does not get better in two days, you should take him or her to a health professional for treatment right away.	→ 139
137	CHECK 124: HEMOGLOBIN RESULT BELOW 8.0 G/DL, SEVERE ANEMIA . . . . . 1 8.0 G/DL OR ABOVE . . . . . 2 OTHER 6	→ 139
138	**SEVERE ANEMIA REFERAL** The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately. RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL FORM.	
139	IF ANOTHER CHILD, GO TO 103 ON THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.	

101	CHECK CAPI OUTPUT FOR "LIST ELIGIBLE INDIVIDUALS/BIOMARKERS". RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN AGE 0-5 YEARS IN QUESTION 102 ON THIS PAGE AND SUBSEQUENT PAGES STARTING WITH THE FIRST ONE LISTED. IF MORE THAN THREE CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).		
	CHILD 3		SKIP
102	CHECK CAPI OUTPUT AND RECORD NAME AND LINE NUMBER OF CHILD.	NAME _____ LINE NUMBER	
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM PREGNANCY HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY . . . . . . MONTH . . . . . . YEAR	
104	IF MOTHER INTERVIEWED: COPY CHILD'S AGE FROM PREGNANCY HISTORY. IF MOTHER NOT INTERVIEWED ASK: How old was (NAME) at (NAME)'s last birthday? COMPARE AND CORRECT 103 AND/OR 104 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
105	CHECK 104: CHILD AGE 0-4 YEARS? YES ☐ NO ☐		→ 139
106	WEIGHT IN KILOGRAMS.	KG. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 108
107	WAS THE CHILD MINIMALLY DRESSED?	YES . . . . . 1 NO 2	
108	HEIGHT IN CENTIMETERS. IF CHILD IS AGE 0-1 YEARS, MEASURE LYING DOWN. IF CHILD IS AGE 2, 3, OR 4 YEARS, MEASURE STANDING UP.	CM. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 113
109	WAS THE CHILD MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	
110	CHECK 104 AND 109: BASED ON CHILD'S AGE, WAS CORRECT MEASUREMENT PROCEDURE FOLLOWED?	YES . . . . . 1 NO 2	→ 112
111	IF CHILD IS AGE 0-1 YEARS: WHY WAS (NAME) MEASURED STANDING UP? IF CHILD IS AGE 2-4 YEARS: WHY WAS (NAME) MEASURED LYING DOWN? _____ _____		
112	WAS THE RECORDED MEASUREMENT INTERFERED WITH BY BRAIDED OR ORNAMENTED HAIR?	YES . . . . . 1 NO 2	
113	ENTER BIOMARKER TECH NUMBER OF MEASURER.	BIOMARKER TECH	

114	ENTER BIOMARKER TECH NUMBER OF ASSISTANT MEASURER.	☐☐☐☐ BIOMARKER TECH	
115	TODAY'S DATE:	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
	CHILD 3		SKIP
116	RECORD HEIGHT/LENGTH AND WEIGHT IN THE INFORMATIONAL PAMPHLET.		
117	CHECK 103: IS THE CHILD AGE 0-5 MONTHS OR IS THE CHILD OLDER?	OLDER ☐ ↓ AGE 0-5 MONTHS ☐ →	139
118	RECORD NAME OF PARENT/RESPONSIBLE ADULT FOR THE CHILD.	NAME _____ LINE NUMBER . . . . . ☐☐	
119	ASK CONSENT FOR MALARIA AND ANEMIA TESTS FROM PARENT/RESPONSIBLE ADULT: As part of this survey, we are asking children all over the country to take a test to see if they have malaria and a test to see if they have anemia. Malaria is a serious illness caused by a parasite transmitted by a mosquito bite. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat malaria and anemia. We ask that all children age 6 months through 4 years take part in malaria and anemia testing. The tests require a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for malaria and anemia immediately, and the results will be told to you right away. A few blood drops will be collected on slide(s) and taken to a laboratory for testing. You will not be told the results of the laboratory testing. All results will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the malaria and anemia tests?		
120	CIRCLE THE CODE.	GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3	→ 123
121	SIGN NAME AND ENTER BIOMARKER TECH NUMBER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH	

	CHILD 3		SKIP
122	IF CONSENT GRANTED, PREPARE EQUIPMENT AND SUPPLIES FOR THE TESTS AND PROCEED WITH THE TESTS.		
123	PLACE 1ST BAR CODE LABEL FOR MALARIA LAB TEST IN SPACE TO THE RIGHT. PUT THE 2ND BAR CODE LABEL ON THE SLIDE AND THE 3RD ON THE TRANSMITTAL FORM.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	

124	RECORD HEMOGLOBIN LEVEL HERE AND IN THE INFORMATIONAL PAMPHLET.	G/DL . . . . . □□.□ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	
125	RECORD THE RESULT OF THE MALARIA RDT HERE AND THE INFORMATIONAL PAMPHLET.	POSITIVE . . . . . 1 NEGATIVE . . . . . 2 NOT PRESENT . . . . . 4 REFUSED . . . . . 5 OTHER 6	→ 137 → 139 → 137
126	Does (NAME) suffer from any of the following illnesses or symptoms: a) Extreme weakness? b) Heart problems? c) Loss of consciousness? d) Rapid or difficult breathing? e) Seizures? f) Abnormal bleeding? g) Jaundice or yellow skin? h) Dark urine?	YES NO a) EXTREME WEAKNESS 1 2 b) HEART PROBLEMS . 1 2 c) LOSS OF CONSCIOUS 1 2 d) RAPID BREATHING . 1 2 e) SEIZURES . . . . . 1 2 f) BLEEDING . . . . . 1 2 g) JAUNDICE . . . . . 1 2 h) DARK URINE 1 2	
127	CHECK 126: ANY 'YES' CIRCLED? NO □ YES □		→ 129
128	CHECK 124: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA . . . . . 1 8.0 G/DL OR ABOVE . . . . . 2 OTHER 6	→ 130

129	**SEVERE MALARIA REFERAL** The malaria test shows that (NAME OF CHILD) has malaria. Your child also has symptoms of severe malaria. The malaria treatment I have will not help your child, and I cannot give you the medication. Your child is very ill and must be taken to a health facility right away. RECORD THE RESULT OF THE MALARIA RDT ON THE REFERRAL FORM.		→ 137
130	In the past two weeks has (NAME) taken or is taking ACT given by a doctor or health center to treat the malaria? VERIFY BY ASKING TO SEE TREATMENT.	YES . . . . . 1 NO 2	→ 132
131	**ALREADY TAKING ACT REFERRAL STATEMENT** You have told me that (NAME OF CHILD) had already received ACT for malaria. Therefore, I cannot give you additional ACT. However, the test shows that he/she has malaria. If your child has a fever for two days after the last dose of ACT, you should take the child to the nearest health facility for further examination.		→ 139
132	ASK CONSENT FOR MALARIA TREATMENT FROM PARENT/RESPONSIBLE ADULT: The malaria test shows that your child has malaria. We can give you free medicine. The medicine is called ACT. ACT is very effective and in a few days it should get rid of the fever and other symptoms. You do not have to give the child the medicine. This is up to you. Please tell me whether you accept the medicine or not.		
133	CIRCLE THE APPROPRIATE CODE.	ACCEPTED MEDICINE . . . . . 1 REFUSED MEDICINE . . . . . 2 OTHER 6	→ 139
134	SIGN NAME AND ENTER BIOMARKER TECH NUMBER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH	

	CHILD 3	SKIP
135	CHECK 133: ACCEPTED MEDICINE? YES ☐ NO ☐	→ 139
136	TREATMENT WITH ARTEMETHER-LUMEFANTRINE (AL) TELL THE PARENT/RESPONSIBLE ADULT TO GIVE THE MEDICINE TO THE CHILD ACCORDING TO THE TREATMENT PROTOCOL BELOW. PAY SPECIAL ATTENTION TO THE AGE OF THE CHILD. Weight (in kg)-Approximate age — Dosage (AL 20mg/120mg) < 15kg (6months-2years) — DAY 1: 1 tablet AL for a start and 1 tablet AL after 8hrs. DAYS 2 & 3: 1 tablet AL in the morning and 1 tablet AL in the evening. 15-25kg (3-4years) — DAY 1: 2 tablets AL for a start and 2 tablets AL after 8hrs. DAYS 2 & 3: 2 tablets AL in the morning and 2 tablets AL in the evening. Give the medicine with fatty food or drinks like milk or breast milk. Put the tablet in a little water, dissolve it well and give it to the child. If your child vomits within an hour of taking the medicine, repeat the dose and get additional tablets TELL PARENT/RESPONSIBLE ADULT: IF (NAME OF CHILD) has a high fever, fast or difficulty breathing, is not able to drink or breastfeed, gets sicker, or does not get better in two days, you should take him or her to a health professional for treatment right away.	→ 139
137	CHECK 124: HEMOGLOBIN RESULT BELOW 8.0 G/DL, SEVERE ANEMIA . . . . . 1 8.0 G/DL OR ABOVE . . . . . 2 OTHER 6	→ 139
138	**SEVERE ANEMIA REFERAL** The anemia test shows that (NAME OF CHILD) has severe anemia. Your child is very ill and must be taken to a health facility immediately. RECORD THE RESULT OF THE ANEMIA TEST ON THE REFERRAL FORM.	
139	IF ANOTHER CHILD, GO TO 103 IN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN,GO TO 201.	

201	CHECK CAPI OUTPUT FOR "LIST ELIGIBLE INDIVIDUALS/BIOMARKERS" . RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE WOMEN IN 202, 203, AND 204 ON THIS PAGE AND SUBSEQUENT PAGES STARTING WITH THE FIRST ONE LISTED. IF MORE THAN TWO WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).		
	WOMAN 1		SKIP
202	CHECK CAPI OUTPUT AND RECORD NAME AND LINE NUMBER OF WOMAN.	NAME _____ LINE NUMBER . . . . . ☐☐	
203	CHECK CAPI OUTPUT FOR AGE: CHECK COLUMN 7 IN HOUSEHOLD QUESTIONNAIRE (AGE).	15-17 YEARS . . . . . 1 18-49 YEARS 2	
204	CHECK CAPI OUTPUT FOR MARITAL STATUS: CHECK COLUMN 8 IN HOUSEHOLD QUESTIONNAIRE (MARITAL STATUS).	CODE 4 (NEVER IN UNION . . . 1 OTHER 2	
205	WEIGHT IN KILOGRAMS.	KG. . . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	→ 207
206	WAS THE WOMAN WEARING ONLY LIGHTWEIGHT CLOTHING?	YES . . . . . 1 NO 2	
207	HEIGHT IN CENTIMETERS.	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 209
208	WAS THE RECORDED MEASUREMENT INTERFERED WITH BY BRAIDED OR ORNAMENTED HAIR?	YES . . . . . 1 NO 2	
209	ENTER BIOMARKER TECH NUMBER OF MEASURER.	☐☐☐☐ BIOMARKER TECH	
210	ENTER BIOMARKER TECH NUMBER OF ASSISTANT MEASURER. IF NO ASSISTANT MEASURER, ENTER 9999.	☐☐☐☐ BIOMARKER TECH	
211	TODAY'S DATE:	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
212	CHECK 203: AGE 15-17 YEARS ☐ ↓	AGE 18-49 YEARS ☐	→ 214
213	CHECK 204: OTHER ☐ ↓	CODE 4 (NEVER IN UNION) ☐	→ 217

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR WOMEN AGE 15-49

	WOMAN 1	SKIP

ADULT RESPONDENT CONSENT FOR ANEMIA TEST

ADULT RESPONDENT CONSENT

214 ASK CONSENT FOR ANEMIA TEST:

As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia.

For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.

Do you have any questions?
You can say yes or no. It is up to you to decide.
Will you take the anemia test?

# 215	CIRCLE THE CODE.	GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3	→ 225
216	SIGN NAME AND ENTER BIOMARKER TECH NUMBER OF HEMOGLOBIN MEASURER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH	→ 225

217	RECORD NAME OF PARENT/RESPONSIBLE ADULT FOR MINOR.	NAME _____ LINE NUMBER OF PARENT/ RESPONSIBLE ADULT ☐☐	

PARENT/RESPONSIBLE ADULT CONSENT FOR ANEMIA TEST

PARENT/RESPONSIBLE ADULT

218 ASK CONSENT FOR ANEMIA TEST FROM PARENT/RESPONSIBLE ADULT:

As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia.

For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF MINOR) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.

Do you have any questions?
You can say yes or no. It is up to you to decide.
Will you allow (NAME OF MINOR) to take the anemia test?

# 219	CIRCLE THE CODE.	GRANTED . . . . . 1 PARENT/RESPONSIBLE ADULT REFUSED . . . . . 2 NOT PRESENT/OTHER 3	→ 225

		WOMAN 1	SKIP
CONSENT	220	SIGN NAME AND ENTER BIOMARKER TECH NUMBER OF HEMOGLOBIN MEASURER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH
	221	CHECK 219: CONSENT GRANTED ☐ ↓ CONSENT REFUSED ☐	→ 225

MINOR RESPONDENT ASSENT FOR ANEMIA TEST

MINOR RESPONDENT ASSENT	222	ASK ASSENT FOR ANEMIA TEST FROM MINOR RESPONDENT: As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?	
	# 223	CIRCLE THE CODE.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 NOT PRESENT/OTHER . . . . 3 → 225
	224	SIGN NAME AND ENTER BIOMARKER TECH NUMBER OF HEMOGLOBIN MEASURER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH

	# 225	RECORD HEMOGLOBIN LEVEL HERE AND IN THE INFORMATIONAL PAMPHLET.	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 → 228 OTHER 996
	226	CHECK 225: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA . . . . . 1 8.0 G/DL OR ABOVE . . . . . 2 → 228
	227	The anemia test shows that you have severe anemia. You are very ill and must go to a health facility immediately. RECORD THE RESULT OF THE ANEMIA TEST ON THE SEVERE ANEMIA REFERRAL FORM.	
	228	IF ANOTHER WOMAN, GO TO 202 ON THE NEXT PAGE; IF NO MORE WOMEN, GO TO 301.	

WEIGHT, HEIGHT, AND HEMOGLOBIN MEASUREMENT FOR WOMEN AGE 15-49

201	CHECK CAPI OUTPUT FOR "LIST ELIGIBLE INDIVIDUALS/BIOMARKERS" . RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE WOMEN IN 202, 203, AND 204 ON THIS PAGE AND SUBSEQUENT PAGES STARTING WITH THE FIRST ONE LISTED. IF MORE THAN TWO WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).		
	WOMAN 2		SKIP
202	CHECK CAPI OUTPUT AND RECORD NAME AND LINE NUMBER OF WOMAN.	NAME _____ LINE NUMBER	
203	CHECK CAPI OUTPUT FOR AGE: CHECK COLUMN 7 IN HOUSEHOLD QUESTIONNAIRE (AGE).	15-17 YEARS . . . . . 1 18-49 YEARS 2	
204	CHECK CAPI OUTPUT FOR MARITAL STATUS: CHECK COLUMN 8 IN HOUSEHOLD QUESTIONNAIRE (MARITAL STATUS).	CODE 4 (NEVER IN UNION . . . 1 OTHER 2	
205	WEIGHT IN KILOGRAMS.	KG. . . . . . NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	→ 207
206	WAS THE WOMAN WEARING ONLY LIGHTWEIGHT CLOTHING?	YES . . . . . 1 NO 2	
207	HEIGHT IN CENTIMETERS.	CM. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 209
208	WAS THE RECORDED MEASUREMENT INTERFERED WITH BY BRAIDED OR ORNAMENTED HAIR?	YES . . . . . 1 NO 2	
209	ENTER BIOMARKER TECH NUMBER OF MEASURER.	BIOMARKER TECH	
210	ENTER BIOMARKER TECH NUMBER OF ASSISTANT MEASURER. IF NO ASSISTANT MEASURER, ENTER 9999.	BIOMARKER TECH	
211	TODAY'S DATE:	DAY . . . . . . MONTH . . . . . . YEAR	
212	CHECK 203:	AGE 15-17 YEARS ↓ / AGE 18-49 YEARS →	→ 214
213	CHECK 204:	OTHER ↓ / CODE 4 (NEVER IN UNION) →	→ 217

	WOMAN 2	SKIP

ADULT RESPONDENT CONSENT FOR ANEMIA TEST

ADULT RESPONDENT CONSENT

214 ASK CONSENT FOR ANEMIA TEST:

As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia.

For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.

Do you have any questions?
You can say yes or no. It is up to you to decide.
Will you take the anemia test?

# 215	CIRCLE THE CODE.	GRANTED . . . . . 1 REFUSED . . . . . 2 NOT PRESENT/OTHER 3	→ 225
216	SIGN NAME AND ENTER BIOMARKER TECH NUMBER OF HEMOGLOBIN MEASURER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH	→ 225

217	RECORD NAME OF PARENT/RESPONSIBLE ADULT FOR MINOR.	NAME _____ LINE NUMBER OF PARENT/ RESPONSIBLE ADULT ☐☐	

PARENT/RESPONSIBLE ADULT CONSENT FOR ANEMIA TEST

PARENT/RESPONSIBLE ADULT

218 ASK CONSENT FOR ANEMIA TEST FROM PARENT/RESPONSIBLE ADULT:

As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia.

For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF MINOR) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team.

Do you have any questions?
You can say yes or no. It is up to you to decide.
Will you allow (NAME OF MINOR) to take the anemia test?

# 219	CIRCLE THE CODE.	GRANTED . . . . . 1 PARENT/RESPONSIBLE ADULT REFUSED . . . . . 2 NOT PRESENT/OTHER 3	→ 225

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR WOMEN AGE 15-49

		WOMAN 2	SKIP
CONSENT	220	SIGN NAME AND ENTER BIOMARKER TECH NUMBER OF HEMOGLOBIN MEASURER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH
	221	CHECK 219: CONSENT GRANTED ☐ ↓ CONSENT REFUSED ☐	→ 225

MINOR RESPONDENT ASSENT FOR ANEMIA TEST

MINOR RESPONDENT ASSENT	222	ASK ASSENT FOR ANEMIA TEST FROM MINOR RESPONDENT: As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?	
	# 223	CIRCLE THE CODE.	GRANTED . . . . . 1 MINOR RESPONDENT REFUSED . . . . . 2 NOT PRESENT/OTHER . . . . 3 → 225
	224	SIGN NAME AND ENTER BIOMARKER TECH NUMBER OF HEMOGLOBIN MEASURER.	_____ (SIGN) ☐☐☐☐ BIOMARKER TECH

	# 225	RECORD HEMOGLOBIN LEVEL HERE AND IN THE INFORMATIONAL PAMPHLET.	G/DL . . . . . ☐☐.☐ NOT PRESENT . . . . . 994 REFUSED . . . . . 995 → 228 OTHER 996
	226A	CHECK 225: HEMOGLOBIN RESULT	BELOW 8.0 G/DL, SEVERE ANEMIA . . . . . 1 8.0 G/DL OR ABOVE . . . . . 2 → 228
	227	The anemia test shows that you have severe anemia. You are very ill and must go to a health facility immediately. RECORD THE RESULT OF THE ANEMIA TEST ON THE SEVERE ANEMIA REFERRAL FORM.	
	228	IF ANOTHER WOMAN, GO TO 202 IN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 301.	

WEIGHT, HEIGHT, AND HEMOGLOBIN MEASUREMENT FOR MEN AGE 15-59

301	CHECK CAPI OUTPUT FOR "LIST ELIGIBLE INDIVIDUALS/BIOMARKERS" COLUMN 10 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE MEN IN 302, 303, AND 304 ON THIS PAGE AND SUBSEQUENT PAGES STARTING WITH THE FIRST ONE LISTED. IF MORE THAN TWO MEN USE ADDITIONAL QUESTIONNAIRE(S).		
	MAN 1		SKIP
302	CHECK CAPI OUTPUT AND RECORD NAME AND LINE NUMBER OF MAN. RECORD NAME FROM COLUMN 2 IN HOUSEHOLD QUESTIONNAIRE; RECORD LINE NUMBER FROM COLUMN 10 IN HOUSEHOLD QUESTIONNAIRE.	NAME _____ LINE NUMBER	
303	CHECK CAPI OUTPUT FOR AGE: CHECK COLUMN 7 IN HOUSEHOLD QUESTIONNAIRE (AGE).	15-17 YEARS . . . . . 1 18-59 YEARS 2	
304	CHECK CAPI OUTPUT FOR MARITAL STATUS: CHECK COLUMN 8 IN HOUSEHOLD QUESTIONNAIRE (MARITAL STATUS).	CODE 4 (NEVER IN UNION . . . 1 OTHER 2	
305	WEIGHT IN KILOGRAMS.	KG. . . . . . NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	→ 307
306	WAS THE MAN WEARING ONLY LIGHTWEIGHT CLOTHING?	YES . . . . . 1 NO 2	
307	HEIGHT IN CENTIMETERS.	CM. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 309
308	WAS THE RECORDED MEASUREMENT INTERFERED WITH BY BRAIDED OR ORNAMENTED HAIR?	YES . . . . . 1 NO 2	
309	ENTER BIOMARKER TECH NUMBER OF MEASURER.	BIOMARKER TECH	
310	ENTER BIOMARKER TECH NUMBER OF ASSISTANT MEASURER. IF NO ASSISTANT MEASURER, ENTER 9999.	BIOMARKER TECH	
311	TODAY'S DATE:	DAY . . . . . . MONTH . . . . . . YEAR	
328	IF ANOTHER MAN, GO TO 302 ON THE NEXT PAGE; IF NO MORE MEN, END INTERVIEW.		

WEIGHT, HEIGHT, AND HEMOGLOBIN MEASUREMENT FOR MEN AGE 15-59

301	CHECK CAPI OUTPUT FOR "LIST ELIGIBLE INDIVIDUALS/BIOMARKERS" COLUMN 10 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE MEN IN 302, 303, AND 304 ON THIS PAGE AND SUBSEQUENT PAGES STARTING WITH THE FIRST ONE LISTED. IF MORE THAN TWO MEN USE ADDITIONAL QUESTIONNAIRE(S).		
	MAN 2		SKIP
302	CHECK CAPI OUTPUT AND RECORD NAME AND LINE NUMBER OF MAN. RECORD NAME FROM COLUMN 2 IN HOUSEHOLD QUESTIONNAIRE; RECORD LINE NUMBER FROM COLUMN 10 IN HOUSEHOLD QUESTIONNAIRE.	NAME _____ LINE NUMBER	
303	CHECK CAPI OUTPUT FOR AGE: CHECK COLUMN 7 IN HOUSEHOLD QUESTIONNAIRE (AGE).	15-17 YEARS . . . . . 1 18-59 YEARS 2	
304	CHECK CAPI OUTPUT FOR MARITAL STATUS: CHECK COLUMN 8 IN HOUSEHOLD QUESTIONNAIRE (MARITAL STATUS).	CODE 4 (NEVER IN UNION . . . 1 OTHER 2	
305	WEIGHT IN KILOGRAMS.	KG. . . . . . NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	→ 307
306	WAS THE MAN WEARING ONLY LIGHTWEIGHT CLOTHING?	YES . . . . . 1 NO 2	
307	HEIGHT IN CENTIMETERS.	CM. . . . . . NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	→ 309
308	WAS THE RECORDED MEASUREMENT INTERFERED WITH BY BRAIDED OR ORNAMENTED HAIR?	YES . . . . . 1 NO 2	
309	ENTER BIORMARKER NUMBER OF MEASURER.	BIORMARKER NUMBER	
310	ENTER BIOMARKER TECH NUMBER OF ASSISTANT MEASURER. IF NO ASSISTANT MEASURER, ENTER 9999.	BIOMARKER TECH	
311	TODAY'S DATE:	DAY . . . . . . MONTH . . . . . . YEAR	
328	IF ANOTHER MAN, GO TO 302 IN ADDITIONAL QUESTIONNAIRE; IF NO MORE MEN, END INTERVIEW.		

BIOMARKER TECH'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

2022 GHANA DEMOGRAPHIC AND HEALTH SURVEYS
FIELDWORKER QUESTIONNAIRE

GHANA
GHANA STATISTICAL SERVICE

LANGUAGE OF QUESTIONNAIRE ENGLISH

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
100	What is your name?	NAME _____	
101	RECORD FIELDWORKER NUMBER	NUMBER . . . . . [ ][ ][ ][ ]	

INSTRUCTIONS

Information on all GDHS field workers is collected as part of the GDHS survey. Please fill out the questions below. The information you provide will be part of the survey data file; however, your name will be removed and will not be part of the data file. Thank you for providing the information needed.

102	In what REGION do you live?	WESTERN . . . . . 01 CENTRAL . . . . . 02 GREATER ACCRA . . . . . 03 VOLTA . . . . . 04 EASTERN . . . . . 05 ASHANTI . . . . . 06 WESTERN NORTH . . . . . 07 AHAFO . . . . . 08 BONO . . . . . 09 BONO EAST . . . . . 10 OTI . . . . . 11 NORTHERN . . . . . 12 SAVANNAH . . . . . 13 NORTH EAST . . . . . 14 UPPER EAST . . . . . 15 UPPER WEST 16	
103	Do you live in a city, town, or rural area?	CITY . . . . . 1 TOWN . . . . . 2 RURAL 3	
104	How old are you? RECORD AGE IN COMPLETED YEARS.	AGE . . . . . [ ][ ]	
105	Are you male or female?	MALE . . . . . 1 FEMALE 2	
106	What is your current marital status?	CURRENTLY MARRIED . . . . . 1 LIVING WITH A MAN/WOMAN . . . . . 2 WIDOWED . . . . . 3 DIVORCED . . . . . 4 SEPARATED . . . . . 5 NEVER MARRIED OR LIVED WITH A MAN/WOMAN 6	
107	How many living children do you have? INCLUDE ONLY CHILDREN WHO ARE YOUR BIOLOGICAL CHILDREN.	LIVING CHILDREN . . . . . [ ][ ]	
108	Have you ever had a child who died?	YES . . . . . 1 NO 2	
109	What is the highest level of school you attended: primary, secondary, or higher?	PRMARY . . . . . 1 MIDDLE . . . . . 2 JSS/JHS . . . . . 3 SECONDARY . . . . . 4 SSS/SHS . . . . . 5 HIGHER 6	
110	What is the highest [GRADE/FORM/YEAR] you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	[GRADE/FORM/YEAR] . . . . . [ ][ ]	
110A	Have you ever received clinical, medical, or laboratory training or worked in healthcare?	YES . . . . . 1 NO 2	→ 111
110B	What is your current occupational category or qualification? For example, are you a registered nurse, doctor, or laboratory technician?	MEDICAL DOCTOR . . . . . 01 ASSISTANT MEDICAL OFFICER . . . . . 02 CLINICAL OFFICER . . . . . 03 ASSISTANT CLINICAL OFFICER . . . . . 04 REGISTERED NURSE/MIDWIFE . . . . . 05 ENROLLED NURSE/MIDWIFE . . . . . 06 NURSE ASSISTANT/ATTENDANT . . . . . 07 LABORATORY SCIENTIST . . . . . 08 LABORATORY TECHNOLOGIST . . . . . 09 LABORATORY TECHNICIAN . . . . . 10 LABORATORY ASSISTANT . . . . . 11 NO TECHNICAL QUALIFICATION . . . . . 95 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	What is your religion?	CATHOLIC . . . . . 01 ANGLICAN . . . . . 02 METHODIST . . . . . 03 PRESBYTERIAN . . . . . 04 PENTECOSTAL/CHARISMATIC . . . . . 05 OTHER CHRISTIAN . . . . . 06 ISLAM . . . . . 07 TRADITIONAL/SPIRITUALIST . . . . . 08 NO RELIGION . . . . . 95 OTHER _____ 96 (SPECIFY)	
112	What is your ethnicity?	AKAN . . . . . 01 GA/DANGME . . . . . 02 EWE . . . . . 03 GUAN . . . . . 04 MOLE-DAGBANI . . . . . 05 GRUSI . . . . . 06 GURMA . . . . . 07 MANDE . . . . . 08 OTHER _____ (SPECIFY) 96	
113	What languages can you speak? RECORD ALL LANGUAGES YOU CAN SPEAK.	AKAN . . . . . A GA/DANGME . . . . . B EWE . . . . . C DAGBANI . . . . . D NZEMA . . . . . E BRONG . . . . . F OTHER _____ X (SPECIFY)	
114	What is your mother tongue/native language (language spoken at home growing up)?	AKAN . . . . . 01 GA/DANGME . . . . . 02 EWE . . . . . 03 DAGBANI . . . . . 04 NZEMA . . . . . 05 BRONG . . . . . 06 OTHER _____ 96 (SPECIFY)	
115	Have you ever worked on: a) a GDHS prior to this survey? b) an GMIS prior to this survey? c) any other survey prior to this survey?	YES NO a) GDHS . . . . . 1 2 b) GMIS . . . . . 1 2 c) OTHER SURVEY 1 2	
116	Were you already working for the National Public Health Reference Laboratory (NPHRL) or the Ghana Statistical Service (GSS) at the time you were employed to work on this MIS?	YES, NPHRL . . . . . 1 YES, GSS . . . . . 2 NO . . . . . 3 → 118	
117	Are you a permanent or temporary employee of the National Public Health Reference Laboratory (NPHRL) or the Ghana Statistical Service (GSS)?	PERMANENT . . . . . 1 TEMPORARY 2	
118	If you have comments, please write them here.		

ADDITIONAL DHS PROGRAM RESOURCES

The DHS Program Website – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.	DHSprogram.com	
STATcompiler – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.	Statcompiler.com	
DHS Program Mobile App – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).	Search DHS Program in your iTunes or Google Play store	
DHS Program User Forum – Post questions about DHS data and search our archive of FAQs.	userforum.DHSprogram.com	
Tutorial Videos – Watch interviews with experts and learn DHS basics, such as sampling and weighting, downloading datasets, and How to Read DHS Tables.	www.youtube.com/DHSProgram	
Datasets – Download DHS datasets for analysis.	DHSprogram.com/Data	
Spatial Data Repository – Download geographically linked health and demographic data for mapping in a geographic information system (GIS).	spatialdata.DHSprogram.com	
Learning Hub – Access online courses for independent learning and workshop participation, communities of practice, and other training resources.	Learning.DHSprogram.com	
GitHub – Open access to Stata, SPSS and R code for DHS indicators for public use.	Github.com/DHSprogram	
Social Media – Follow The DHS Program and join the conversation. Stay up to date through:	**Twitter** www.twitter.com/DHSprogram	
Facebook www.facebook.com/DHSprogram	**LinkedIn** www.linkedin.com/company/dhs-program	
YouTube www.youtube.com/DHSprogram	**Blog** Blog.DHSprogram.com	