Ghana-Accra

**Multiple Indicator Cluster Survey
in 5 High Densely Populated Localities**

Monitoring the situation of children and women

2010-2011

ISSER
Institute of Statistical,
Social and Economic
Research

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MICS

GHANA-ACCRA
MULTIPLE INDICATOR CLUSTER SURVEY
IN 5 HIGH DENSELY POPULATED LOCALITIES,
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INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH

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The Ghana Urban Multiple Indicator Cluster Survey (MICS) was carried out in 2010-2011 by the Institute of Statistical, Social and Economic Research (ISSER) at the University of Ghana. Financial and technical support was provided by the United Nations Children's Fund (UNICEF).

The Ghana Urban MICS was conducted as part of the fourth global round of MICS surveys (MICS4). MICS is an international household survey programme developed by UNICEF. to provide up-to-date information on the situation of children and women and measures key indicators that allow countries to monitor progress towards the Millennium Development Goals (MDGs) and other internationally agreed upon commitments. Additional information on the global MICS project may be obtained from www.childinfo.org. The need for this specialized MICS was to provide greater insight into the situation of children, women and men in high density areas of the capital city.

PHOTO CREDIT

Cover Photo: © Nyani Quarmyne, April 22, 2011

A child runs across a makeshift bridge in Old Fadama. Located in Ghana's capital Accra and colloquially referred to as 'Sodom and Gomorrah', Old Fadama is Ghana's largest slum and is home to some 80 000 people. With no public sanitation services at all, what limited toilet facilities exist in the community are privately owned and operate on a pay-per-use basis. People who cannot pay - children, for example - defecate in the open or in plastic bags which are often dumped near toilets, such as the one past which this drain flows.

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Ghana-Accra, Multiple Indicator Cluster Survey in 5 High Densly Populated Localities, 2010-2011.

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
NUTRITION					
		1.8	Underweight prevalence		
	2.1a		Moderate and Severe (- 2 SD)	12.6	percent
	2.1b		Severe (- 3 SD)	2.1	percent
			Stunting prevalence		
	2.2a		Moderate and Severe (- 2 SD)	11.0	percent
	2.2b		Severe (- 3 SD)	3.9	percent
			Wasting prevalence		
	2.3a		Moderate and Severe (- 2 SD)	14.1	percent
Nutritional status	2.3b		Severe (- 3 SD)	2.7	percent
Breastfeeding and infant feeding	2.4		Children ever breastfed	96.2	percent
	2.5		Early initiation of breastfeeding	43.3	percent
	2.6		Exclusive breastfeeding under 6 months	(45.7)	percent
	2.9		Predominant breastfeeding under 6 months	(63.8)	percent
	2.10		Mean Duration of breastfeeding	15.9	Months
	2.11		Bottle feeding	27.3	percent
	2.13		Minimum meal frequency	20.6	percent
	2.14		Age-appropriate breastfeeding	38.9	percent
	2.15		Milk feeding frequency for non-breastfed children	34.9	percent
Salt iodization	2.16		Iodized salt consumption	63.0	percent
Vitamin A	2.17		Vitamin A supplementation (children under age 5)	23.2	percent
Low birth weight	2.18		Low-birthweight infants	13.1	percent
	2.19		Infants weighed at birth	85.7	percent
CHILD HEALTH					
Vaccinations	3.1		Tuberculosis immunization coverage	99.0	percent
	3.2		Polio immunization coverage	89.9	percent
	3.3		Immunization coverage for diphtheria, pertussis and tetanus (DPT)	91.7	percent
	3.4	4.3	Measles immunization coverage	97.7	percent
	3.5		Hepatitis B immunization coverage	91.7	percent
	3.6		Yellow fever immunization coverage	96.0	percent
Tetanus toxoid	3.7		Neonatal tetanus protection	74.2	percent
Care of illness	3.8		Oral rehydration therapy with continued feeding	51.0	percent
Solid fuel use	3.11		Solid fuels	60.2	percent
Malaria	3.12		Household availability of insecticide-treated nets (ITNs)	16.2	percent
	3.13		Households protected by a vector control method	17.5	percent
	3.14		Children under age 5 sleeping under any mosquito net	12.4	percent
	3.15	6.7	Children under age 5 sleeping under insecticide-treated nets (ITNs)	10.3	percent
	3.16		Malaria diagnostics usage	24.0	Percent
	3.17		Antimalarial treatment of children under 5 the same or next day	53.5	percent
	3.18	6.8	Antimalarial treatment ¬¬of children under age 5	81.7	percent
	3.20		Intermittent preventive treatment for malaria	45.9	Percent
Figures in parentheses '()' are based on 25-49 unweighted cases					

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
WATER AND SANITATION					
	4.1	7.8	Use of improved drinking water sources	98.4	percent
	4.2		Household water treatment	0.0	percent
	4.3	7.9	Use of improved sanitation facilities	10.9	percent
	4.4		Safe disposal of child's faeces	34.3	percent
Water and sanitation	4.5		Place for handwashing	53.1	Percent
	4.6		Availability of soap	91.7	Percent
REPRODUCTIVE HEALTH					
Contraception and unmet need	5.1		Adolecent birth rate	29.0	percent
	5.2		Early childbearing	7.7	percent
	5.3	5.3	Contraceptive prevalence rate	26.6	Percent
	5.4	5.6	Unmet need	27.1	Percent
Maternal and newborn health		5.5	Antenatal care coverage		
	5.5a		At least once by skilled personnel	97.2	percent
	5.5b		At least four times by any provider	87.9	percent
	5.6		Content of antenatal care	96.1	percent
	5.7	5.2	Skilled attendant at delivery	97.5	percent
	5.8		Institutional deliveries	97.1	percent
	5.9		Caesarean section	22.4	Percent
	5.10		Duration of post-partum stay in health facility	86.9	percent
	5.11		Post-natal health check for newborn	93.5	percent
	5.12		Post-natal health check for the mother	91.1	percent
CHILD DEVELOPMENT					
Child development	6.1		Support for learning	57.3	percent
	6.2		Father's support for learning	43.2	percent
	6.3		Learning materials: children's books	15.9	percent
	6.4		Learning materials: playthings	50.6	percent
	6.5		Inadequate care	14.4	percent
	6.6		Early child development index	81.1	percent
	6.7		Attendance to early childhood education	87.8	percent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
EDUCATION					
Literacy and education	7.1	2.3	Literacy rate among young men	86.3	percent
			Literacy rate among young women	77.9	percent
	7.2		School readiness	90.0	percent
	7.3		Net intake rate in primary education	65.7	percent
	7.4	2.1	Primary school net attendance ratio (adjusted)	90.9	percent
	7.5		Secondary school net attendance ratio (adjusted)	64.5	percent
	7.6	2.2	Children reaching last grade of primary	97.9	percent
	7.7		Primary completion rate	144.0	percent
	7.8		Transition rate to secondary school	96.1	percent
	7.9		Gender parity index (primary school)	1.01	ratio
	7.10		Gender parity index (secondary school)	0.92	ratio
CHILD PROTECTION					
Birth registration	8.1		Birth registration	79.6	percent
Child labour	8.2		Child labour	35.4	percent
	8.3		School attendance among child labourers	95.5	percent
	8.4		Child labour among students	34.8	percent
Child discipline	8.5		Violent discipline	94.6	percent
Early marriage and polygyny	8.6		Marriage before age 15	2.4	percent
	8.7		Marriage before age 18	13.1	percent
	8.8		Young women age 15-19 currently married or in union	2.1	percent
	8.9		Polygyny	12.3	percent
Female genital mutilation/ Cutting	8.11		Approval for female genital mutilation/cutting (FGM/C)	0.6	percent
	8.12		Prevalence of female genital mutilation/cutting (FGM/C) among women	1.6	percent
Domestic violence	8.14		Attitudes towards domestic violence, Women	23.2	percent
Domestic violence	8.14		Attitudes towards domestic violence, Men	17.7	percent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator		Value
HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANED AND VULNERABLE CHILDREN					
HIV/AIDS knowledge and attitudes	9.1		Comprehensive knowledge about HIV prevention, Women	39.7	percent
	9.1		Comprehensive knowledge about HIV prevention, Men	50.2	percent
	9.2	6.3	Comprehensive knowledge about HIV prevention among young women	42.5	percent
	9.2	6.3	Comprehensive knowledge about HIV prevention among young men	42.7	percent
	9.3		Knowledge of mother-to-child transmission of HIV, Women	58.8	percent
	9.3		Knowledge of mother-to-child transmission of HIV, Men	54.6	percent
	9.4		Accepting attitude towards people living with HIV, Women	12.7	percent
	9.4		Accepting attitude towards people living with HIV, Men	24.9	percent
	9.5		Women who know where to be tested for HIV	72.5	percent
	9.5		Men who know where to be tested for HIV	76.3	percent
	9.6		Women who have been tested for HIV and know the results	8.9	percent
	9.6		Men who have been tested for HIV and know the results	7.8	percent
	9.7		Sexually active young women who have been tested for HIV and know the results	11.4	percent
	9.7		Sexually active young men who have been tested for HIV and know the results	10.4	percent
	9.8		HIV counselling during antenatal care	70.2	percent
	9.9		HIV testing during antenatal care	73.0	percent
Sexual behaviour	9.10		Young women who have never had sex	56.5	percent
	9.10		Young men who have never had sex	50.5	percent
	9.11		Sex before age 15 among young women	6.3	percent
	9.11		Sex before age 15 among young men	5.3	percent
	9.12		Age-mixing among sexual partners	9.5	percent
	9.13		Sex with multiple partners, Women	1.3	percent
	9.13		Sex with multiple partners, Men	13.3	percent
	9.14		Sex with multiple partners for Young women	1.1	percent
	9.15		Sex with non-regular partners	77.4	percent
	9.16	6.2	Condom use with non-regular partners	41.5	percent
Orphaned children	9.17		Children's living arrangements	17.7	percent
	9.18		Prevalence of children with at least one parent dead	9.2	Percent
ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY					
Access to Mass Media	MT.1		Women with exposure to all three media at least once a week	11.6	Percent
			Men with exposure to all three media at least once a week	34.1	Percent
			Young women who used a computer during the last 12 months	41.0	Percent
Use of computers and internet	MT.2		Young men who used a computer during the last 12 months	73.7	Percent
	MT.3		Young women who used the internet during the last 12 months	28.4	Percent
			Young men who used the internet during the last 12 months	71.1	Percent

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AIDS	Acquired Immune Deficiency Syndrome
BCG	Bacillis-Cereus-Geuerin (Tuberculosis)
CBD	Central Business District
CSPro	Census and Survey Processing System
DPT	Diphteria Pertussis Tetanus
ECDI	Early Childhood Development Index
EPI	Expanded Programme on Immunization
EAs	Enumeration Areas
FGM/C	Female Genital Mutilation/Cutting
GLSS	Ghana Living Standards Survey
GPI	Gender Parity Index
GPRS	Ghana Poverty Reduction Strategy
GPRS II	Growth and Poverty Reduction Strategy
HIRD	High Impact Rapid Delivery
HIV	Human Immunodeficiency Virus
IDD	Iodine Deficiency Disorders
ILLN	Insecticide Long Lasting Nets
IRS	Indoor Residual Spraying
ISSER	Institute of Statistical, Social and Economic Research
ITN	Insecticide Treated Net
IUD	Intrauterine Device
JMP	Joint Monitoring Programme
LAM	Lactational Amenorrhea Method
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MoH	Ministry of Health
NAR	Net Attendance Rate
NHIS	National Health Insurance Scheme
ORT	Oral Rehydration Treatment
PEPFAR	United States Government President's Emergency Plan for AIDS Relief
ppm	Parts Per Million
SPSS	Statistical Package for Social Sciences
UNAIDS	United Nations Programme on HIV/AIDS
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
WFFC	World Fit For Children
WHO	World Health Organization

Acknowledgements

The Accra Multiple Indicator Survey, 2010-11, is a special MICS survey carried out in 5 high densely populated localities of Accra with the primary objective of providing up-to-date information for assessing the situation of children and women in these areas. Summary findings are presented under the thematic areas as follows:

HOUSEHOLD CHARACTERISTICS
- o Total of 4,887 members listed from the 1,409 households, giving a mean household size of 3.5.
- o About 22 percent of the households were single member households.
- o Sixty-five percent of the households were headed by males.
- o There was at least one child age less than 5 years old in about 29 percent of the households and almost 6 out of 10 of the households had at least one child age 0-17 years.
- o Household dependency ratio was 54 percent.
- o About 3 in 10 of the households lived in a family house where they paid no rent.

NUTRITIONAL STATUS
- o Among the children under-five years of age
  - • Thirteen percent were moderately or severely underweight; 2 percent were severely underweight.
  - • Eleven percent were moderately or severely stunted; 4 percent were severely stunted.
  - • Fourteen percent were moderately or severely wasted; 3 percent were severely wasted.
  - • Two percent were overweight.
  - • Mother's education and household wealth status were strong correlates of children's nutritional status with children in the poor 60% of households been more than twice as likely to be wasted or severely wasted compared to their counterparts from the rich 40% of households (19 percent and 8 percent respectively).

SALT IODIZATION
- o About 63 percent of households were found to be using adequately iodized salt

BREASTFEEDING
- o Among children age 0-23 months
  - • Ninety-six percent were ever breastfed
  - • Thirty-nine percent were appropriately breastfed (46 percent of infants 0-5 months were exclusively breastfed; 37 percent of children 6-23 months were breastfed and also received solid, semi-solid or soft foods during the previous day)
  - • Only 35 percent of children 6-23 months who were not been breastfed received at least 2 milk feeds.
- o Mean duration of exclusive breastfeeding among children age 0-35 months is 2.5 months

LOW BIRTH WEIGHT
- o Of the 86 percent of live births who were weighed at birth, 13 percent weighed below the minimum acceptable birth weight of 2500 grams.

IMMUNIZATION
- o Among children age 12-23 months
  - • About 83 percent were fully immunized before the age of 12 months
  - • About 99 percent of received BCG by the age of 12 months; 90 percent received the third dose of polio by age 12 months and 92 percent received PENTA by age 12 months.

CHILD HEALTH

- o About 9 percent of children 0-59 months suffered malaria in the last two weeks preceding the survey. Of this:
    - • About 82 percent received appropriate anti-malaria drug;
    - • Fifty-four percent took the anti-malaria drug same or next day after the onset of the malaria
- o Only 1 in 10 of children age 0-59 months slept under an insecticide treated net
- o About 11 percent of children 0-59 months suffered diarrhoea in the last two weeks preceding the survey. Of this:
    - • About 60 percent received ORS or other recommended homemade fluid
    - • Sixty-nine percent had ORT
    - • Fifty-one percent had ORT with continued feeding
    - • Nine percent were not given any treatment or drug

WATER AND SANITATION

- o About 98 percent of the household population have access to improved source of drinking water.
- o Sachet water is the single most important source of drinking water contributing 55 percent.
- o Time to water source was not a problem as 89 percent had water on the premises and only 0.2 percent of users of improved drinking water used 30 or more minutes to source drinking water
- o About 85 percent of the household population use sanitary means of excreta disposal; 10 percent still use the bucket and 0.5 percent have no facility.
- o More than 70 percent of the household population using sanitary means of excreta disposal rely on a shared facility with 52 percent of that contributed by the use of a public facility.
- o Only 11 percent of the population are classified as using an improved sanitation facility.
- o Thirty-four percent of children 0-2 years have their stools disposed off safely.
- o Place for handwashing was observed in 59 percent of households and 53 percent of these had water and soap available at the designated place of handwashing.

REPRODUCTIVE HEALTH

- o About 6 percent of women age 15-19 have begun childbearing – 5 percent have already had a live birth and 1 percent were pregnant with first child.
- o About 27 percent of women had an unmet need for contraception – 15 percent for spacing and 13 percent for limiting.
- o Fifty percent of the demand for contraception is not satisfied
- o Seventy-three percent of women currently married or in union were not using any contraceptive method.
- o About 20 percent of women in union were using a modern method of contraception with injectables contributing about 8 percent.
- o Among women with a live birth in the two years preceding the survey:
    - • Ninety-seven percent were attended to, at least once, by a skilled attendant during antenatal visits;
    - • Eighty-nine percent had 4 or more antenatal visits
    - • About 97 percent delivered in a health facility
    - • Ninety-eight percent were delivered by a skilled personnel
    - • Twenty-two percent were delivered by C-section
    - • About 87 percent of those who delivered in a health facility stayed there for 12 hours or more
    - • About 94 percent had a post-natal health check for the new born from a health care provider
    - • Ninety one percent of the mothers had a post natal health check from a health care provider

CHILD DEVELOPMENT
- o Of the children age 36-59 months
    - • Eighty-eight percent were attending childhood education
    - • Fifty-seven percent engaged in 4 or more activities with an adult household member
    - • Fourty-three percent have their father engaged in one or more activities with them
    - • Eighty-one percent were developmentally on track in at least three of four domains: literacy-numeracy, physical, social-emotional and learning.
- o Of the children under age 5
    - • Twelve percent were left alone in the past week.
    - • Six percent were left in the care of another child younger than 10 years of age .
    - • Fourteen percent were left with inadequate care at least once in the past week.

LITERACY AND EDUCATION
- o About 86 percent of young men and 78 percent of young women age 15-24 years were literate.
- o Up to 90 percent of children attending first grade of school attended preschool in the previous year
- o Net primary school attendance ratio was 91 percent.
- o Survival rate to last grade of primary school was 98 percent
- o Primary school completion rate was 144 percent – an indication of delayed school enrolment
- o Gender parity index at primary school was 1.01
- o Secondary net attendance ratio (adjusted) was 65 percent
- o Gender parity index at secondary school was 0.92.

CHILD PROTECTION
- o About 80 percent of children age 0-5 years have their births registered and birth certificates were inspected for about 40 percent of them.
- o About 46 percent of children age 5-11 years, and 10 percent of children age 12-14 years are involved in child labour. Total incidence of child labour was 35 percent.
- o About 64 percent of adults believe that the child needs to be physically punished
- o Up to 88 percent of children 2-14 years have ever suffered a psychological aggression
- o Seventy eight percent of children 2-14 have suffered a physical punishment (14 percent severe)
- o Ninety-five percent of children have suffered a psychological or physical discipline method
- o About 2 percent of women age 15-19 years are currently married
- o Twelve percent of women 15-49 years are currently in a polygynous marriage/union
- o About 2 percent of women 15-49 years have experienced FGM/C, and 0.6 percent of the women believe that the practice should be continued
- o Twenty-three percent of women age 15-49 believe that a husband is justified in beating the wife for at least one of a list of reason.

HIV/AIDS AND SEXUAL BEHAVIOUR
- o About 99 percent each of women and men have heard about HIV/AIDS
- o Sixty nine percent of women and 73 percent of men know about the two main ways of preventing HIV transmission
- o Fifty-three percent of women and 65 percent of men reject the two most common misconceptions about HIV/AIDS
- o About 40 percent of women and 50 percent of men have comprehensive knowledge about HIV/AIDS.
- o Thirteen percent of women and 25 percent of men express accepting attitude towards people living with HIV/AIDS.
- o About 73 percent of women and 76 percent of men know a place to get tested for HIV/AIDS
- o About 9 percent of women and 8 percent of men have been tested and have been told the results.
- o About 1 percent of women and 13 percent of men had sex with more than one partner in the last 12 months.
- o About 42 percent of women age 15-24 who had sex with a non-marital, non-cohabiting partner in the last 12 months also reported a condom was used the last time they had sex with such a partner.

ORPHANHOOD
- o Of the children age 0-17 years:
  - • Fifty-four percent were living with both parents
  - • Twenty-four percent live with mother alone
  - • Four percent live with father alone
  - • Eighteen percent were not living with a biological parent although 13 percent of these have both parents still alive.

ACCESS TO MASS MEDIA AND ICT
- o Thirty four percent of young males and 12 percent of young females (age 15-24) were exposed to all three mass media (radio, television and newspaper) at least once a week
- o Fifty percent of young women and 80 percent of young men have ever used a computer
- o About 35 percent of young women and 74 percent of young men have ever used the internet.

NATIONAL HEALTH INSURANCE
- o Forty-nine percent of women age 18-49 and 39 percent of men age 18-59 were registered with the NHIS;
- o About 51 percent of non-registered women, and 29 percent of non-registered men have not done so because the premium is too expensive.

BACKGROUND

This report is based on the Accra Multiple Indicator Cluster Survey, conducted in 2010-2011 by the Institute of Statistical, Social and Economic Research (ISSER) with funding and technical support from UNICEF. The survey provides valuable information on the situation of children and women in high densely populated localities in Accra and was motivated by the need to adequately capture the peculiar characteristics of residents in Accra, particularly those living in high density urban areas, to inform planning for more tailored interventions.

The proportion of the total population living in urban localities in Ghana increased from 23 percent in 1960 to 32 percent in 1984 and again to 44 percent in 2000. It is estimated that the urban population reached 52 percent in 2010, and will increase to 63 percent by 2025. Accra Metropolitan is the largest city in Ghana, with an estimated population of 2.7 million.

Various national surveys have tended to cast Accra as the 'most developed' region in Ghana, and while this may not be disputed in aggregate terms, these findings tend to mask the numerous pockets of poverty in the city with deplorable living conditions which clearly depict poverty. While Ghana has met MDG1 on reducing the population living below the poverty line (from 51.7% in 1992 to 28.5% in 2006), and for those described as "extremely poor" (from 36.5% in 1992 to 18.2% in 2006), poverty reduction has not been uniform across the country. Available evidence suggests poverty to be increasing in the urban areas. In the Greater Accra region for example, the proportion of people living below the national poverty line increased from 4 in 1999 to 12 percent in 2005/06.[1] Pockets of high population density areas in the city are characterized by dilapidated structures, poor sanitation, occasional outbreak of diseases (e.g. cholera), high unemployment rate and vulnerability to natural disasters especially floods.

Precise information, though, of the status of health and livelihood in the high densely populated localities is often lacking. It was against this background that the MICS survey was initiated to provide data on the situation of health, education, child labour, and other variables in some selected high densely populated localities of the Accra Metropolis.

INFORMATION ABOUT THE 5 LOCALITIES SELECTED FOR THE ACCRA MICS SURVEY

While there are more than 20 densely populated localities in Accra, five localities were selected for the Accra MICS. These localities are Nima, Accra New Town, James Town, La and Bubuashie. These five localities have different social-demographic characteristics and histories, and a brief profile of each of the localities follows:

NIMA

Located about 5km from the centre of Accra, until the 1940s, Nima was largely settled by the Fulani tribe from the Sahelian region of West Africa who used the area for pasturing cattle prior to sale in Accra markets. With the expansion of Accra during the 1940s, a demand for residential land was created within Nima, and the first to arrive and settle in Nima were Gold Coast troops who returned from the Second World War. Later on people from northern Ghana as well as nationals of other West African countries also came to settle in Nima. Though the Islamic culture and way of life of the community can easily be discerned by the way of life and dressing of the people, Nima is now a diverse society as the languages spoken cuts across every ethnic group in the country.

Nima is one of the densely populated areas of Ghana – over 430 persons per hectare. Many buildings are not built according to planning layout and regulations. As a result, many areas of the neighborhood are not accessible, except on foot and even then only by picking one's way past puddles, garbage and putrescent materials.

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[1] Ghana Statistical Service, Patterns and Trends of Poverty in Ghana 1991-2006, Ghana Statistical Service, Accra, Ghana, April 2007, p. 7.

ACCRA NEW TOWN

Accra New Town is a migrant community. It was originally settled by Nigerian migrants, thus deriving its former name Lagos. Even though it is still home to many Nigerian migrants to Accra, it has witnessed a steady increase of people from northern Ghana as well as other groups in recent decades. It is a poorly planned area and densely populated. Accra New Town is made up of old house dating as far back as the late 1800s and a few modern ones mostly of the compound house types. Originally laying on the edge of Accra's central business district (CBD), the area has seen a lot gentrification due to the expansion of business and economic activities in Accra. The result is that increasing businesses are displacing residential properties, leading to further increases in density and room occupancy rates.

JAMES TOWN

Located in Accra's CBD and closer to the financial district of the city, James Town represents the origin of the city. Lying on the coast, James Town is one of the indigenous low-class neighborhoods of Accra, dominated by the indigenous Ga people (indigenes of Accra). This means, among other things, that most properties are family homes, that is, they have been handed down through the generations and are usually not for rent. The population comprises fishermen and fishmongers, traders, drivers and office workers. Housing is a mixture of old, and in some cases, pre-dating the colonial era, and more modern buildings. Most of the houses are of the compound type.

Due to the inadequacy or near-absence of urban renewal schemes, this original neighborhood of Accra presents a picture of poor housing units, deteriorated physical infrastructure, poor sanitation and over-crowding. Several studies have found room occupancy rates of as high as 7 and 8 persons per room in this neighborhood.

LA

La is one of the most densely populated communities in Accra with a population of about 81,684. It is located in the La Sub-Metro and it is predominantly settled by the indigenous Gas with the major occupation being fishing. The manifestation of poverty in the area could be seen in the type of houses and their condition.

BUBUASHIE

Lying on the western part of Accra, Bubuashie has a mixed character. While some parts of the community are relatively well developed, with roads, drains and other infrastructure, other parts seem to have been ignored by the city authorities. A key challenge, especially in the poor parts of Bubuashie is the perennial flooding of the area. The main drains in the area are not properly constructed and connected, and also choked with refuse. This makes it difficult for the free flow of water whenever it rains, and as a result, the area is hit by occasional floods.

Demographically, Bubuashie has a mixed character as well. However, unlike the other study communities, the Akans predominate in the community. Though Bubuashie is densely populated, the density level is not as high as those in other study migrant or indigene communities.

The location of these localities is presented on the map below.

MAP OF AMA SHOWING THE SPATIAL
DISTRIBUTION OF SELECTED EAs
FOR URBAN MICS, ACCRA 2010
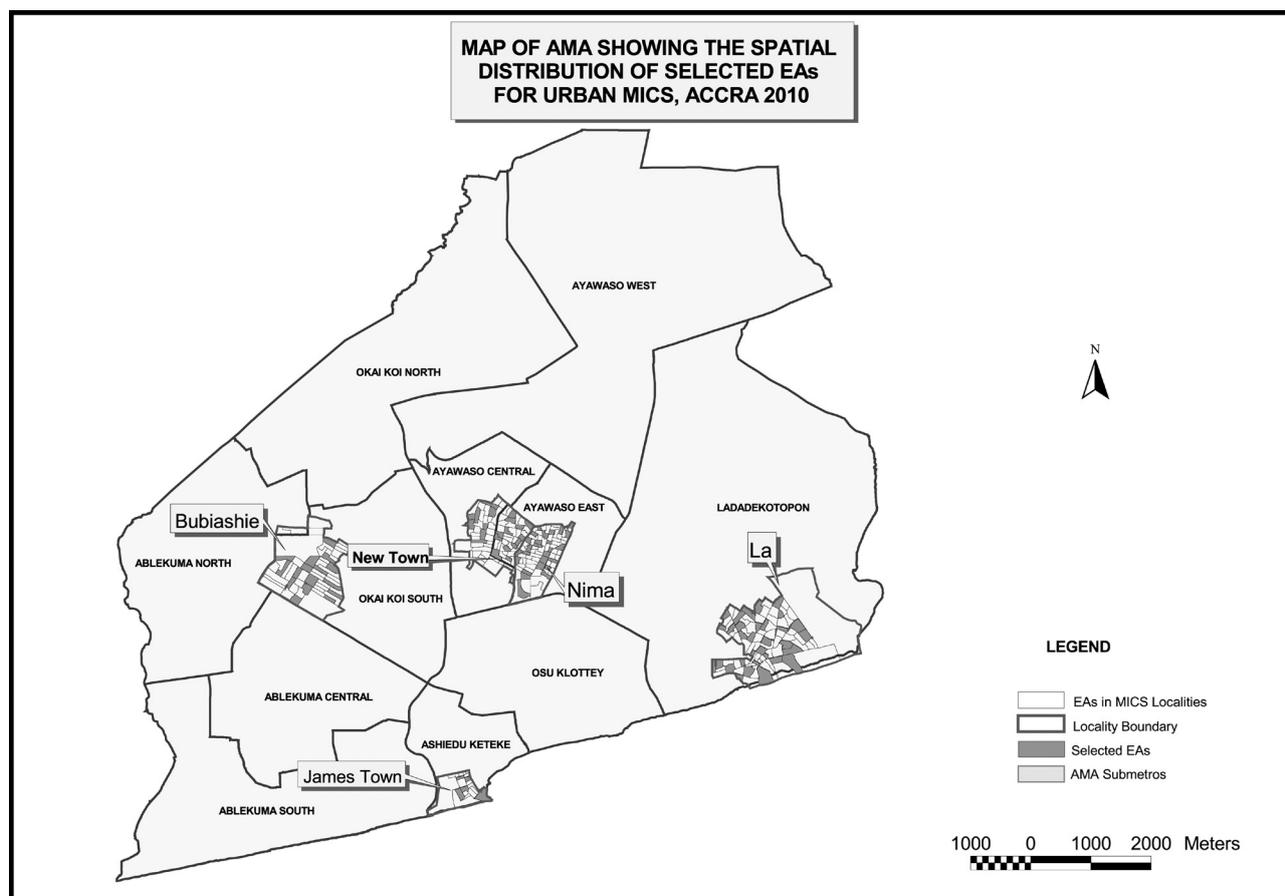
This survey forms part of the fourth round of the global MICS surveys initiated in 1995 to monitor the progress towards goals and targets emanating from recent international agreements: the Millennium Declaration, adopted by all 191 United Nations Member States in September 2000, and the Plan of Action of A World Fit For Children, adopted by 189 Member States at the United Nations Special Session on Children in May 2002. Both of these commitments build upon promises made by the international community at the 1990 World Summit for Children.

In signing these international agreements, governments committed themselves to improving conditions for their children and to monitoring progress towards that end. UNICEF was assigned a supporting role in this task (see table on the next page).

A Commitment to Action: National and International Reporting Responsibilities

The governments that signed the Millennium Declaration and the World Fit for Children Declaration and Plan of Action also committed themselves to monitoring progress towards the goals and objectives they contained:

"We will monitor regularly at the national level and, where appropriate, at the regional level and assess progress towards the goals and targets of the present Plan of Action at the national, regional and global levels. Accordingly, we will strengthen our national statistical capacity to collect, analyse and disaggregate data, including by sex, age and other relevant factors that may lead to disparities, and support a wide range of child-focused research. We will enhance international cooperation to support statistical capacity-building efforts and build community capacity for monitoring, assessment and planning." (A World Fit for Children, paragraph 60)

"…We will conduct periodic reviews at the national and subnational levels of progress in order to address obstacles more effectively and accelerate actions.…" (A World Fit for Children, paragraph 61)

The Plan of Action (paragraph 61) also calls for the specific involvement of UNICEF in the preparation of periodic progress reports:

 "… As the world's lead agency for children, the United Nations Children's Fund is requested to continue to prepare and disseminate, in close collaboration with Governments, relevant funds, programmes and the specialized agencies of the United Nations system, and all other relevant actors, as appropriate, information on the progress made in the implementation of the Declaration and the Plan of Action."

Similarly, the Millennium Declaration (paragraph 31) calls for periodic reporting on progress:

"…We request the General Assembly to review on a regular basis the progress made in implementing the provisions of this Declaration, and ask the Secretary-General to issue periodic reports for consideration by the General Assembly and as a basis for further action."

Over the years, the Government of Ghana has embarked on a number of intervention programmes which are expected to have an impact on most of the indicators outlined for monitoring. Among these are the Ghana Poverty and Reduction Strategy (GPRS) which was implemented from the year 2000 through 2006, and was followed by the Growth and Poverty Reduction Strategy (GPRS II) which run from 2006 to 2010. Within the framework of the GPRS II, the Ministry of Health placed strong emphasis on scaling-up of the High Impact Rapid Delivery approach (HIRD) to achieving MDGs 4 and 5 and a number of interventions were pursued. The current Government development framework, dubbed the Ghana Shared Growth and Development Agenda (GSGDA) seeks to build on the lessons learnt and pay closer attention to areas where progress has been unsatisfactory.

In addition, there are several NGOs and CBOs who are also engaged in various activities expected to have a positive impact on the indicators, and surveys of these nature are critical to provide an update on progress. Other donor specific programmes have also been implemented including the Integrated Management of Childhood Illness (IMCI) and the United States Government President's Emergency Plan for AIDS Relief (PEPFAR). Also, Ghana is a signatory to the Abuja Accord, which sought to achieve 60 percent coverage of malaria interventions by the year 2005, focusing particularly on pregnant women and children under five in need of access to suitable and affordable combinations of personal and community protective and curative measures such as insecticide-treated mosquito nets (ITNs) and prompt, effective treatment for malaria. There has also been a recent global directive, which translated by the Government means a target of two persons within a household owning at least one ITN by 2015.

This final report presents the results of the indicators and topics covered in the survey.

SURVEY OBJECTIVES

The Accra Multiple Indicator Cluster Survey has as its primary objectives:

- To provide up-to-date quantitative information for assessing the situation of children and women in high densely populated areas of Accra, and determine if the new UNDAF 2012-2015 should concentrate support on poor areas of Accra, in additional to the other regions already being support;

- To generate data on the situation of urban children and women, including the identification of vulnerable groups and of disparities, to inform policies and interventions;

- To contribute to the improvement of data and monitoring systems in Ghana and to strengthen technical expertise in the design, implementation, and analysis of such systems;

- To provide baseline data for specific urban programmes that are aimed at targeting the vulnerable populations in urban communities.

SAMPLE DESIGN

The sample for the Accra Multiple Indicator Cluster Survey (MICS) was designed to provide estimates for a large number of indicators on the situation of households, women, men and children in selected high population density localities of Accra. A representative sample of 1500 households was targeted based on the desired accuracy and power computations, and this sample was selected from 100 enumeration areas with 15 households selected from each enumeration area. Five high population density localities were targeted, namely Nima, New Town, James Town, La and Bubuashie, and a profile of these localities are given in Section I.

The selection of the households was done in two stages. For the first stage, the 100 enumeration areas were allocated to the five localities (or strata) proportionally to the population size of these localities (see Appendix A, Table SD1: Sample size computation for Accra MICS). The proportion of the population for each locality was then used to determine the number of census enumeration areas (primary sampling units (PSUs)) to be selected in that locality. The EAs to be sampled from each locality were then selected systematically with probability proportional to the (population) size of the EAs based on the Population and Housing census 2010 figures. Thereafter, a household listing of the selected EAs was conducted based on which a systematic sample of 15 households was drawn in each selected enumeration area.

By this approach, the sample is not self-weighting since the probability of selection of the households is not the same across the EAs and localities. Additional details about the sample design can be found in Appendix A.

QUESTIONNAIRES

Four sets of questionnaires were used in the survey:

• a household questionnaire which was used to collect information on all household members (usual residents), the household, and the dwelling;

• a women's questionnaire administered in each household to all women aged 15-49 years;

• an under-5 questionnaire, administered to mothers or caretakers of all children under 5 living in the household; and

• a men's questionnaire administered in half of the households to all men aged 15-59 years;

The questionnaires included the following modules:

The Household Questionnaire included the following modules:
   o   Household Listing Form
   o   Education
   o   Water and Sanitation
   o   Household Characteristics
   o   Insecticide Treated Nets
   o   Indoor Residual Spraying
   o   Child Labour
   o   Child Discipline
   o   Handwashing
   o   Salt Iodization

The Questionnaire for Individual Women included the following modules:
- o Women's Background
- o Access to Mass Media and Use of Information/Communication Technology
- o Child Mortality – however, given the small sample size, indicators for child mortality have not been included in this report
- o Desire for Last Birth
- o Maternal and Newborn Health
- o Post-Natal Health Checks
- o Illness Symptoms
- o Contraception
- o Unmet Need
- o Female Genital Mutilation/Cutting
- o Attitudes Towards Domestic Violence
- o Marriage/Union
- o Sexual Behaviour
- o National Health Insurance
- o HIV/AIDS

The questionnaire for Under-five children included the following modules:
- o Age
- o Birth Registration
- o Early Childhood Development
- o Breastfeeding
- o Care of Illness
- o Malaria
- o Immunization
- o Anthropometry

The Questionnaire for Individual Men included the following modules:
- o Men's Background
- o Access to Mass Media and Use of Information/Communication Technology
- o Marriage/Union
- o Attitudes Towards Contraception
- o Attitudes Towards Domestic Violence
- o Sexual Behaviour
- o National Health Insurance
- o HIV/AIDS

The questionnaires are based on the MICS4 model questionnaire [2] with the exception of the module on the National Health Insurance and Attitudes towards contraception in the men's questionnaire, both adapted from the 2008 Ghana Demographic and Health Survey. A few questions were also added to some modules to collect additional information. These include the addition of information on: employment status and income of women in the Women's Background Module, and the in-or-out remittances to the Household Characteristics Module. A copy of the final MICS questionnaires is provided in Appendix F.

In addition to the administration of questionnaires, fieldwork teams tested the salt used for cooking in the households for iodine content, observed the place for handwashing and measured the weights and heights of children age under 5 years. Details and findings of these measurements are provided in the respective sections of the report.

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[2] The model MICS4 questionnaires can be found at www.childinfo.org

TRAINING AND FIELDWORK

Training for the fieldwork was conducted for 13 days from October 27th through to November 12th, 2010. Training included lectures on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in asking the questions. Participants were taken through the process of salt testing and the anthropometric measurements so that they could assist the measures whenever desired. Participants were also taken through the various versions of immunization cards that have been used in the country over the past 5 years and how the recording of the immunization regimens have changed over time. Special training sessions were held with the selected supervisors on how to complete the cluster control sheets, as well as training on reading the maps of the selected EAs so that they could facilitate the easy identification of households. Most importantly, they were trained on questionnaire control and consistency checking.

Towards the end of the training period, trainees spent 2 days in practice interviewing at Madina Zongo and Bawaleshie, two communities that have similar characteristics to the target communities. The final day involved a debriefing section where experiences and challenges were discussed and the procedure for redress as outlined in the MICS protocols were emphasized.

The data were collected by 5 teams; each was comprised of 4 interviewers, one measurer and a supervisor who doubled as the field editor. Fieldwork began on 10th December 2010 and concluded on January 28 in 2011. Given that the 2010 Population and Housing Census had just commenced, it took longer than anticipated to get the updated listing of EAs, and this delayed the commencement of the fieldwork after the training had been completed.

DATA PROCESSING

Data were entered using the CSPro software. The data were entered on 14 microcomputers and carried out by 14 data entry operators under the supervision of 4 data entry supervisors. In order to ensure quality control, all questionnaires were double entered and internal consistency checks were performed. Procedures and standard programs developed under the global MICS4 programme and adapted to the final questionnaires were used throughout. Data processing began two weeks after data collection in December 2010 and was completed in February 2011. Data were analysed using the Statistical Package for Social Sciences (SPSS) software program, Version 18, and the model syntax and tabulation plans developed by UNICEF were used for this purpose, after amending to take into account the changes/additions to the Questionnaires.

SAMPLE COVERAGE

Of the 1,500 households selected for the sample, 1,453 were found to be occupied. Of these, 1,409 were successfully interviewed for a household response rate of 97 percent. In the interviewed households, 1,427 women (age 15-49 years) were identified. Of these, 1,294 were successfully interviewed, yielding a response rate of 91 percent within interviewed households. In addition, 472 children under age five were listed in the household questionnaire. Questionnaires were completed for 453 of these children, which corresponds to a response rate of 96 percent within interviewed households. Similarly, out of the 688 eligible men identified, 607 were successfully interviewed, giving a response rate of 88 percent. Overall response rates of 88 percent, 93 percent and 86 percent are calculated for the women's, under-5's and men's interviews respectively (Table HH.1).

Table HH.1: Results of household, women's, under-five and men's interviews.
Numbers of households, women, children under 5 and men by results of the household, women's, under-5's and men's interviews, and household, women's, under-5's and men's response rates, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Variable	Bubuashie	La	James Town	Nima	New Town	Total
Households Sampled	240	480	75	390	315	1,500
Households Occupied	233	463	72	380	305	1,453
Households Interviewed	218	451	68	368	304	1,409
Household response rate	93.6	97.4	94.4	96.8	99.7	97.0
Women Eligible	231	395	61	369	371	1,427
Women Interviewed	205	371	57	351	310	1,294
Women's response rate	88.7	93.9	93.4	95.1	83.6	90.7
Women's overall response rate	83.0	91.5	88.3	92.1	83.3	87.9
Children under 5 Eligible	85	127	27	121	112	472
Mother/Caretaker Interviewed	82	125	27	119	100	453
Under-5's response rate	96.5	98.4	100.0	98.3	89.3	96.0
Under-5's overall response rate	90.3	95.9	94.4	95.2	89.0	93.1
Men Eligible	102	204	28	176	178	688
Men Interviewed	85	191	26	166	139	607
Men's response rate	83.3	93.6	92.9	94.3	78.1	88.2
Men's overall response rate	78.0	91.2	87.7	91.3	77.8	85.6

These response rates are quite appreciable judging from the general difficulty associated with conducting surveys in urban communities. It is however acknowledged that the timing of the fieldwork might have contributed to the non-response rate since a number of respondents had travelled out for Christmas festivities during the period of the survey. There are no pronounced differentials in the response rates across the 5 localities except the observation that the near universal household response rate in the New Town cluster did not translate into equally high individual response rates, especially for the children under five and for the men.

CHARACTERISTICS OF HOUSEHOLDS

The weighted age and sex distribution of survey population is provided in Table HH.2. The distribution is also used to produce the population pyramid in Figure HH.1. In the 1,409 households successfully interviewed in the survey, 4,887 household members were listed. Of these, 2,303 (about 47 percent) were males, and 2,584 (about 53 percent) were females.

Table HH.2: Household age distribution by sex
Percent and frequency distribution of the household population by five-year age groups, dependency age groups, and by child (age 0-17 years) and adult populations (age 18 or more), by sex, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Age (years)	Males Number	Percent	Female Number	Percent	Total Number	Percent
5yr Age groups						
0-4	238	10.3	240	9.3	478	9.8
5-9	249	10.8	250	9.7	499	10.2
10-14	232	10.1	279	10.8	511	10.5
15-19	232	10.1	238	9.2	470	9.6
20-24	262	11.4	253	9.8	515	10.5
25-29	210	9.1	273	10.6	483	9.9
30-34	159	6.9	211	8.2	370	7.6
35-39	154	6.7	202	7.8	356	7.3
40-44	141	6.1	140	5.4	281	5.8
45-49	112	4.9	112	4.4	225	4.6
50-54	77	3.3	114	4.4	191	3.9
55-59	51	2.2	72	2.8	123	2.5
60-64	68	2.9	74	2.9	142	2.9
65-69	29	1.3	36	1.4	65	1.3
70-74	39	1.7	36	1.4	74	1.5
75-79	13	0.6	21	0.8	34	0.7
80-84	9	0.4	13	0.5	21	0.4
85+	13	0.6	18	0.7	31	0.6
Missing/DK	15	0.7	3	0.1	19	0.4
Dependency age groups						
0-14	719	31.2	769	29.7	1,488	30.4
15-64	1,466	63.7	1,689	65.4	3,155	64.6
65+	102	4.4	123	4.8	225	4.6
Missing/DK	15	0.7	3	0.1	19	0.4
Children and adult populations						
Children age 0-17	869	37.7	914	35.4	1,784	36.5
Adults age 18+	1,418	61.6	1,666	64.5	3,084	63.1
Missing/DK	15	0.7	3	0.1	19	0.4
Total	2,303	100.0	2,584	100.0	4,887	100.0

The high proportion of children less than 15 years reflects Ghana's fairly young population, characterized by high fertility. Nonetheless, this percentage of 30 percent is lower than what was recorded for urban areas in the Ghana MICS 3 (34 percent) of 2006, and the 32 percent recorded for both Accra and Kumasi Metropolitans in the 2007/08 HIRD District Survey.

The dependent population (those aged less than 15 or 65 and above) is 35 percent which is quite moderate for clusters identified as high population density areas. Population aged 0-4 years constitute 10 percent of the population.

Figure HH.1 clearly depicts the age-sex distribution of the population and vividly reveals the large share of the population in the younger age groups. Adolescence and early adulthood are the peak periods of initiation into sexual activity and reproduction and access to key reproductive health services is key for an enhanced quality of life in later years.

Figure HH.1: Age and sex distribution of household population,
MICS in 5 High Densely Populated Localities in Accra, 2010-2011
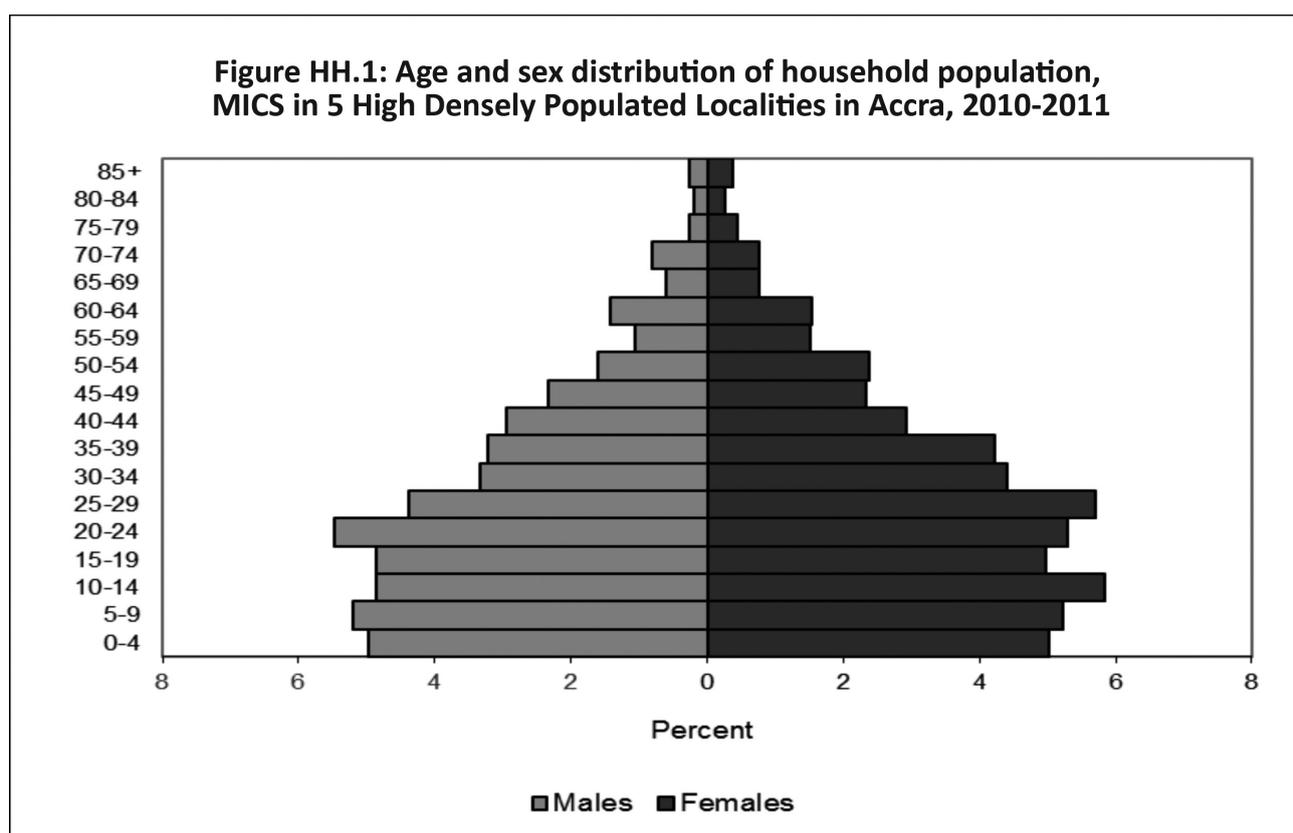
Tables HH.3 - HH.5 provide basic information on the households, female respondents age 15-49, children under-5 and male respondents age 15-59 years by presenting the unweighted, as well as the weighted numbers. Information on the basic characteristics of households, women and children under-5 interviewed in the survey is essential for the interpretation of findings presented later in the report and also can provide an indication of the representativeness of the survey. The remaining Tables in this report are presented only with weighted numbers. See Appendix A for more details about the weighting.

Table HH.3 provides basic background information on the households. Within households, the sex of the household head, locality of residence, number of household members and education of the household head are shown in the table. These background characteristics are used in some subsequent tables in this report; the figures in the table are also intended to show the numbers of observations by major categories of analysis in the report.

The weighted and unweighted total numbers of households are equal, since sample weights were normalized (See Appendix A). The table also shows the proportions of households with at least one child under 18, at least one child under 5, at least one eligible woman age 15-49, and at least one eligible man age 15-59. The sample size for households with at least one eligible man is 750 because only half of the households were earmarked for the male interviews. The table also shows the weighted average household size estimated by the survey.

Table HH.3: Household composition Percent distribution of households by selected characteristics, MICS in 5 High Densely Populated Localities in Accra, 2010-2011			
	Weighted percent	Number of households	
Background characteristics		Weighted	Unweighted
Sex of household head			
Male	65.1	917	926
Female	34.9	492	483
Locality			
Bubuashie	12.0	168	218
La	33.2	468	451
James Town	5.4	77	68
Nima	25.3	357	368
Accra New Town	24.1	339	304
Number of household members			
1	21.9	309	308
2-3	31.6	446	451
4-5	30.6	430	425
6-7	11.7	165	166
8+	4.2	60	59
Education of household head			
None	15.1	213	212
Primary	10.2	144	142
Middle/JSS	38.2	539	534
Secondary +	35.9	506	513
Missing/DK	0.6	7	8
Households with at least:			
One child age 0-4 years	27.8	1,409	1,409
One child age 0-17 years	58.9	1,409	1,409
One woman age 15-49 years	68.9	1,409	1,409
One man age 15-59 years	72.0	705	705
Mean household size	3.5	1,409	1,409
Total	100.0	1,409	1,409

The table shows the dominance of males as the head of household with about 2 in 3 households headed by a male. The distribution by locality is mainly in proportion to the sizes of the localities (see details in Appendix A).

The distribution of the number of household members shows that more than 1 in 5 (22%) of the households consists of just a single member, and the overall average household size is 3.5. These results show that these high densely populated localities consists more of several small to medium sized households rather than large household units.

About 15 percent of the heads of household have no formal education while 10 percent have up to primary education with 38 percent having Middle/JSS education and 36 percent having Secondary or higher education.

A little over 1 in 4 of all the households had at least one child age 0-4 years; about 3 in 5 of the households had at least one child age 0-17 years; about 7 in 10 of them had at least one woman age 15-49 years; and about 7 in 10 of them had at least one man age 15-59 years.

CHARACTERISTICS OF FEMALE RESPONDENTS 15-49 YEARS OF AGE, MALE RESPONDENTS 15-59 YEARS OF AGE AND CHILDREN UNDER-5

Tables HH.4 and HH.5 provide information on the background characteristics of female respondents 15-49 years of age, male respondents 15-59 years of age and of children under age 5. In both tables, the total numbers of weighted and unweighted observations are equal, since sample weights have been normalized (standardized). In addition to providing useful information on the background characteristics of women, men and children, the tables are also intended to show the numbers of observations in each background category. Some of these categories are used in the subsequent tabulations of this report.

Table HH.4 provides background characteristics of female respondents 15-49 years of age and male respondents 15-59 years of age. The table includes information on the distribution of women and men according to locality of residence, age, marital status and education.[3] Table HH.4 also provides information on the motherhood status of the women and births in last two years, for which details are collected about the entire pregnancy, birth and postnatal experience.

Table HH.4: Women's and men's background characteristics Percent and frequency distribution of women age 15-49 years and Men age 15-59 years by selected characteristics, MICS in 5 High Densely Populated Localities in Accra, 2010-2011						
	Women			Men		
	Weighted percent	Number of women		Weighted percent	Number of men	
Background characteristics		Weighted	Unweighted		Weighted	Unweighted
Locality						
Bubuashie	12.5	161	205	11.6	70	85
La	28.1	364	371	30.6	185	191
James Town	4.7	60	57	4.9	30	26
Nima	25.5	330	351	24.0	146	166
Accra New Town	29.3	379	310	28.9	176	139
Age						
15-19	15.7	203	213	13.6	83	83
20-24	17.1	221	230	18.6	113	115
25-29	19.1	248	238	17.3	105	102
30-34	15.4	200	190	12.9	78	75
35-39	15.0	194	187	12.0	73	76
40-44	9.8	127	127	9.3	57	56
45-49	7.8	102	109	7.3	44	46
50-59				9.0	54	54
Marital/Union status						
Currently married/in union	43.6	564	560	40.6	247	247
Widowed	2.6	34	30	1.0-	6	6
Divorced	4.3	55	57	1.8-	11	12
Separated	5.1	66	65	1.9-	12	12
Never married/in union	44.5	575	582	54.6	332	330
Education						
None	10.7	138	137	4.3-	26	24
Primary	15.9	205	190	5.7	34	37
Middle/JSS	39.8	515	514	38.4	233	228
Secondary +	33.6	435	453	51.6	313	318
Wealth index quintile						
Lower 60%	60.1	778	777	61.0	370	367
Upper 60%	39.9	516	517	39.0	237	240
Motherhood status						
Ever gave birth	58.8	761	754	na	na	na
Never gave birth	41.2	533	540	na	na	na
Births in last two years						
Had a birth in last two years	15.1	195	189	na	na	na
Had no birth in last two years	84.9	1,099	1,105	na	na	na
Total	100.0	1,294	1,294	100.0	607	607

[3]Unless otherwise stated, "education", when it is used as a background variable, refers to the highest educational level attended by the respondent in the formal educational system of the country.

Finally, Table HH.4 provides information on the wealth status of households categorized into two as Lower 60% and Upper 40%.[4] The use of only two categories for the wealth index instead of the usual 5 wealth quintiles is a result of the fact that no much differences existed among the lower three and between the upper two categories in the usual wealth quintile.

Table HH.5 shows the background characteristics of children. These include sex, locality of residence, age, mother's education and household wealth status. In terms of sex, the distribution was almost even at 50 percent for males and for females.

Those aged 0-5 months made up 10 percent of the children sampled and those aged 48-59 months made up 18 percent.

Mothers' education of the children under 5 followed a similar pattern to the education of the women with the highest proportion of 42 percent contributed by those in the Middle/JSS category.

About 59 percent of the children were interviewed in households belonging to the Lower 60 percent quintile and 41 percent were interviewed in households in the Upper 40 percent quintiles.

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[4] *Principal components analysis was performed by using information on the ownership of consumer goods, dwelling characteristics, water and sanitation, and other characteristics that are related to the household's wealth to assign weights (factor scores) to each of the household assets. Each household was then assigned a wealth score based on these weights and the assets owned by that household. The survey household population was then ranked according to the wealth score of the household they are living in, and was finally divided into 5 equal parts (quintiles) from lowest (poorest) to highest (richest). The assets used in these calculations were as follows: persons per sleeping room, type of floor, roof, wall, cooking fuel, sanitary facility, household assets (see Table HH.7 for these assets); and source of drinking water. The wealth index is assumed to capture the underlying long-term wealth through information on the household assets, and is intended to produce a ranking of households by wealth, from poorest to richest. The wealth index does not provide information on absolute poverty, current income or expenditure levels. The wealth scores calculated are applicable for only the particular data set they are based on. Further information on the construction of the wealth index can be found in Filmer, D. and Pritchett, L., 2001. "Estimating wealth effects without expenditure data – or tears: An application to educational enrolments in states of India". Demography 38(1): 115-132. Gwatkin, D.R., Rutstein, S., Johnson, K., Pande, R. and Wagstaff. A., 2000. Socio-Economic Differences in Health, Nutrition, and Population. HNP/Poverty Thematic Group, Washington, DC: World Bank. Rutstein, S.O. and Johnson, K., 2004. The DHS Wealth Index. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro.*

Table HH.5: Under-5's background characteristics
Percent and frequency distribution of children under five years of age by selected characteristics, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Weighted percent	Number of children	
		Weighted	Unweighted
Sex			
Male	49.9	226	221
Female	50.1	227	232
Locality			
Bubuashie	14.2	64	82
La	28.0	127	125
James Town	6.8	31	27
Nima	25.0	113	119
Accra New Town	25.9	118	100
Age			
0-5	10.1	46	46
6-11	12.7	58	56
12-23	18.2	83	81
24-35	22.4	101	100
36-47	18.4	83	81
48-59	18.2	83	89
Mother's education			
None	15.3	69	65
Primary	18.0	82	79
Middle/JSS	42.2	191	199
Secondary +	24.5	111	110
Wealth index quintile			
Lower 60%	59.2	268	269
Upper 40%	40.8	185	184
Total	100.0	453	453

Additional characteristics about the households concerning occupancy status, land ownership, possession of a bank account, and cash transfers are given in Table HH. 6. More than 50 percent of the households live in rented accommodation with about 31 percent living in a family house where they do not pay rent. Only 14 percent of households in the five localities owned land that can be used for agricultural purposes. In 65 percent of the households, at least one household member owns a bank account, and in about 4 out of 10 households (40%), at least one member receives in-transfers (cash or kind) from non-resident relatives. At the same time, 48 percent of the households also send out-transfers to non-resident household members. In the five localities, only 3 percent of household members received any in-transfer from government.

Table HH.6: Additional household characteristics			
Percent distribution of households by selected characteristics, MICS in 5 High Densely Populated Localities in Accra, 2010-2011			
		Number of households	
Background characteristics	Weighted percent	Weighted	Unweighted
Occupancy status			
Own	11.5	162	157
Rent	54.4	767	761
Squatting	0.9	12	9
Caretaker	1.3	19	15
Family house (without rent)	30.5	430	450
Other	1.4	20	17
Any household member owns land that can be used for agriculture			
Yes	14.0	197	195
No	86.0	1,212	1,214
Any household member owns a bank account			
Yes	65.1	918	918
No	34.8	490	490
In-transfers received from non-resident relatives			
Yes	39.8	560	585
No	59.4	836	810
DK	0.8	12	14
In-transfers received from Government programs			
Yes	2.7	38	39
No	96.8	1,364	1,362
DK	0.5	7	8
Transfers sent out to no resident relatives			
Yes	48.3	680	679
No	51.0	718	719
Missing	0.7	10	11
Total	100	1,409	1,409

Table HH.7 provides additional information on household assets.   Over 80 percent of households or its members owned a radio (82%), color TV (85%), a watch (86%) and a mobile phone (95%).

Table HH.7: Household asset ownership
Percent distribution of households by asset ownership, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Item name	Weighted percent	Number of households	
		Weighted	Unweighted
Radio	82.0	1,156	1,147
B & W television	1.5	21	26
Colour television	84.7	1,193	1,201
Land/Fixed line	4.1	58	60
Refrigerator/ Freezer	66.0	930	926
Washing machine	1.9	27	28
Laptop	1.9	27	28
Desktop computer	10.8	152	161
Video deck	16.1	227	222
DVD/VCD player	61.3	863	864
Sewing machine	22.1	311	310
Watch	86.1	1,214	1,216
Mobile telephone	94.7	1,335	1,336
Bicycle	12.6	177	176
Motorcycle or scooter	3.3	47	49
Animal-drawn cart	0.0	1,408	1,408
Car or truck	10.9	153	150
Canoe/ Boat with motor	0.2	3	2
Canoe/ Boat without motor	0.2	2	2
Total	100.0	1,409	1,409

NUTRITIONAL STATUS

Children's nutritional status is a reflection of their overall health. When children have access to an adequate food supply, are not exposed to repeated illness, and are well cared for, they reach their growth potential and are considered well nourished.

Malnutrition is associated with more than half of all child deaths in developing countries. Undernourished children are more likely to die from common childhood ailments, and for those who survive, have recurring sicknesses and faltering growth. Three-quarters of the children who die from causes related to malnutrition were only mildly or moderately malnourished – showing no outward sign of their vulnerability. The Millennium Development target is to reduce by half the proportion of people who suffer from hunger between 1990 and 2015. A reduction in the prevalence of malnutrition will also assist in the goal to reduce child mortality.

In a well-nourished population, there is a reference distribution of height and weight for children under age five. Under-nourishment in a population can be gauged by comparing children to a reference population. The reference population used in this report is based on new WHO growth standards.[5] Each of the three nutritional status indicators can be expressed in standard deviation units (z-scores) from the median of the reference population.

Weight-for-age is a measure of both acute and chronic malnutrition. Children whose weight-for-age is more than two standard deviations below the median of the reference population are considered moderately or severely underweight while those whose weight-for-age is more than three standard deviations below the median are classified as severely underweight.

Height-for-age is a measure of linear growth. Children whose height-for-age is more than two standard deviations below the median of the reference population are considered short for their age and are classified as moderately or severely stunted. Those whose height-for-age is more than three standard deviations below the median are classified as severely stunted. Stunting is a reflection of chronic malnutrition as a result of failure to receive adequate nutrition over a long period and recurrent or chronic illness.

Finally, children whose weight-for-height is more than two standard deviations below the median of the reference population are classified as moderately or severely wasted, while those who fall more than three standard deviations below the median are classified as severely wasted. Wasting is usually the result of a recent nutritional deficiency. The indicator may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence.

In the Urban MICS Survey, weights and heights of all children under 5 years of age were measured using anthropometric equipment recommended by UNICEF (www.childinfo.org). Findings in this section are based on the results of these measurements. Table NU.1 shows percentages of children classified into each of these categories, based on the anthropometric measurements that were taken during fieldwork. Additionally, the table includes the percentage of children who are overweight, which takes into account those children whose weight for height is above 2 standard deviations from the median of the reference population, and mean z-scores for all three anthropometric indicators.

Children whose full birth date (month and year) were not obtained and children whose measurements are outside a plausible range are excluded from Table NU.1. Children are excluded from one or more of the anthropometric indicators when their weights and heights have not been measured, whichever applicable. For example if a child has been weighed but his/her height has not been measured, the child is included in underweight calculations, but not in the calculations for stunting and wasting. Percentages of children by age and reasons for exclusion are shown in the data quality Tables DQ.6 and DQ.7 in Appendix D.

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[5] *http://www.who.int/childgrowth/standards/second_set/technical_report_2.pdf*

Overall, 95 percent of the children had both their weights and heights measured (Table DQ.6 in the Annex). Table DQ.7 shows that due to incomplete dates of birth, implausible measurements, and missing weight and/or height, about 5 percent of children have been excluded from calculations of the weight-for-age (underweight) indicator. Also, about 6 percent of children have been excluded from the height-for-age (stunting) and the weight-for-height (wasting) indicators.

Almost 13 percent of children under age five in the five localities are moderately underweight and 2 percent are classified as severely underweight (Table NU.1). One out of every 10 children (11 percent) is moderately stunted or too short for their age and 14 percent are moderately wasted or too thin for their height.

Those children whose mothers have secondary or higher education are the least likely to be stunted (8%), compared to children whose mothers have little or no education (15%). The same is true for underweight – one in five (20%) children whose mothers have little or no education are underweight, compared to 7 percent of children whose mothers have secondary or higher education. Fourteen percent of children under age five are wasted.[6] Girls appear to be slightly more likely to be underweight than boys, however boys are slightly more likely to be stunted and wasted than girls.

The age pattern shows that a higher percentage of children aged 24-35 months are undernourished according to two indices (underweight and stunted) in comparison to children who are younger and older (Figure NU.1). However a higher percentage of children aged 6-11 months are wasted as compared to children of other ages. Marked differences are observed in all three indices in regard to wealth status of households. Children of the poor are at least twice more likely to be underweight, stunted or wasted in comparison with children of the rich. For underweight, 5 percent of children in the richer households are underweight compared to 18 percent of children in the poorer households. Additionally, the table reveals that 2 percent of children in the five localities are overweight – these are the children whose weight for height is above 2 standard deviations from the median of the reference population.

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[6] *The percentage of children under five that are wasted is quite high, compared to previous surveys – for example in the 2007/08 HIRD District MICS, 5 percent of children in Accra and Kumasi metropolitan areas were wasted. In the 2008 GDHS, this figure was 8 percent for all urban areas in Ghana, and 6 percent for Greater Accra region.*

Table NU.1: Nutritional status of children

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Weight for age — Underweight				Height for age — Stunted				Weight for height — Wasted		Overweight		
	Percent below -2 SD [1]	Percent below -3 SD [2]	Mean Z-Score (SD)	Number of children	Percent below -2 SD [3]	Percent below -3 SD [4]	Mean Z-Score (SD)	Number of children	Percent below -2 SD [5]	Percent below -3 SD [6]	Percent above +2 SD	Mean Z-Score (SD)	Number of children
Sex													
Male	10.6	2.1	-0.7	212	11.7	4.1	-0.5	210	15.6	3.2	2.3	-0.6	216
Female	14.5	2.0	-0.7	219	10.3	3.7	-0.4	218	12.7	2.3	0.9	-0.7	216
Locality													
Bubuashie	6.3	0.0	-0.4	57	7.5	1.6	-0.1	57	7.2	2.4	0.0	-0.5	58
La	11.5	2.8	-0.7	119	11.7	5.3	-0.5	119	11.5	1.8	2.4	-0.6	121
James Town	(20.2)	(2.1)	(-0.7)	29	(33.0)	(6.0)	(-1.1)	29	(6.8)	(2.3)	(0.0)	(-0.6)	27
Nima	14.2	1.9	-0.7	113	11.2	2.4	-0.7	111	8.7	0.0	3.5	-0.4	111
Accra New Town	13.3	2.6	-0.9	113	6.2	4.6	-0.2	113	27.2	6.6	0.0	-1.1	116
Age													
0-5 months	(7.4)	(0.0)	(-0.4)	44	(10.7)	(7.1)	(0.1)	43	(28.4)	(4.7)	(4.7)	(-0.8)	41
6-11 months	14.4	0.0	-0.6	56	5.3	0.0	0.5	56	26.7	9.3	2.4	-1.1	56
12-23 months	13.2	4.4	-0.8	80	8.3	4.7	-0.3	79	23.8	4.0	2.4	-0.9	80
24-35 months	16.9	4.1	-0.7	98	18.7	6.3	-0.9	97	6.9	0.6	1.7	-0.3	99
36-47 months	10.2	1.1	-0.9	83	10.2	1.7	-0.7	82	7.8	1.1	0.0	-0.7	82
48-59 months	10.5	0.9	-0.8	70	9.0	3.7	-0.7	71	3.3	0.0	0.0	-0.6	75
Mother's education													
None	19.5	2.6	-1.0	64	14.7	5.3	-0.9	63	16.7	6.1	1.5	-0.7	67
Primary	16.7	2.3	-0.9	76	15.6	4.5	-0.7	76	11.6	1.8	0.6	-0.7	76
Middle/JSS	11.6	2.3	-0.7	185	9.8	4.1	-0.3	183	15.9	2.1	1.3	-0.8	183
Secondary +	7.2	1.3	-0.6	106	7.7	2.3	-0.4	106	11.3	2.4	2.9	-0.5	106
Wealth index quintile													
Lower 60%	17.9	2.5	-0.9	255	14.4	4.6	-0.5	254	18.6	3.7	1.5	-0.8	259
Upper 40%	4.9	1.5	-0.5	175	6.0	3.0	-0.3	174	7.5	1.3	1.8	-0.5	173
Total	12.6	2.1	-0.7	431	11.0	3.9	-0.5	428	14.1	2.7	1.6	-0.7	432

[1] MICS indicator 2.1a and MDG indicator 1.8   [2] MICS indicator 2.1b
[3] MICS indicator 2.2a,   [4] MICS indicator 2.2b
[5] MICS indicator 2.3a, [6] MICS indicator 2.3b
Figures in parentheses '()' are based on 25-49 unweighted cases

The trend in the anthropometry indicators by age of the children are shown in Figure NU.1.

Figure NU.1: Percentage of children under age 5 who are underweight, stunted and wasted, MICS in 5 High Densely Populated Localities in Accra, 2010-2011
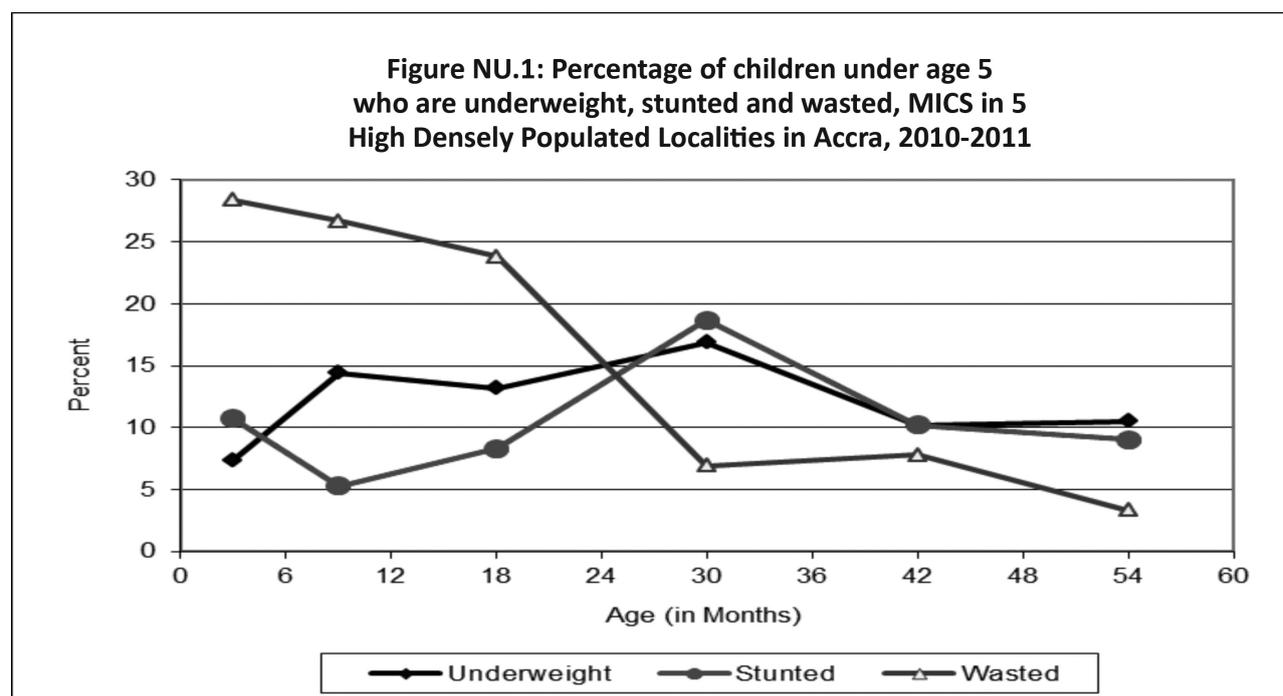
BREASTFEEDING AND INFANT AND YOUNG CHILD FEEDING

Breastfeeding during the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe. However, many mothers stop breastfeeding too soon and there are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition and is unsafe if clean water is not readily available.

WHO/UNICEF have the following feeding recommendations:
• Exclusive breastfeeding for first six months
• Continued breastfeeding for two years or more
• Safe, appropriate and adequate complementary foods beginning at 6 months
• Frequency of complementary feeding: 2 times per day for 6-8 month olds; 3 times per day for 9-11 month olds.

It is also recommended that breastfeeding be initiated within one hour of birth.

The indicators related to recommended child feeding practices are as follows:
• Early initiation of breastfeeding (within 1 hour of birth)
• Exclusive breastfeeding rate (< 6 months)
• Predominant breastfeeding (< 6 months)
• Continued breastfeeding rate (at 1 year and at 2 years)
• Duration of breastfeeding
• Age-appropriate breastfeeding (0-23 months)
• Introduction of solid, semi-solid and soft foods (6-8 months)
• Minimum meal frequency (6-23 months)
• Milk feeding frequency for non-breastfeeding children (6-23 months)
• Bottle feeding (0-23 months)

	Table NU.2: Initial breastfeeding				
Percentage of last-born children in the 2 years preceding the survey who were ever breastfed, percentage who were breastfed within one hour of birth and within one day of birth, and percentage who received a prelacteal feed, MICS in 5 High Densely Populated Localities in Accra, 2010-2011					
	Percentage who were first breastfed				
Background characteristics	Percentage ever breastfed [1]	Within one hour of birth [2]	Within one day of birth	Percentage who received a prelacteal feed	Number of last-born children in two years preceding survey
Months since last birth					
0-11 months	95.2	36.8	71.3	16.9	102
12-23 months	97.7	49.6	88.2	11.4	88
Mother's education					
None	(100.0)	(37.5)	(79.5)	(18.1)	26
Primary	(97.3)	(45.3)	(85.8)	(9.6)	39
Middle/JSS	94.4	49.3	76.5	11.8	88
Secondary +	(96.6)	(32.7)	(80.1)	(19.4)	43
Wealth index quintile					
Lower 60%	97.0	41.7	78.4	15.4	122
Upper 40%	94.9	45.9	81.3	11.4	73
Total	96.2	43.3	79.5	13.9	196

[1] MICS indicator 2.4
[2] MICS indicator 2.5
Figures in parentheses '()' are based on 25-49 unweighted cases

Table NU.2 provides the proportion of children born in the last two years who were ever breastfed, those who were first breastfed within one hour and one day of birth, and those who received a prelacteal feed. Although a very important step in management of lactation and establishment of a physical and emotional relationship between the baby and the mother, just 43 percent of babies are breastfed for the first time within one hour of birth, while 80 percent of newborns start breastfeeding within one day of birth. Overall, 96 percent of the babies were ever breastfed.

A declining breastfeeding pattern is observed within a 24 month period preceding the survey in all four indices of measurements. Children born 12-23 months prior to the survey tend to have enjoyed a higher breastfeeding experience as 98 percent of them were ever breastfed compared to 95 percent of children born 0-11 months before the survey. About one in every two of the children born 12-23 months preceding the survey was breastfed within one hour of birth. The proportion that was breastfed within the first day was 88 percent while only 11 percent of them received prelacteal feed.

Ninety-seven percent of children from the poorer households were ever breastfed, compared to 95 percent of children in the wealthier households. However children from wealthier households are more likely to be breastfed within one hour (46%) compared to children from poorer households (42%). Overall, 14 percent of children received a prelacteal feed.

Figure NU.2: Percentage of mothers who started breastfeeding within one hour and within one day of birth, MICS in 5 High Densely Populated Localities in Accra, 2010-2011
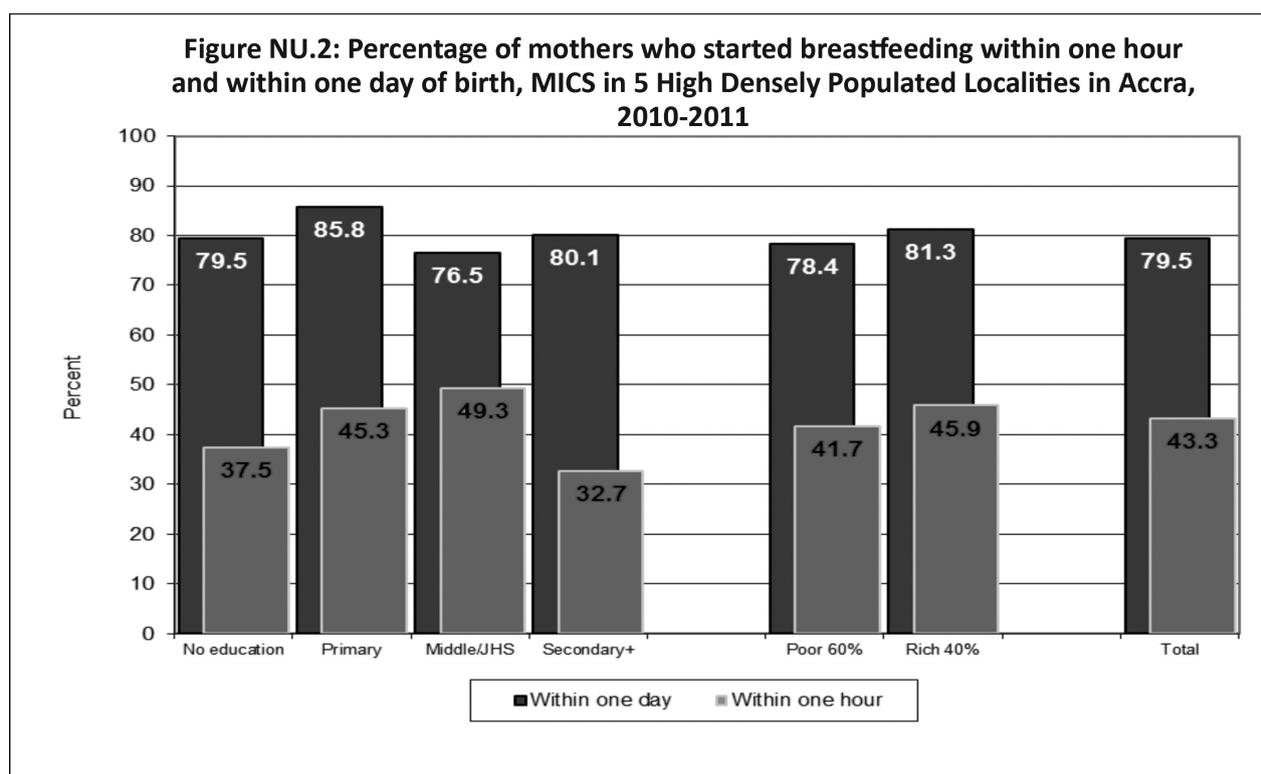
In Table NU.3, breastfeeding status is based on the reports of mothers/caretakers of children's consumption of food and fluids in the 24 hours prior to the interview. Exclusively breastfed refers to infants who received only breast milk (and vitamins, mineral supplements, or medicine). The table shows exclusive breastfeeding of infants less than 6 months old.

Table NU.3: Breastfeeding		
Percentage of living children age 0-5 months according to breastfeeding status, MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Indicator	Percentage	Number of children
Children 0-5 months exclusively breastfed [1]	(45.7)	46
Children 0-5 months predominantly breastfed [2]	(63.8)	46
[1] MICS indicator 2.6		
[2] MICS indicator 2.9		
Figures in parentheses '()' are based on 25-49 unweighted cases		

Approximately 46 percent of children aged less than six months are exclusively breastfed, a level considerably lower than what is recommended – that an optimal way of feeding infants is to ensure that children aged less than six months are exclusively breastfeed. Also, 64 percent had been predominantly breastfed. It must however be noted that these figures are based on only 46 unweighted cases and therefore cannot be generalized.

Table NU.4 shows the median duration of breastfeeding by selected background characteristics. Among children under age 3, the median duration is 15.9 months for any breastfeeding, 2.5 months for exclusive breastfeeding, and a little bit over 4 months for predominant breastfeeding. Mothers with middle/JHS and Secondary education have the least median duration of exclusive breastfeeding (1.6 and 2 months respectively). Children from the richer households are less likely to be exclusively breastfed for a longer duration (1.9 months), compared to those in the poorer households (2.6 months).

Table NU.4: Duration of breastfeeding
Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children age 0-35 months, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Median duration (in months) of			Number of children age 0-35 months
	Any breastfeeding [1]	Exclusive breastfeeding	Predominant breastfeeding	
Sex				
Male	16.7	1.4	4.2	147
Female	15.7	2.5	3.2	140
Mother's education				
None	(21.2)	(3.5)	(4.5)	39
Primary	15.8	3.2	4.0	51
Middle/JHS	14.1	1.6	2.5	120
Secondary+	16.3	2.0	5.1	77
Wealth index quintile				
Lower 60%	17.5	2.6	3.5	168
Upper 40%	15.4	1.9	3.7	120
Median	16.4	2.3	3.6	287
Mean for all children (0-35 months)	15.9	2.5	4.2	287
1] MICS indicator 2.10				
Figures in parentheses '()' are based on 25-49 unweighted cases				

The adequacy of infant feeding in children under 24 months is provided in Table NU.5. Different criteria of adequate feeding are used depending on the age of the child. For infants aged 0-5 months, exclusive breastfeeding is considered as adequate feeding, while infants aged 6-23 months are considered to be adequately fed if they are receiving breast milk and solid, semi-solid or soft food. Overall about 39 percent of children aged 0-23 months received appropriate breastfeeding. The poorer households are also more likely to offer appropriate breastfeeding than the richer households.

Table NU.5: Age-appropriate breastfeeding
Percentage of children age 0-23 months who were appropriately breastfed during the previous day, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Children age 0-5 months		Children age 6-23 months		Children age 0-23 months	
	Percent exclusively breastfed [1]	Number of children	Percent currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Percent appropriately breastfed [2]	Number of children
Sex						
Male	*	23	31.8	69	34.5	93
Female	*	23	41.4	71	43.2	93
Mother's education						
None	*	4	*	23	(61.7)	28
Primary	*	11	*	23	(55.3)	34
Middle/JSS	*	21	25.2	60	28.0	82
Secondary +	*	9	(30.5)	34	(32.2)	43
Wealth index quintile						
Lower 60%	(51.9)	27	40.6	88	43.3	115
Upper 40%	*	18	29.9	52	31.6	71
Total	45.7	46	36.6	140	38.9	186
1] MICS indicator 2.6 [2] MICS indicator 2.14						
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.						

Adequate complementary feeding of children from 6 months to two years of age is particularly important for growth and development and the prevention of under nutrition. Continued breastfeeding beyond six months should be accompanied by consumption of nutritionally adequate, safe and appropriate complementary foods that help meet nutritional requirements when breast milk is no longer sufficient. This requires that for breastfed children, two or more meals of solid, semi-solid or soft foods are needed if they are six to eight months old, and three or more meals if they are 9-23 months of age. For children 6-23 months and older who are not breastfed, four or more meals of solid, semi-solid or soft foods or milk feeds are needed.

Table NU.6 presents the proportion of children age 6-23 months who received semi-solid or soft foods the minimum number of times or more during the previous day according to breastfeeding status (see the note in Table NU.6 for a definition of minimum number of times for different age groups). Overall, only one out of 5 children age 6-23 months (21 percent) were receiving solid, semi-solid and soft foods the minimum number of times. Twelve percent of children currently breastfed and 34 percent of children not currently breastfed received solid, semi-solid and soft foods the minimum number of times each day. Also, for those not currently breastfed, 35 percent were receiving at least 2 milk feeds per day. No marked differences are observed among the poorer and richer households in regards to provision of minimum meals for children.

Table NU.6: Minimum meal frequency							
Percentage of children age 6-23 months who received solid, semi-solid, or soft foods (and milk feeds for non-breastfeeding children) the minimum number of times or more during the previous day, according to breastfeeding status, MICS in 5 High Densely Populated Localities in Accra, 2010-2011							
	Currently breastfed		Currently not breastfed			All	
Background characteristics	Percent receiving solid, semi-solid and soft foods the minimum number of times	Number of children age 6-23 months	Percent receiving at least 2 milk feeds [1]	Percent receiving solid, semi-solid and soft foods or milk feeds 4 times or more	Number of children age 6-23 months	Percent with minimum meal frequency [2]	Number of children age 6-23 months
Sex							
Male	(10.2)	40	(42.9)	(30.5)	29	18.7	69
Female	(12.7)	44	(26.0)	(38.7)	26	22.4	71
Wealth index quintile							
Lower 60%	12.3	54	(27.4)	(32.3)	34	20.1	88
Upper 40%	(10.1)	31	*	*	21	21.4	52
Total	11.5	85	34.9	34.4	56	20.6	140
[1] MICS indicator 2.15 [2] MICS indicator 2.13 *An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.*							

The continued practice of bottle-feeding is a concern because of the possible contamination due to unsafe water and lack of hygiene in preparation. Table NU.7 shows that bottle-feeding is prevalent. Twenty-seven percent of children under 6 months are fed using a bottle with a nipple. Bottle feeding is generally an urban phenomenon, and it is likely that mothers who resorted to that are working women, who have to be away for their children for long hours. Children aged 6–11 months are most likely to be fed with a bottle with a nipple (48 percent), compared to children age 12-23 months (13 percent).

Thirty-six percent of children from the richer households are fed with a bottle with a nipple compared to 22 percent of children from the poorer households. This difference may be attributed to affordability of the bottle and of the infant milk (or formula). The identification of the current trends in bottle feeding would reinforce interventions to encourage breastfeeding and to reduce bottle feeding practices so that child morbidity and mortality can be reduced.

Table NU.7: Bottle feeding		
Percentage of children age 0-23 months who were fed with a bottle with a nipple during the previous day, MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Background characteristics	Percentage of children age 0-23 months fed with a bottle with a nipple [1]	Number of children age 0-23 months:
Sex		
Male	25.9	93
Female	28.7	93
Age		
0-5 months	(28.7)	46
6-11 months	47.5	58
12-23 months	12.5	83
Mother's education		
None	(15.1)	28
Primary	(11.4)	34
Middle/JSS	31.4	82
Secondary +	(39.7)	43
Wealth index quintile		
Lower 60%	21.9	115
Upper 40%	36.0	71
Total	27.3	186
[1] MICS indicator 2.11		
Figures in parenthesis '()' are based on 25-49 unweighted cases.		

SALT IODIZATION

Iodine Deficiency Disorders (IDD) is the world's leading cause of preventable mental retardation and impaired psychomotor development in young children. In its most extreme form, iodine deficiency causes cretinism. It also increases the risks of stillbirth and miscarriage in pregnant women. Iodine deficiency is most commonly and visibly associated with goitre. IDD takes its greatest toll in impaired mental growth and development, contributing in turn to poor school performance, reduced intellectual ability, and impaired work performance. The international goal was to achieve sustainable elimination of iodine deficiency by 2005. The indicator is the percentage of households consuming adequately iodized salt (>15 parts per million).

The USI regulations mandate salt for human and animal consumption to be iodized. In Ghana, non-iodized salt is banned from sale when it is intended for consumption and people found selling or using non-iodized salt are liable to arrest. Campaigns on iodized salt consumption have also been on-going for several years and iodized salt is readily accessible, at least, in all urban areas.

In about 82 percent of households, salt used for cooking was tested for iodine content by using salt test kits and testing for the presence of potassium iodate. Table NU.8 shows that in 17 percent of households there was no salt available. The poorer households are more likely to have no salt available in the household (20 percent) compared to the richer households (13%). Also, 20 percent of the households in Nima locality did not have salt. In only 63 percent of households, salt was found to be adequately iodated. Use of iodized salt was lowest in James Town (38%) and highest in Accra New Town (76%). 61 percent of households in Bubuashie, 55 percent of households in La, and 68 percent of households in Nima also had adequately iodated salt.

There is marked difference between the richer and poorer households in terms of iodized salt consumption (Figure NU.4). Close to 80 percent of the richer households use iodated salt as compared to about 53 percent of the poorer households. It is also interesting to note that nearly one in four (24%) households used salt that was not iodized, and 13 percent used inadequately iodated salt (>0 and <15 ppm). Households in James Town are also more likely to use inadequately iodated salt (36%), compared to the other localities – 15 percent in Bubuashie, 16 percent in La, 8 percent in Nima, and 7 percent in Accra New Town.

Table NU.8: Iodized salt consumption								
Percent distribution of households by consumption of iodized salt, MICS in 5 High Densely Populated Localities in Accra, 2010-2011								
Background characteristics	Percent of households in which salt was tested	Percent of households with no salt	Number of households	Percent of households with Salt test results				Number of households in which salt was tested or with no salt
				Not iodized 0 PPM	>0 and <15 PPM	15+ PPM [1]	Total	
Locality								
Bubuashie	82.3	17.1	168	23.9	15.4	60.7	100.0	167
La	84.0	14.8	468	28.9	15.9	55.2	100.0	461
James Town	87.5	12.5	77	26.5	35.6	37.8	100.0	77
Nima	79.2	20.3	357	23.4	8.2	68.4	100.0	354
Accra New Town	81.8	16.0	339	16.8	7.4	75.8	100.0	330
Wealth index quintile								
Lower 60%	79.6	19.9	870	30.4	16.5	53.1	100.0	864
Upper 40%	86.5	11.4	539	14.3	8.0	77.6	100.0	526
Total	82.2	16.7	1,409	23.9	13.1	63.0	100.0	1,390
[1] MICS indicator 2.16								

Figure NU.3: Percentage of household consuming adequately iodized salt, MICS in 5 High Densely Populated Localities in Accra, 2010-2011
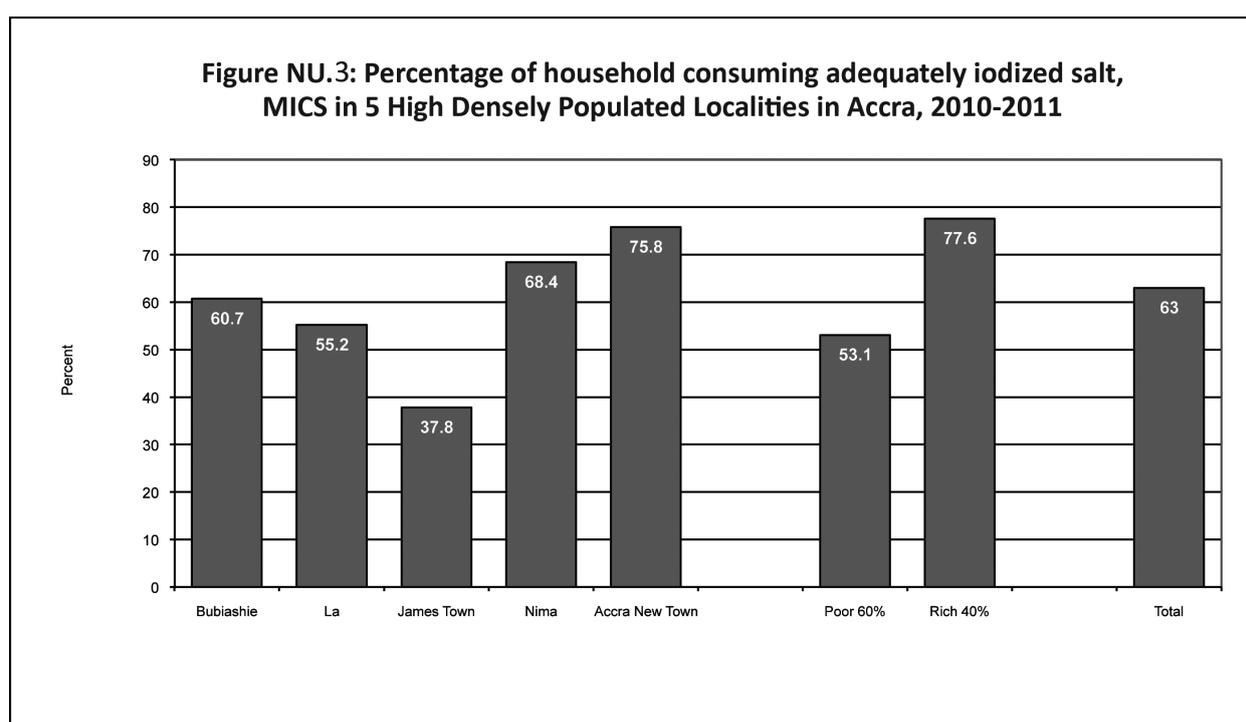
CHILDREN'S VITAMIN A SUPPLEMENTATION

Vitamin A is essential for eye health and proper functioning of the immune system. It is found in foods such as milk, liver, eggs, red and orange fruits, red palm oil and green leafy vegetables, although the amount of Vitamin A readily available to the body from these sources varies widely. In developing areas of the world, where Vitamin A is largely consumed in the form of fruits and vegetables, daily per capita intake is often insufficient to meet dietary requirements. Inadequate intakes are further compromised by increased requirements for the vitamin as children grow or during periods of illness, as well as increased losses during common childhood infections. As a result, Vitamin A deficiency is quite prevalent in the developing world and particularly in countries with the highest burden of under-five deaths.

The 1990 World Summit for Children set the goal of virtual elimination of Vitamin A deficiency and its consequences, including blindness, by the year 2000. This goal was also endorsed at the Policy Conference on Ending Hidden Hunger in 1991, the 1992 International Conference on Nutrition, and the UN General Assembly's Special Session on Children in 2002. The critical role of Vitamin A for child health and immune function also makes control of deficiency a primary component of child survival efforts, and therefore critical to the achievement of the fourth Millennium Development Goal: a two-thirds reduction in under-five mortality by the year 2015.

For countries with Vitamin A deficiency problems, current international recommendations call for high-dose Vitamin A supplementation every four to six months, targeted to all children between the ages of six to 59 months living in affected areas. Providing young children with two high-dose Vitamin A capsules a year is a safe, cost-effective, efficient strategy for eliminating Vitamin A deficiency and improving child survival. Giving Vitamin A to new mothers who are breastfeeding helps protect their children during the first months of life and helps to replenish the mother's stores of Vitamin A, which are depleted during pregnancy and lactation. For countries with Vitamin A supplementation programs, the definition of the indicator is the percent of children 6-59 months of age receiving at least one high dose Vitamin A supplement in the last six months.

Based on UNICEF/WHO guidelines, the Ghana Ministry of Health recommends that children aged 6-11 months be given one high dose Vitamin A capsules and children aged 12-59 months given a Vitamin A capsule every 6 months. In some parts of the country, Vitamin A capsules are linked to immunization services and are given when the child has contact with these services after six months of age. It is also recommended that mothers take a Vitamin A supplement within eight weeks of giving birth due to increased Vitamin A requirements during pregnancy and lactation.

Within the six months prior to the Urban MICS, only 23 percent of children aged 6-59 months received a high dose Vitamin A supplement (Table NU.9). The age pattern of Vitamin A supplementation shows that supplementation in the last six months is highest (48%) among children aged 6-11 months and lowest (9%) among those aged 24-35 months. There is not much difference in coverage among children from the richer or poorer. The mother's level of education is also related to the likelihood of Vitamin A supplementation. Children whose mothers have secondary or higher education are more likely to have received Vitamin A during the last 6 months, compared to children whose mothers have little or no education. The percentage receiving a supplementation in the last six months increases from 18 percent among children whose mothers have no education to 22 percent of those whose mothers have primary education, and 29 percent among children of mothers with secondary or higher education.

Table NU.9: Children's vitamin A supplementation

Percent distribution of children age 6-59 months by receipt of a high dose vitamin A supplement in the last 6 months, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage who received Vitamin A according to:		Percentage of children who received Vitamin A during the last 6 months [1]	Number of children age 6-59 months
	Child health book/card/ vaccination card	Mother's report		
Sex				
Male	11.4	13.7	25.1	203
Female	8.8	12.4	21.3	204
Locality				
Bubuashie	9.1	14.7	23.7	59
La	8.6	10.7	19.2	109
James Town	2.2	13.1	15.4	27
Nima	9.3	12.8	22.1	104
Accra New Town	15.0	14.8	29.8	108
Age				
6-11	47.1	0.8	47.9	58
12-23	12.7	9.9	22.6	83
24-35	2.6	6.1	8.7	101
36-47	0.0	24.4	24.4	83
48-59	1.1	21.9	23.0	83
Mother's education				
None	11.4	7.1	18.4	65
Primary	9.9	12.0	21.9	71
Middle/JSS	8.0	14.1	22.2	170
Secondary +	12.9	15.8	28.7	102
Wealth index quintile				
Lower 60%	9.4	13.1	22.5	241
Upper 40%	11.2	13.0	24.2	167
Total	10.1	13.1	23.2	407
[1] MICS indicator 2.17				

LOW BIRTH WEIGHT

Weight at birth is a good indicator not only of a mother's health and nutritional status but also the newborn's chances for survival, growth, long-term health and psychosocial development. Low birth weight (less than 2,500 grams) carries a range of grave health risks for children. Babies who were undernourished in the womb face a greatly increased risk of dying during their early months and years. Those who survive have impaired immune function and increased risk of disease; they are likely to remain undernourished, with reduced muscle strength, throughout their lives, and suffer a higher incidence of diabetes and heart disease in later life. Children born underweight also tend to have a lower IQ and cognitive disabilities, affecting their performance in school and their job opportunities as adults.

In the developing world, low birth weight stems primarily from the mother's poor health and nutrition. Three factors have most impact: the mother's poor nutritional status before conception, short stature (due mostly to under nutrition and infections during her childhood), and poor nutrition during the pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large proportion of foetal growth retardation. Moreover, diseases such as diarrhoea and malaria, which are common in many developing countries, can significantly impair foetal growth if the mother becomes infected while pregnant.

In the industrialized world, cigarette smoking during pregnancy is the leading cause of low birth weight. In developed and developing countries alike, teenagers who give birth when their own bodies have yet to finish growing run the risk of bearing underweight babies.

One of the major challenges in measuring the incidence of low birth weight is the fact that more than half of infants in the developing world are not weighed at birth. In the past, most estimates of low birth weight for developing countries were based on data compiled from health facilities. However, these estimates are biased because the majority of newborns are not delivered in facilities, and those who are represent only a selected sample of all births.

Because many infants are not weighed at birth and those who are weighed may be a biased sample of all births, the reported birth weights usually cannot be used to estimate the prevalence of low birth weight among all children. Therefore, the percentage of births weighing below 2500 grams is estimated from two items in the questionnaire: the mother's assessment of the child's size at birth (i.e., very small, smaller than average, average, larger than average, very large) and the mother's recall of the child's weight or the weight as recorded on a health card if the child was weighed at birth.[7] Overall, 86 percent of births were weighed at birth and approximately 13 percent of infants are estimated to weigh less than 2500 grams at birth (Table NU.10). While children from the richer households are weighed at birth (87%), compared to children from the poorer households (85%), a higher proportion of their children appear to have low weights at birth than children from the poorer households.

Table NU.10: Low birth weight infants			
Percentage of last-born children in the 2 years preceding the survey that are estimated to have weighed below 2500 grams at birth and percentage of live births weighed at birth, MICS in 5 High Densely Populated Localities in Accra, 2010-2011			
	Percent of live births:		Number of live births in the
Background characteristics	Below 2500 grams [1]	Weighed at birth [2]	last 2 years
Wealth index quintile			
Lower 60%	12.0	84.8	122
Upper 40%	15.0	87.3	73
Total	13.1	85.7	196
[1] MICS indicator 2.18 [2] MICS indicator 2.19			

[7] For a detailed description of the methodology, see Boerma, J. T., Weinstein, K. I., Rutstein, S.O., and Sommerfelt, A. E. , 1996. Data on Birth Weight in Developing Countries: Can Surveys Help? Bulletin of the World Health Organization, 74(2), 209-16.

VACCINATIONS

The Millennium Development Goal (MDG) 4 is to reduce child mortality by two thirds between 1990 and 2015. Immunization plays a key part in this goal. Immunizations have saved the lives of millions of children in the three decades since the launch of the Expanded Programme on Immunization (EPI) in 1974. Worldwide there are still 27 million children overlooked by routine immunization and as a result, vaccine-preventable diseases cause more than 2 million deaths every year.

A World Fit for Children goal is to ensure full immunization of children under one year of age at 90 percent nationally, with at least 80 percent coverage in every district or equivalent administrative unit.

According to UNICEF and WHO guidelines, a child should receive a BCG vaccination to protect against tuberculosis, three doses of DPT to protect against diphtheria, pertussis, and tetanus, three doses of polio vaccine, and a measles vaccination by the age of 12 months. Since 2007, children in Ghana receive DPT as part of a combined Pentavalent (PENTA) dose which also contains Hepatatis B and Influenza vaccination. Mothers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards onto the MICS questionnaire. Where vaccination cards were not available, mothers/caregivers provided the information on the vaccinations that the child had received. The percentage of children age 12 to 23 months who received each of the vaccinations is shown in Table CH.1.

Table CH.1: Vaccinations in first year of life			
Percentage of children age 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, MICS in 5 High Densely Populated Localities in Accra, 2010-2011			
Vaccination type	Vaccinated any time before the survey according to: V card	Vaccinated any time before the survey according to: Mother	Vaccinated any time before the survey according to: Either	Vaccinated by 12 months of age
BCG [1]	88.6	10.4	99.0	99.0
Polio 0	84.9	10.4	95.2	95.2
Polio 1	89.1	8.7	97.8	96.6
Polio 2	89.1	8.7	97.8	96.6
Polio 3 [2]	86.9	4.2	91.1	89.9
DPT/HepB/INLF 1	89.1	9.9	99.0	97.7
DPT/HepB/INLF 2	89.1	8.7	97.8	96.6
DPT/HepB/INLF 3 [3]	86.9	6.1	93.0	91.7
Measles [4]	87.8	9.9	97.7	97.7
Yellow fever [6]	87.8	9.9	97.7	96.0
All vaccinations	85.8	0.0	85.8	83.2
No vaccinations	0.0	0.0	0.0	0.0
Number of children age 12-23 months	83	83	83	83
Children with vaccination cards: 90.1 percent			
[1] MICS indicator 3.1 [2] MICS indicator 3.2 [3] Combined MICS indicators 3.3 and 3.5 [4] MICS indicator 3.4; MDG indicator 4.3 [6] MICS indicator 3.6			

The denominator for the table is comprised of children age 12-23 months so that only children who are old enough to be fully vaccinated are counted. In the top panel, the numerator includes all children who were vaccinated at any time before the survey according to the vaccination card or the mother's report. In the last column, only those who were vaccinated before their first birthday, as recommended, are included. For children without vaccination cards, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with vaccination cards. Overall, 90 percent of the children had health cards (Table CH.1). If the child did not have a card, the mother was asked to recall whether or not the child had received each of the vaccinations and, for DPT and Polio, how many times.

Approximately 99 percent of children age 12-23 months received a BCG vaccination by the age of 12 months. The first dose PENTA was given to 98 percent of children. The percentage declines to 92 percent for the third dose (Figure CH.1). Similarly, 97 percent of children received Polio 1 and Polio 2 by age 12 months and this declines to 90 percent by the third dose. The coverage for measles vaccine by 12 months is appreciable high at about 98 percent. The percent of children who had all the recommended vaccinations by their first birthday is high at about 83 percent.

According to the survey, it is evident that minimal differences exist in the immunization coverage by sex or by the wealth status of the households (data not shown). The immunization results of the five densely populated localities reflect the progress that has been made in immunizing children, and this can be attributed to the national Expanded Programme of Immunization (EPI), which has improved immunization coverage among children against vaccine preventable diseases in recent years. These results also confirms what has been reflected in the Ghana's MDG report – that the country is on track to meet the MDG4 target of 100 percent coverage of immunization against childhood diseases by 2015 (the rate in the base year of 1990 was only 61 percent, illustrating the progress achieved).[8] Ghana's success in vaccinating children across all regions, wealth quintiles, and genders is noteworthy and could serve as a lesson for how to ensure that other interventions are equitably distributed.[9]

Figure CH.1: Percentage of children aged 12-23 months who received the recommended vaccinations by 12 months, MICS in 5 High Densely Populated Localities in Accra, 2010-2011
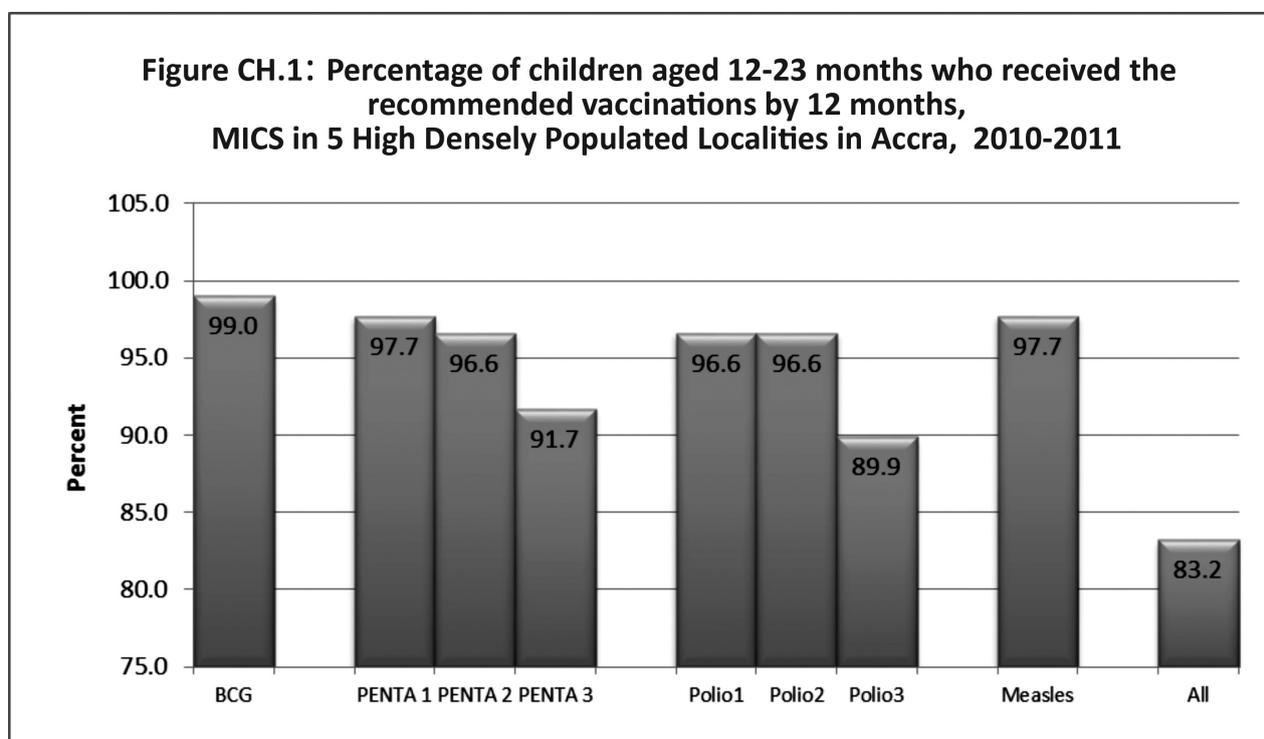
8 NDPC and UNDP, 2008 Ghana MDG Report, table, p. 90.
9 Ibid.

NEONATAL TETANUS PROTECTION

One of the MDGs is to reduce by three quarters the maternal mortality ratio, with one strategy to eliminate maternal tetanus. In addition, another goal is to reduce the incidence of neonatal tetanus to less than 1 case of neonatal tetanus per 1000 live births in every district. A World Fit for Children goal was to eliminate maternal and neonatal tetanus by 2005.

Prevention of maternal and neonatal tetanus is to assure all pregnant women receive at least two doses of tetanus toxoid vaccine. However, if women have not received two doses of the vaccine during the pregnancy, they (and their newborn) are also considered to be protected if the following conditions are met:
• Received at least two doses of tetanus toxoid vaccine, the last within the prior 3 years;
• Received at least 3 doses, the last within the prior 5 years;
• Received at least 4 doses, the last within 10 years;
• Received at least 5 doses during lifetime.

Table CH.2 shows the protection status from tetanus of women who have had a live birth within the last 2 years. Figure CH.2 also shows the protection of women against neonatal tetanus by major background characteristics. About 3 in 4 (74%) of all the women with a live birth in the last 2 years preceding the survey were protected against neonatal tetanus. About 58 percent of them actually received at least 2 doses of tetanus toxoid during pregnancy, and 16 percent had received 2 doses, the last within prior 3 years.

		Did not receive two or more doses but received:					
Background characteristics	Percentage of women who received at least 2 doses during last pregnancy	2 doses, the last within prior 3 years	3 doses, the last within prior 5 years	4 doses, the last within prior 10 years	5 or more doses during lifetime	Protected against tetanus [1]	Number of women with a live birth in the last 2 years
Education							
None	(46.9)	(9.2)	(0.0)	(0.0)	(3.4)	(59.6)	26
Primary	(50.4)	(14.2)	(0.0)	(0.0)	(0.0)	(64.6)	39
Middle/JSS	61.5	20.4	0.0	0.0	0.0	81.9	88
Secondary +	(63.3)	(12.9)	(0.0)	(0.0)	(0.0)	(76.2)	43
Wealth index quintile							
Lower 60%	56.9	15.2	0.0	0.0	.7	72.9	122
Upper 40%	59.1	17.4	0.0	0.0	0.0	76.5	73
Total	57.7	16.0	0.0	0.0	0.5	74.2	196

Table CH.2: Neonatal tetanus protection
Percentage of women age 15-49 years with a live birth in the last 2 years protected against neonatal tetanus, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

[1] MICS indicator 3.7
Figures in parenthesis '()' are based on 25-49 unweighted cases.

ORAL REHYDRATION TREATMENT

Diarrhoea is the second leading cause of death among children under five worldwide. Most diarrhoea related deaths in children are due to dehydration from loss of large quantities of water and electrolytes from the body in liquid stools. Management of diarrhoea – either through oral rehydration salts (ORS) or a recommended home fluid (RHF) - can prevent many of these deaths. Preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhoea.

The goals are to: 1) reduce by one half death due to diarrhoea among children under five by 2010 compared to 2000 (A World Fit for Children); and 2) reduce by two thirds the mortality rate among children under five by 2015 compared to 1990 (Millennium Development Goals). In addition, the World Fit for Children calls for a reduction in the incidence of diarrhoea by 25 percent.

The indicators are:
- Prevalence of diarrhoea
- Home management of diarrhoea
- Oral rehydration therapy (ORT)
- ORT with continued feeding

In the children's questionnaire, mothers (or caretakers) were asked to report whether their child had had diarrhoea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what the child had to drink and eat during the episode and whether this was more or less than the child usually ate and drank.

Overall, about 11 percent of under five children had diarrhoea in the two weeks preceding the survey (Table CH.3). Diarrhoea prevalence was slightly higher among females than males (12% and 10% respectively). The peak of diarrhoea prevalence occurs in the weaning period, among children age 12-23 months. 17 percent of 12-23 months old children had diarrhoea the week preceding the survey, compared to 9 percent for children 48-59 months old.

There were disparities in incidence of diarrhoea by mother's education and household wealth status. Children from the poorer households were more than twice as likely to suffer from diarrhoea (14%), compared to children from the richer households (6%). Children of women with no education were also more than twice (21%) as likely to suffer from diarrhoea, compared to children born to women with secondary or higher education (7%).

Table CH.3: Diarrhoea Prevalence among children age 0-59 months Percentage of children age 0-59 months with diarrhoea in the last two weeks, MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Background characteristics	Had diarrhoea in last two weeks	Number of children age 0-59 months
Sex		
Male	9.9	226
Female	11.8	227
Age		
0-11	13.0	103
12-23	16.5	83
24-35	8.4	101
36-47	7.9	83
48-59	8.5	83
Mother's education		
None	20.9	69
Primary	16.2	82
Middle/JSS	6.9	191
Secondary +	7.4	111
Wealth index quintile		
Lower 60%	14.1	268
Upper 40%	6.1	185
Total	10.8	453

Table CH.4 shows the percentage of children receiving various types of recommended liquids during the episode of diarrhoea. Since mothers could name more than one type of liquid, the percentages do not necessarily add to 100.

About 27 percent received fluids from ORS packets or pre-packaged ORS fluids and 39 percent received recommended homemade fluids. Approximately 60 percent of children with diarrhoea received one or more of the recommended home treatments (i.e., were treated with ORS or any recommended homemade fluid).

Table CH.4: Oral rehydration solutions and recommended homemade fluids						
Percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration solutions and recommended homemade fluids, MICS in 5 High Densely Populated Localities in Accra, 2010-2011						
	Had diarrhoea in last two weeks	Number of children age 0-59 months	Children with diarrhea who received ORS (Fluid from ORS packet or pre-packaged ORS fluid)	Children with diarrhea who received any recommended homemade fluids	Children with diarrhea who received ORS or any recommended homemade fluid	Number of children aged 0-59 months with diarrhoea
Total	10.8	453	(27.1)	(38.7)	(59.5)	49
Figures in parenthesis '()' are based on 25-49 unweighted cases.						

Feeding practices during diarrhoea is shown in Table CH.5. About 1 in 5 (21%) of the under five children with diarrhoea drank more than usual while 63 percent drank the same or less (Table CH.5). About a quarter (26% ate somewhat less, 45 percent had same to eat and 12 percent ate much less, and 11 percent stopped eating or were not given food.

Table CH.5: Feeding practices during diarrhoea			
Percent distribution of children age 0-59 months with diarrhoea in the last two weeks by amount of liquids and food given during episode of diarrhoea, MICS in 5 High Densely Populated Localities in Accra, 2010-2011			
Drinking practices during diarrhoea:		**Eating practices during diarrhoea:**	
Given much less to drink	(7.0)	Given much less to eat	(12.3)
Given somewhat less to drink	(19.3)	Given somewhat less to eat	(25.5)
Given about the same to drink	(43.8)	Given about the same to eat	(44.5)
Given more to drink	(21.2)	Given more to eat	(5.5)
Given nothing to drink	(7.5)	Stopped food	(5.5)
		Had never been given food	(5.5)
Total	100.0	**Total**	100.0
Number of children aged 0-59 months with diarrhoea = 49			
Figures in parenthesis '()' are based on 25-49 unweighted cases.			

Table CH.6 provides the proportion of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments. Overall, 47 percent of children with diarrhoea received ORS or increased fluids, 69 percent received ORT (ORS or recommended homemade fluids or increased fluids). Combining the information in Table CH.5 with those in Table CH.4 on oral rehydration therapy, it is observed that 51 percent of children either received ORT and, at the same time, feeding was continued, as is the recommendation.

Antibiotic pill or syrup provided the main source of other treatment for children with diarrhea, followed by other pill or syrup that the respondents did not know the names. About 9 percent of those with diarrhea were not given any treatment or drug. Studies have shown that administering zinc to children during episodes of diarrhea may reduce the overall incidence and severity of diarrhea. In Ghana, treatment of diarrhea using zinc has been introduced in the past year. Table CH.6 reveals that only 2 percent of children with diarrhoea received zinc either in syrup or pill form.

Table CH.6: Oral rehydration therapy with continued feeding and other treatments Percentage of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments, MICS in 5 High Densely Populated Localities in Accra, 2010-2011	
Children with diarrhoea who received:	Percent
ORS or increased fluids	(46.5)
ORT (ORS or recommended homemade fluids or increased fluids)	(68.8)
ORT with continued feeding [1]	(51.0)
Other treatment:	
Pill or syrup: Antibiotic	(33.9)
Pill or syrup: Antimotility	(5.2)
Pill or syrup: Zinc	(2.0)
Pill or syrup: Other	(5.0)
Pill or syrup: Unknown	(10.9)
Injection: Unknown	(2.0)
Home remedy/Herbal medicine	(1.4)
Other	(14.1)
Not given any treatment or drug	(8.9)
Number of children aged 0-59 months with diarrhoea = 49	
[1] MICS indicator 3.8 *Figures in parenthesis '()' are based on 25-49 unweighted cases.*	

CARE SEEKING AND ANTIBIOTIC TREATMENT OF PNEUMONIA

Pneumonia is the leading cause of death in children and the use of antibiotics in under-5s with suspected pneumonia is a key intervention. A World Fit for Children goal is to reduce by one-third the deaths due to acute respiratory infections. Children with suspected pneumonia are those who had an illness with a cough accompanied by rapid or difficult breathing and whose symptoms were NOT due to a problem in the chest and a blocked nose.

Among the children interviewed, only 11 of them were reported to have been suspected of having pneumonia in the two weeks preceding the survey. This number being too small to lend itself to computing the indicators of incidence and care seeking behaviour for treatment of pneumonia, results are not presented in this report. Issues related to knowledge of danger signs of pneumonia are presented in Table CH.8. Obviously, mothers' knowledge of the danger signs is an important determinant of care-seeking behaviour. Overall, only 9 percent of women know of the two danger signs of pneumonia – fast and difficult breathing. The most commonly identified symptom for taking a child to a health facility is when the child develops a fever.

About 12 percent of mothers identified fast breathing and 23 percent of mothers identified difficult breathing as symptoms for taking children immediately to a health care provider. Differences in the knowledge of the two danger signs of pneumonia are not pronounced for the different educational level backgrounds or for the household wealth quintiles.

Table CH.7: Knowledge of the two danger signs of pneumonia Percentage of mothers and caretakers of children age 0-59 months by symptoms that would cause them to take the child immediately to a health facility, and percentage of mothers who recognize fast and difficult breathing as signs for seeking care immediately, MICS in 5 High Densely Populated Localities in Accra, 2010-2011										
	Percentage of mother/caretakers of children 0-59 months who think that a child should be taken immediately to a health facility if the child:								Mothers/caretakers who recognize the two danger signs of pneumonia	Number of mothers/caretakers of children age 0-59 months
Background characteristics	Is not able to drink or breast-feed	Be-comes sicker	Develops a fever	Has fast breath-ing	Has difficulty breath-ing	Has blood in stool	Is drink-ing poorly	Has other symp-toms		
Education										
None	9.3	21.9	63.7	9.0	15.4	13.5	4.0	53.4	6.1	48
Primary	10.3	34.5	59.2	10.2	17.4	6.8	12.5	57.9	8.4	71
Middle/JSS	21.7	41.8	70.5	11.1	26.8	16.5	8.6	51.7	9.4	154
Secondary +	19.0	28.7	74.7	18.1	24.7	18.2	12.8	58.1	8.9	88
Wealth index quintile										
Lower 60%	17.6	33.7	64.3	11.3	23.0	12.9	9.2	56.1	8.3	218
Upper 40%	16.4	35.8	74.7	14.0	22.7	17.2	10.7	52.5	9.1	143
Total	17.1	34.5	68.4	12.4	22.9	14.6	9.8	54.7	8.6	361

SOLID FUEL USE

More than 3 billion people around the world rely on solid fuels (biomass and coal) for their basic energy needs, including cooking and heating. Cooking and heating with solid fuels leads to high levels of indoor smoke, a complex mix of health-damaging pollutants. The main problem with the use of solid fuels is products of incomplete combustion, including CO, polyaromatic hydrocarbons, SO2, and other toxic elements. Use of solid fuels increases the risks of acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, and possibly tuberculosis, low birth weight, cataracts, and asthma. The primary indicator is the proportion of the population using solid fuels as the primary source of domestic energy for cooking.

Table CH.8 provides the distribution of household members according to type of cooking fuel used by the household. Overall, 6 out of every 10 (60%) of all households living in high densely populated areas of Accra are using solid fuels for cooking. Differentials with respect to household wealth and the educational level of the household head are quite significant. Households where the head has no education are almost twice as likely to use solid fuels (84%), as compared to households where the head has secondary or higher education (44%). Also, poorer households are more than three times more likely to be using solid fuels for cooking (84%), as compared to richer households (24%). The findings show that use of solid fuels is more common in James Town (78%), Accra New Town (71%) and Nima (66%), than it is in La (44%) and Bubuashie (54%). The majority of households in the five localities use charcoal for cooking (60%), while 37 percent of the households use clean fuel for cooking: electricity (less than 1%), LPG (35%), and kerosene (1%). More than one in two households (52%) in La locality, and 42 percent of households in Bubuashie use LPG for cooking. In the other areas, less than 30 percent of are using LPG for cooking. Use of charcoal is highest among households in James Town (78%) and Accra new Town (71%).

Table CH.8: Solid fuel use

Percentage distribution of household members according to type of cooking fuel used by the household, and percentage of household members living in households using solid fuels for cooking, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Electricity	Liquefied Petroleum Gas (LPG)	Kerosene	Charcoal	Wood / Firewood	No food cooked in household	Total	Solid fuels for cooking [1]	Number of household members
Locality									
Bubuashie	0.4	41.9	1.3	52.3	1.6	2.5	100.0	53.9	597
La	0.2	51.9	1.4	43.4	1.0	2.2	100.0	44.4	1,424
James Town	0.0	20.3	0.0	77.7	0.0	2.1	100.0	77.7	250
Nima	0.8	27.2	1.2	65.7	0.0	5.0	100.0	65.7	1,266
Accra New Town	0.5	25.1	0.4	71.3	0.0	2.7	100.0	71.3	1,349
Education of household head									
None	0.0	12.8	0.8	82.4	1.7	2.4	100.0	84.0	855
Primary	0.1	25.4	0.0	68.5	1.5	4.5	100.0	70.0	430
Middle/JSS	0.8	33.9	1.3	61.1	0.1	2.7	100.0	61.3	1,905
Secondary +	0.4	51.1	0.9	43.9	0.0	3.7	100.0	43.9	1,668
Missing/DK	(0.0)	(22.0)	(0.0)	(78.0)	(0.0)	(0.0)	(100.0)	(78.0)	28
Wealth index quintile									
Lower 60%	0.4	10.2	1.2	83.5	0.8	4.0	100.0	84.3	2930
Upper 40%	0.6	72.8	0.7	24.1	0.0	1.8	100.0	24.1	1956
Total	0.5	35.3	1.0	59.7	0.5	3.1	100.0	60.2	4,887

[1] MICS indicator 3.11
Figures in parenthesis '()' are based on 25-49 unweighted cases.

Solid fuel use alone is a poor proxy for indoor air pollution, since the concentration of the pollutants is different when the same fuel is burnt in different stoves or fires. Use of closed stoves with chimneys minimizes indoor pollution, while open stove or fire with no chimney or hood means that there is no protection from the harmful effects of solid fuels. Solid fuel use by place of cooking is depicted in Table CH.9. For about half of those households using solid fuels, cooking is done elsewhere in the house and a further 38 percent do their cooking outdoors, and about 9 percent of households have a separate rom used as a kitchen. This is encouraging since the impact of the solid fuel use on indoor air pollution is likely to be minimal.

Table CH.9: Solid fuel use by place of cooking

Percentage distribution of household members in households using solid fuels by place of cooking, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	In a separate room used as kitchen	Elsewhere in the house	In a separate building	Outdoors	Other	Total	Household members using solid fuels for cooking
Locality							
Bubuashie	10.7	43.6	6.6	39.1	0.0	100.0	322
La	11.7	52.4	1.2	34.5	0.2	100.0	632
James Town	6.3	32.9	0.0	60.8	0.0	100.0	194
Nima	3.7	51.9	2.2	42.2	0.0	100.0	832
Accra New Town	11.0	55.0	1.7	31.5	0.8	100.0	962
Education of household head							
None	5.7	46.4	2.4	45.6	0.0	100.0	719
Primary	3.6	61.1	1.9	33.1	0.3	100.0	301
Middle/JSS	9.7	48.6	3.2	37.8	0.7	100.0	1,167
Secondary +	11.7	54.9	0.4	33.0	0.1	100.0	733
Missing/DK	*	*	*	*	*	100.0	22
Wealth index quintile							
Lower 60%	7.3	50.6	2.1	39.7	0.4	100.0	2,469
Upper 40%	16.1	52.3	2.6	29.0	0.0	100.0	472
Total	8.7	50.9	2.1	38.0	0.3	100.0	2,942

An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed.

MALARIA

Malaria is a leading cause of death of children under age five in Ghana. It also contributes to anaemia in children and is a common cause of school absenteeism. Preventive measures, especially the use of mosquito nets treated with insecticide (ITNs), can dramatically reduce malaria mortality rates among children. In areas where malaria is common, international recommendations suggest treating any fever in children as if it were malaria and immediately giving the child a full course of recommended anti-malarial tablets. Children with severe malaria symptoms, such as fever or convulsions, should be taken to a health facility. Also, children recovering from malaria should be given extra liquids and food and, for younger children, should continue breastfeeding.

Ghana is signatory to the Abuja Declaration of 2000 and has since been giving malaria control priority. This is reflected in the health sector policy and strategic documents such as the National Health Policy, the Child Health Policy and Strategy 2007-2015 and the Ghana Health Service Strategic Plan 2007-2011. The Strategies for malaria control have been spelt out in the first Malaria Control Strategy 2000-2010 and the revised National Malaria Control Strategy 2007-2015.

Ghana has adopted multiple control strategies in her fight against malaria. These include:
1. Prevention through:
   • increased use of Long-lasting Insecticide Nets (LLINs) by children and pregnant women
   • improved drainage, mosquito-proofing of houses and general sanitation
   • reduced mosquito population through in-door residual spraying and larviciding and;

2. Prompt and effective treatment through
*   early recognition of fever, early and appropriate treatment with ACTs at the home
*   appropriate referral of severe cases
*   promotion of presumptive treatment of pregnant women
*   improved malaria case management at the health facility level

The National Malaria Control Strategy was developed to help Ghana achieve the Abuja targets and in line with recent global directives such as attainment of universal access to ITNs.[10] The objectives and targets relating specifically to LLIN are   as follows:
*   100 percent of households own at least one LLIN by 2015
*   80 percent of the general population sleep under LLIN by 2015
*   Increase the proportion of children under-five and pregnant women sleeping under treated net from current levels to 85 percent by 2015.

The household questionnaire incorporates questions on the availability and use of bed nets, both at household level and among children under five years of age and pregnant women, as well as anti-malarial treatment, intermittent preventive therapy for malaria, and indoor residual spraying of households. Table CH.10 shows the responses on the availability of ITNs in the households. The survey results indicate that only 16 percent of households have at least one insecticide treated net and a further one percent have received Indoor Residual Spraying, bringing the total percentage of households with at least one ITN or received IRS during the last 12 months to 18 percent (Table CH.10). This figure is much lower than that of other regions in Ghana.[11] For example, in the 2008 GDHS, 33 percent of all households in Ghana, and 20 percent of households in Greater Accra region owned at least one ITN. There is generally an assumption that urban households are more likely to use other means of protecting themselves from mosquito bites – use of insecticide sprays, mosquito repellents and malarial prophylaxis for protecting themselves.

Marginal differentials exist in the household availability of insecticide treated nets by locality, education of the household head and the household wealth status. The Nima locality has only 8 percent of households with at least one ITN compared to 24 percent of households in Bubuashie locality. About 18 percent of the richer households had at least one ITN compared to 15 percent for the poorer households.

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[10] Universal access to ITN in Ghana's context is defined as two persons within a household owning at least one ITN
[11] See other Surveys: 2006 MICS, the 2007/08 HIRD District MICS, and the 2008 GDHS

Table CH.10: Household availability of insecticide treated nets and protection by a vector control method

Table CH.10: Household availability of insecticide treated nets and protection by a vector control method

Percentage of households with at least one mosquito net, percentage of households with at least one long-lasting treated net, percentage of households with at least one insecticide treated net (ITN) and percentage of households which either have at least one ITN or have received spraying through an indoor residual spraying (IRS) campaign in the last 12 months, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background Characteristics	Percentage of households with at least one mosquito net	Percentage of households with at least one long-lasting treated net	Percentage of households with at least one ITN [1]	Percentage of households with at least one ITN or received IRS during the last 12 months [2]	Number of households
Locality					
Bubuashie	29.2	23.3	24.0	24.0	168
La	22.5	19.5	19.8	21.0	468
James Town	23.7	21.1	21.1	24.1	77
Nima	9.8	8.0	8.0	8.3	357
Accra New Town	18.4	13.5	14.8	17.7	339
Education of Household Head					
None	17.3	12.0	12.0	13.2	213
Primary	10.8	10.2	10.2	11.5	144
Middle/JSS	19.5	16.3	16.8	18.3	539
Secondary +	22.0	18.2	19.1	20.3	506
Missing/DK	*	*	*	*	7
Wealth index quintile					
Lower 60%	18.3	14.5	15.0	16.0	870
Upper 40%	20.6	17.6	18.1	20.0	539
Total	19.2	15.7	16.2	17.5	1,409

[1] MICS indicator 3.12, [2] MICS indicator 3.13
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed.

The difference in the percentage of households with at least one mosquito net (19%) and percentage of households with at least one ITN (16%) shows that some 3 percent of households have some nets which may not be treated. ITNs are widely available in Ghana and all pregnant women who attend antenatal clinic in public facilities are supposed to receive an ITN. Additionally, distribution of ITNs has taken place during National Immunization Days. Many NGOs and other corporate organizations have also been at the forefront of distributing ITNs and this makes this result quite surprising.

Children and pregnant women are more vulnerable to malaria and therefore, their sleeping under mosquito nets was of particular interest. At the time of the survey, there were only 21 pregnant women who were living in households with at least one ITN and 9 of them (about 43%) slept under ITN. The sample size of 21 is however too small for any meaningful analysis. The percentage of children under 5 who slept under ITNs is shown in Table CH.11.

Table CH.11: Children sleeping under mosquito nets

Percentage of children age 0-59 months who slept under a mosquito net during the previous night, by type of net, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of children age 0-59 months who stayed in the household the previous night	Number of children age 0-59 months	Percentage of children who: Slept under any mosquito net [1]	Percentage of children who: Slept under an insecticide treated net [2]	Number of Children 0-59 months who slept in the household previous night	Percentage of children who slept under an ITN living in households with at least one ITN	Number of children age 0-59 living in households with at least one ITN
Sex							
Male	98.5	226	16.6	12.8	222	36.9	77
Female	98.0	227	8.3	7.9	223	26.0	67
Mother's education							
None	100.0	69	4.2	4.2	69	*	15
Primary	97.6	82	8.5	8.5	80	(25.5)	27
Middle/JSS	97.3	191	15.0	10.0	186	28.4	65
Secondary +	99.4	111	16.0	16.0	110	(47.2)	37
Wealth index quintile							
Lower 60%	97.7	268	12.4	10.5	262	32.9	83
Upper 40%	99.1	185	12.5	10.1	183	30.4	61
Total	98.3	453	12.4	10.3	445	31.8	144

[1] MICS indicator 3.14
[2] MICS indicator 3.15; MDG indicator 6.7
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

Results indicate that overall, 12 percent of children under the age of five slept under any mosquito net the night prior to the survey and 10 percent slept under an insecticide treated net. For children living in households with at least one ITN, about 1 in 3 (32%) slept under an ITN. Male children were more likely to have slept under an ITN than females (13% versus 8%) and increasing education of the mother improved the possibility that the child slept under an ITN (4% for mothers with no education versus 16% for mothers with secondary or higher education).

Questions on the prevalence and treatment of fever were asked for all children under age five. Less than 1 in 10 of (9%) of under five children were ill with fever in the two weeks prior to the survey (Table CH.14). No systematic differences exist in the pattern of the fever prevalence by mother's education or by age. The fever prevalence was also similar among male and female children, at 9 percent each. Differences were also noted in relation to locality – the prevalence was lower for the children residing in the Accra New Town locality (5%), compared to children residing in Bubuashi and Nima localities, where 14 percent of children i had fever in the two weeks preceding the survey.

Mothers or caregivers were asked to report all of the medicines given to a child to treat the fever, including both medicines given at home and medicines given or prescribed at a health facility. Overall, about 82 percent of children with fever in the last two weeks were treated with an "appropriate" anti-malarial drug and 54 percent received anti-malarial drugs within 24 hours of onset of symptoms. "Appropriate" anti-malarial drugs include Armodiaquine, SP (sulfadoxine-pyrimethamine), and artimisine based combination drugs.

Table CH.12: Prevalence of fever in children 0-59 months		
Percentage of children age 0-59 months who had fever in the last two weeks , MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Background characteristics	Had a fever in last two weeks	Number of children age 0-59 months
Sex		
Male	9.2	226
Female	9.2	227
Locality		
Bubuashie	14.1	64
La	11.6	127
James Town	(13.9)	31
Nima	7.0	113
Accra New Town	4.8	118
Age		
0-11 months	7.2	103
12-23 months	10.9	83
24-35 months	12.6	101
36-47 months	6.6	83
48-59 months	8.4	83
Mother's education		
None	7.9	69
Primary	8.9	82
Middle/JSS	10.1	191
Secondary +	8.8	111
Wealth index quintile		
Lower 60%	10.2	268
Upper 40%	7.7	185
Total	9.2	453
Percentage given any appropriate anti malaria drug [1]		81.7
Percentage who took anti malaria drug same or next day[2]		53.5
[1] MICS indicator 3.18; MDG indicator 6.8 [2] MICS indicator 3.17 *Figures in parenthesis '()' are based on 25-49 unweighted cases*		

Table CH.13: Malaria diagnostics usage		
Percentage of children age 0-59 months who had a fever in the last two weeks and who had a finger or heel stick for malaria testing, MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Background characteristics	Had a finger or heel stick [1]	Number of children age 0-59 months
Sex		
Male	31.0	226
Female	16.9	227
Locality		
Bubuashie	40.9	64
La	18.8	127
James Town	(0.0)	31
Nima	5.6	113
Accra New Town	54.3	118
Age		
0-11 months	18.5	103
12-23 months	29.3	83
24-35 months	18.2	101
36-47 months	27.7	83
48-59 months	30.6	83
Mother's education		
None	33.3	69
Primary	44.6	82
Middle/JSS	16.8	191
Secondary +	17.5	111
Wealth index quintile		
Lower 60%	24.7	268
Upper 40%	22.7	185
Total	24.0	453
[1] MICS indicator 3.16 *Figures in parenthesis '()' are based on 25-49 unweighted cases.*		

Table CH.13 provides the proportion of children age 0-59 months who had a fever in the last two weeks and who had a finger or heel stick for malaria testing. Overall, 24 percent of children with a fever in the last two weeks had a finger or heel stick. Males were more likely to have had a finger or heel stick for malaria testing, 31 percent, compared to 17 percent for females. Increasing level of education of the mother appears to have a negative effect on the likelihood that the child would have a finger or heel stick for malaria testing. According to the World Health Organization, pregnant women living in places where malaria is highly prevalent are four times more likely than other adults to get malaria and twice as likely to die of the disease. [12]

[12] http://www.who.int/malaria/publications/atoz/brochure_rbm.pdf.

Once infected, pregnant women risk anemia, premature delivery and stillbirth. Their babies are likely to be of low birth weight, which makes them unlikely to survive their first year of life. For this reason, steps are taken to protect pregnant women by distributing insecticide-treated mosquito nets and treatment during antenatal check-ups with drugs that prevent malaria infection (Intermittent preventive treatment or IPT). In the Accra MICS, women were asked of the medicines they had received in their last pregnancy during the 2 years preceding the survey. Women are considered to have received intermittent preventive therapy if they have received at least 2 doses of SP/Fansidar during the pregnancy.

Intermittent preventive treatment for malaria in pregnant women with a live birth in the two years preceding the survey is presented in Table CH.14. About 46 percent of the women who gave birth in the two years preceding the survey received SP/Fansidar at least two times. Not marked differences are observed by wealth index of the household.

Table CH.14: Intermittent preventive treatment for malaria						
Percentage of women age 15-49 years who had a live birth during the two years preceding the survey and who received intermittent preventive treatment (IPT) for malaria during pregnancy at any antenatal care visit, MICS in 5 High Densely Populated Localities in Accra, 2010-2011						
			Percentage of pregnant women who took:			
Background characteristics	Percentage of women who received antenatal care (ANC)	Number of women who gave birth in the preceding two years	Any medicine to prevent malaria at any ANC visit during pregnancy	SP/Fansidar at least once	SP/Fansidar two or more times [1]	Number of women who had live birth in last two years and received ANC
Education						
None	(89.2)	26	*	*	*	23
Primary	(95.1)	39	(93.7)	(57.7)	(40.9)	37
Middle/JSS	99.1	88	89.6	57.5	47.3	87
Secondary +	(100.0)	43	(86.0)	(53.9)	(42.7)	43
Wealth index quintile						
Lower 60%	96.2	122	92.2	56.1	46.1	118
Upper 40%	98.8	73	85.0	58.5	45.6	72
Total	97.2	196	89.5	57.0	45.9	190
[1] MICS indicator 3.20						
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.						

Safe drinking water is a basic necessity for good health. Unsafe drinking water can be a significant carrier of diseases such as trachoma, cholera, typhoid, and schistosomiasis. Drinking water can also be tainted with chemical, physical and radiological contaminants with harmful effects on human health. In addition to its association with disease, access to drinking water may be particularly important for women and children, especially in rural areas, who bear the primary responsibility for carrying water, often for long distances.

The MDG goal is to reduce by half, between 1990 and 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. The World Fit for Children goal calls for a reduction in the proportion of households without access to hygienic sanitation facilities and affordable and safe drinking water by at least one-third.

The list of indicators used in MICS is as follows:
Water
- Use of improved drinking water sources
- Use of adequate water treatment method
- Time to source of drinking water
- Person collecting drinking water

Sanitation
- Use of improved sanitation facilities
- Use of shared sanitation facilities
- Sanitary disposal of child's faeces

For more details on water and sanitation and to access some reference documents, please visit the UNICEF childinfo website http://www.childinfo.org/wes.html.

USE OF IMPROVED WATER SOURCES

The distribution of the population by source of drinking water is shown in Table WS.1 and Figure WS.1. The population using improved sources of drinking water are those using any of the following types of supply: piped water (into dwelling, compound, yard or plot, public tap/standpipe), tube well/borehole, protected well, protected spring, and rainwater collection. Bottled water is considered as an improved water source only if the household is using an improved water source for other purposes, such as handwashing and cooking.

Overall, there is near universal usage of improved source of drinking water with 98 percent of the population using an improved source of drinking water. Of the remaining 2 percent that did not have access to improved water source, one percent of them actually use bottled/sachet water for drinking but uses water provided by a tanker-truck or cart with small drum for collecting water for cooking or for hand washing. Almost half of the households (44%) rely on piped water whether it be into own dwelling/ yard/plot or piped to neighbour or public tap/stand pipe. Seven percent of the richer households have water piped to own dwelling, compared to only one percent of the poorer households. A high proportion of the population use sachet water for drinking (55%). There is widespread scepticism about the quality and taste of pipe borne water for drinking, and this coupled with unreliable supply has made the sachet water a major source of water for drinking in urban localities. Little variations are observed in the use of improved water sources in terms of locality, education of household head or wealth index.

Table WS.1: Use of improved water sources

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Main source of drinking water											Total	Percentage using improved source of drinking water [1]	Number of household members [1]
	Improved sources									Unimproved sources				
	Piped into dwelling	Piped into yard or plot	Piped to neighbour	Public tap / stand pipe	Tube well, Borehole	Protected well	Bottled water	Sachet water	Tanker-truck	Cart with small tank/drum				
Locality														
Bubuashie	1.7	26.9	8.2	7.3	0.0	0.0	0.1	55.8	0.0	0.0	100.0	100.0	597
La	4.8	20.8	16.8	.9	0.0	0.0	0.5	52.8	3.5	0.0	100.0	96.5	1,424
James Town	4.4	26.8	26.6	1.3	0.0	0.0	0.0	41.0	0.0	0.0	100.0	100.0	250
Nima	2.0	13.7	18.0	7.6	0.0	0.0	1.1	56.3	1.0	0.2	100.0	98.8	1,266
Accra New Town	4.7	8.3	21.5	4.9	0.4	0.1	0.4	58.7	0.9	0.0	100.0	99.1	1,349
Education of household head														
None	1.6	16.4	26.9	6.7	0.0	0.1	0.2	46.3	1.9	0.0	100.0	98.1	855
Primary	6.2	17.5	17.4	6.7	0.0	0.0	0.4	51.1	0.7	0.0	100.0	99.3	430
Middle/JSS	3.8	19.8	18.7	4.4	0.0	0.1	0.3	51.4	1.2	0.2	100.0	98.6	1,905
Secondary +	3.9	12.6	11.7	3.1	0.3	0.0	1.0	65.4	1.9	0.0	100.0	98.1	1,668
Missing/DK	.0	(14.7)	(54.0)	.0	0.0	0.0	0.0	(31.3)	0.0	0.0	100.0	100.0	28
Wealth index quintile														
Lower 60%	1.4	19.1	24.0	6.8	0.2	0.1	0.6	46.2	1.6	0.0	100.0	98.3	2930
Upper 40%	6.9	12.8	8.6	1.3	0.0	0.0	0.5	68.4	1.3	0.2	100.0	98.6	1,956
Total	3.6	16.6	17.9	4.6	0.1	0.0	0.5	55.1	1.5	0.1	100.0	98.4	4887

[1] MICS indicator 4.1; MDG indicator 7.8

Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table WS.2 presents use of in-house water treatment by selected characteristics in the five localities of Accra. Given that about 98 percent of households in these five localities use improved source of drinking water, the table presents the percentages of household members using appropriate water treatment methods, separately for all households and for those using unimproved drinking water sources. Households were asked of ways they may be treating water at home to make it safer to drink such as boiling, adding bleach or chlorine, using a water filter, and using solar disinfection which are considered as proper treatment of drinking water. Roughly, only 6 percent of households treat their water. Boiling water before drinking is the most common water treatment method reported by 2 percent of household members, and less than 1 percent adds bleach/chlorine. Another 1 percent of the households strain water through a cloth, and 2 percent let it stand and settle.

The proportion of households using appropriate water treatment is positively correlated with the wealth index and level of education of the head of the household. For example, while 95 percent of from the poorer households did not use any water treatment method, this figure is 62 percent for members in the richer households. No members of the households using unimproved water source use an appropriate water treatment method for treating their water.

The amount of time it takes to obtain water is presented in Table WS.3 and the person who usually collected the water in Table WS.4. Note that these results refer to one round-trip from home to drinking water source. Information on the number of trips made in one day was not collected.

Table WS.3 shows that for 89 percent of households (89% of those using improved water source and 1% for those using unimproved water source), the drinking water source is on the premises. For a further 10 percent (9% of those using improved water source and 1% of those using unimproved water source), it takes less than 30 minutes to get to the water source and bring water, and less than one percent of households spend 30 minutes or more for this purpose. These results show that water is very readily accessible by all the households which is congruent with expectation.

Households in the richer wealth category have greater access to water on their premises as compared to the poorer households (93% versus 86% respectively). There are also moderate differentials in the access to water on the premises by locality. Households in the James Town and La communities appear to have greater access to water on the premises as compared to the other three communities.

Table WS.2: Household water treatment

Percentage of household population by drinking water treatment method used in the household, and for household members living in households where an unimproved drinking water source is used, the percentage who are using an appropriate treatment method,
MICS in 5 High Densely Populated Localities in Accra, 2010-2011

| Background characteristics | Water treatment method used in the household | | | | | | | Number of household members | Percentage of household members in households using unimproved drinking water sources and using an appropriate water treatment method [1] | Number of household members in households using unimproved drinking water sources |
	None	Boil	Add bleach / chlorine	Strain through a cloth	Use water filter	Let it stand and settle	Other			
Locality										
Bubuashie	94.8	1.5	0.5	0.8	0.5	2.0	0.0	597	*	0
La	89.8	3.0	1.1	2.3	0.6	6.1	0.0	1,424	(.0)	49
James Town	96.2	1.3	0.0	1.3	0.0	0.0	0.0	250	*	0
Nima	96.1	1.9	0.7	1.4	0.0	0.0	0.0	1,266	*	16
Accra New Town	96.4	1.8	0.0	0.5	0.1	0.9	0.3	1,349	*	12
Education of household head										
None	97.7	0.9	0.9	0.2	0.0	0.7	0.0	855	*	16
Primary	99.4	0.0	0.0	0.0	0.0	0.6	0.0	430	*	3
Secondary +	92.7	2.7	0.6	1.8	0.4	2.9	0.1	3,573	0.0	58
Wealth index quintiles										
Lower 60%	95.3	1.2	0.4	1.2	0.0	1.4	0.0	2,930	(.0)	47
Upper 40%	61.7	2.3	0.6	1.1	0.4	2.4	0.1	1,956	*	30
Total	94.2	2.1	0.6	1.4	0.3	2.3	0.1	4,887	0.0	77

1] MICS indicator 4.2
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table WS.3: Time to source of drinking water

Percent distribution of household population according to time to go to source of drinking water, get water and return, for users of improved and unimproved drinking water sources, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Time to source of drinking water							Number of household members
	Users of improved drinking water sources			Users of unimproved drinking water sources				
	Water on premises	Less than 30 minutes	30 minutes or more	Missing/DK	Water on premises	Less than 30 minutes	Total	
Locality								
Bubuashie	83.7	15.9	0.4	0.0	0.0	0.0	100.0	597
La	94.4	2.1	0.0	0.0	0.5	2.9	100.0	1,424
James Town	97.1	2.9	0.0	0.0	0.0	0.0	100.0	250
Nima	83.8	13.6	0.6	0.8	0.8	0.5	100.0	1,266
Accra New Town	87.6	11.4	0.1	0.0	0.5	0.4	100.0	1,349
Education of household head								
None	81.5	15.8	0.6	0.2	1.0	0.9	100.0	855
Primary	89.2	7.8	0.4	1.9	0.0	0.7	100.0	430
Middle/JSS	89.0	9.6	0.1	0.0	0.4	0.9	100.0	1,905
Secondary +	91.5	6.5	0.1	0.0	0.4	1.5	100.0	1,668
Missing/DK	(100.0)	0.0	0.0	0.0	0.0	0.0	100.0	28
Wealth index quintile								
Lower 60%	85.6	12.4	0.2	0.1	0.4	1.3	100.0	2,930
Upper 40%	93.2	4.8	0.2	0.4	0.6	0.8	100.0	1,956
Total	88.6	9.4	0.2	0.2	0.5	1.1	100.0	4,887

Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table WS.4: Person collecting water	
Percentage of households without drinking water on premises, and percent distribution of households without drinking water on premises according to the person usually collecting drinking water used in the household, MICS in 5 High Densely Populated Localities in Accra, 2010-2011	
Percentage of households without drinking water on premises	10.9
Number of households	1,409
Person usually collecting drinking water for households without water on the premises	
Adult woman (age 15+ years)	49.5
Adult man (age 15+ years)	32.6
Female child (under 15)	9.0
Male child (under 15)	2.7
Children (both sexes)	3.0
Adult women and child(ren)	2.7
Adult men and child(ren)	0.6
Total	100.0
Number of households without drinking water on premises	142

Table WS.4 shows that for about half of households without water on the premises, an adult female is usually the person collecting the water. Adult men collect water in about 1 in 3 (33%) of the households, while female children are usually responsible for collecting water in about 1 in 10 (9%) of households, whereas male children collect water only in 3 percent of households. The burden of collecting water still lies female adult or children.

USE OF IMPROVED SANITATION FACILITIES

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation can reduce diarrheal disease by more than a third, and can significantly lessen the adverse health impacts of other disorders responsible for death and disease among millions of children in developing countries. Improved sanitation facilities for excreta disposal include flush or pour flush to a piped sewer system, septic tank, or latrine; ventilated improved pit latrine, pit latrine with slab, and composting toilet.

In the five localities, the results show that about 85 percent of the listed individuals are living in households using sanitary means of excreta disposal (Table WS.5). The two dominant types of toilet facilities are the Ventilated Improved Pit Latrine (VIP) and the flush to septic tank (42% and 26% respectively). Only 4 percent of the households have an improved toilet facility flushing to a piped sewer system, while 10 percent of the population use pit latrines with slabs. Education of household head and household wealth status are not strongly associated with the use of sanitary means of excreta disposal. While less than one percent of the household population have no access to toilet facilities (these households are located mainly in the La and James Town communities which lie along the coast and suggest probable defecation along the sea-shore), another 10 percent used buckets.

Access to safe drinking-water and to basic sanitation is measured by the proportion of population using an improved sanitation facility. MDGs and WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation classify households as using an unimproved sanitation facility if they are using otherwise acceptable sanitation facilities but sharing a facility between two or more households or using a public toilet facility. Thus, the use of sanitary means of excreta disposal is necessary but not a sufficient condition for defining use of improved sanitation facility. Table WS.6 show the use of improved sanitation facilities among the population. As shown in Table WS.6, only 11 percent of the household population is using an improved sanitation facility. More than half (52%) of the household population use public facilities and about 11 percent of household population share the toilet facilities with 5 or less households, while 12 percent share with more than 5 households.

Table WS.5: Types of sanitation facilities

Percent distribution of household population according to type of toilet facility used by the household, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristic	Type of toilet facility used by household												Percentage of household population using sanitary means of excreta disposal	Number of household members
	Improved toilet facility						Unimproved toilet facility							
	Flush to piped sewer system	Flush to septic tank	Flush to pit (latrine)	Flush to unknown place / Not sure / DK where	Ventilated Improved Pit latrine (VIP)	Pit latrine with slab	Flush to some-where else	Pit latrine without slab / Open pit	Bucket	Other	No facility, Bush, Field	Total		
Locality														
Bubuashie	1.8	43.8	0.0	0.4	42.8	8.1	0.0	0.0	2.9	0.0	0.3	100.0	96.9	597
La	6.1	47.8	2.7	5.8	25.4	5.3	0.5	3.0	2.1	0.2	1.1	100.0	93.1	1,424
James Town	1.3	1.5	0.0	0.0	71.7	0.0	4.8	19.0	0.5	0.0	1.3	100.0	74.5	250
Nima	3.9	8.4	1.2	0.0	65.5	9.0	2.0	0.7	9.2	0.0	0.1	100.0	88.0	1,266
Accra New Town	2.6	17.3	2.5	0.0	31.7	17.5	0.0	4.0	24.4	0.0	0.0	100.0	71.6	1,349
Education of household head														
None	1.3	11.5	2.7	0.0	54.3	12.4	1.0	5.3	11.1	0.0	0.4	100.0	82.2	855
Primary	2.5	17.0	2.0	1.3	54.7	9.7	1.4	1.0	8.7	0.0	1.7	100.0	87.2	430
Middle/JSS	3.0	26.3	0.8	2.8	41.8	11.5	0.8	3.4	9.5	0.0	0.1	100.0	86.2	1,905
Secondary +	6.2	36.4	2.5	1.5	33.0	6.5	0.9	2.3	9.9	0.2	0.6	100.0	86.1	1,668
Missing/DK	(0.0)	(18.6)	(0.0)	(0.0)	(26.1)	(0.0)	(0.0)	(0.0)	(55.4)	(0.0)	(0.0)	100.0	(44.7)	28
Wealth index quintile														
Lower 60%	2.5	16.2	1.3	1.7	55.4	9.5	0.7	4.1	8.0	0.1	0.7	100.0	86.6	2,930
Upper 40%	5.7	41.4	2.5	1.8	22.1	10.1	1.2	1.7	13.3	0.1	0.1	100.0	83.6	1,956
Total	3.8	26.3	1.8	1.7	42.0	9.7	0.9	3.1	10.1	0.1	0.5	100.0	85.3	4,887

Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table WS.6: Use and sharing of sanitation facilities

Percent distribution of household population by use of private and public sanitation facilities and use of shared facilities, by users of improved and unimproved sanitation facilities, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Users of improved sanitation facilities					Users of unimproved sanitation facilities					Open defecation (no facility, bush field)	Total	Number of household members
	Not shared [1]	Public facility	Shared by: 5 households or less	Shared by: More than 5 households	Missing/DK	Not shared	Public facility	Shared by: 5 households or less	Shared by: More than 5 households	Missing/DK			
Locality													
Bubuashie	18.5	37.9	14.0	24.9	1.6	0.0	0.0	0.7	1.7	0.4	0.3	100.0	597
La	15.5	58.9	13.0	5.6	0.1	0.5	2.4	2.2	0.7	0.0	1.1	100.0	1,424
James Town	3.3	69.8	1.3	0.0	0.0	0.0	19.0	0.5	4.8	0.0	1.3	100.0	250
Nima	7.1	64.0	6.6	9.9	0.4	0.7	2.1	1.6	7.6	0.0	0.1	100.0	1,266
Accra New Town	7.6	36.1	11.8	15.9	0.2	0.6	2.2	6.6	19.0	0.0	0.0	100.0	1,349
Education of household head													
None	8.7	59.9	3.9	9.1	0.6	0.7	3.9	4.0	8.8	0.0	0.4	100.0	855
Primary	5.0	61.0	11.5	9.6	0.0	0.0	2.4	1.4	7.3	0.1	1.7	100.0	430
Middle/JSS	6.6	55.8	11.5	12.1	0.2	0.9	2.9	2.2	7.6	0.1	0.1	100.0	1,905
Secondary +	18.4	41.5	12.8	13.0	0.6	0.1	2.3	3.9	7.1	0.0	0.6	100.0	1,668
Missing/DK	(11.3)	(24.1)	(0.0)	(9.2)	(0.0)	(0.0)	(0.0)	(0.0)	(55.4)	(0.0)	(0.0)	100.0	28
Wealth index quintile													
Lower 60%	1.9	68.9	5.4	10.0	0.3	0.8	3.8	3.0	5.3	0.0	0.7	100.0	2,930
Upper 40%	24.3	26.4	18.2	14.1	0.5	0.1	1.4	3.1	11.8	0.1	0.1	100.0	1,956
Total	10.9	51.9	10.5	11.6	0.4	0.5	2.8	3.0	7.9	0.1	0.5	100.0	4,887

[1] MICS indicator 4.3; MDG indicator 7.9

Figures in parenthesis '()' are based on 25-49 unweighted cases.

Safe disposal of a child's faeces is disposing of the stool, by the child using a toilet or by rinsing the stool into a toilet or latrine. Disposal of faeces of children 0-2 years of age is presented in Table WS.7. Overall, about 1 in 3 (34%) of children had their stools disposed of safely – 3 percent used the toilet/latrine by themselves and the remaining 32 percent had the stool put/rinsed into the toilet or latrine. Almost one in two (45%) of the children had their stool thrown into garbage (solid waste) and 19 percent of the children had their stool put/rinsed into drain or ditch.

Table WS.7: Disposal of child's ftaeces

Percent distribution of children age 0-2 years according to place of disposal of child's faeces, and the percentage of children age 0-2 years whose stools were disposed of safely the last time the child passed stools, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Place of disposal of child's faeces							Percentage of children whose stools were disposed of safely [1]	Number of children age 0-2 years
	Child used toilet / latrine	Put / Rinsed into toilet or latrine	Put / Rinsed into drain or ditch	Thrown into garbage (solid waste)	Buried	Other	Total		
Type of sanitation facility in dwelling									
Improved	2.8	30.2	18.7	46.4	0.8	0.9	100.0	33.1	247
Unimproved	(0.0)	(41.7)	(20.1)	(35.7)	(0.0)	(2.5)	100.0	(41.7)	40
Mother's Education									
None	(0.0)	(31.1)	(29.8)	(39.1)	(0.0)	(0.0)	100.0	(31.1)	39
Primary	3.3	29.4	12.2	51.2	0.0	3.9	100.0	32.7	51
Middle/JSS	3.6	32.3	23.6	38.7	1.7	0.0	100.0	35.9	120
Secondary +	1.3	33.2	10.5	53.3	0.0	1.8	100.0	34.5	77
Wealth index quintile									
Lower 60%	0.7	25.8	22.0	48.3	1.2	2.0	100.0	26.5	168
Upper 40%	4.9	40.4	14.6	40.2	0.0	0.0	100.0	45.3	120
Total	2.5	31.8	18.9	44.9	0.7	1.2	100.0	34.3	287

[1] MICS indicator 4.4
Figures in parenthesis '()' are based on 25-49 unweighted cases.

In its 2008 report[13], the JMP developed a new way of presenting the access figures, by disaggregating and refining the data on drinking-water and sanitation and reflecting them in "ladder" format. This ladder allows a disaggregated analysis of trends in a three rung ladder for drinking-water and a four-rung ladder for sanitation. For sanitation, this gives an understanding of the proportion of population with no sanitation facilities at all, of those reliant on technologies defined by JMP as "unimproved," of those sharing sanitation facilities of otherwise acceptable technology, and those using "improved" sanitation facilities. Table WS.8 presents the percentages of household population by drinking water and sanitation ladders. The Table also shows the percentage of household members using improved sources of drinking water and sanitary means of excreta disposal.

Overall, the Table WS.8 shows that about 1 in 10 (11%) of the household population have access to improved sanitation, and a further 11 percent of the household population have access to improved drinking water sources and improved sanitation. A wide disparity exists between the population from the richer households and the poorer households, where the use of improved drinking water and improved sanitation is concerned (24% and 2% respectively).

Table WS.8: Drinking water and sanitation ladders

Percentage of household population by drinking water and sanitation ladders, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Improved drinking water [1]		Unimproved drinking water	Total	Improved sanitation [2]	Unimproved sanitation			Total	Improved drinking water sources and improved sanitation	Number of household members
	Piped into dwelling, plot or yard	Other improved				Shared improved facilities	Unimproved facilities	Open defecation			
Locality											
Bubuashie	28.7	33.9	0.0	100.0	18.5	78.3	2.9	0.3	100.0	18.5	597
La	25.9	37.9	3.5	100.0	15.5	77.5	5.8	1.1	100.0	15.5	1,424
James Town	31.1	52.4	0.0	100.0	3.3	71.1	24.3	1.3	100.0	3.3	250
Nima	16.5	67.0	1.2	100.0	7.1	80.9	11.9	0.1	100.0	7.1	1,266
Accra New Town	13.3	59.3	0.9	100.0	7.6	64.0	28.4	0.0	100.0	7.2	1,349
Education of household head											
None	18.2	65.4	1.9	100.0	8.7	73.5	17.4	0.4	100.0	8.7	855
Primary	24.0	51.4	0.7	100.0	5.0	82.2	11.1	1.7	100.0	5.0	430
Middle/JSS	24.0	50.4	1.4	100.0	6.6	79.6	13.7	0.1	100.0	6.6	1,905
Secondary +	17.1	45.5	1.9	100.0	18.4	67.8	13.3	0.6	100.0	18.0	1,668
Missing/DK	(14.7(	(76.0)	(0.0)	(100.0)	(11.3)	(33.3)	(55.4)	(0.0)	(100.0)	(11.3)	28
Wealth index quintile											
Lower 60%	20.8	61.4	1.7	100.0	1.9	84.6	12.8	0.7	100.0	1.9	2,930
Upper 40%	20.2	36.9	1.4	100.0	24.3	59.2	16.4	0.1	100.0	24.0	1,956
Total	20.6	51.6	1.6	100.0	10.9	74.4	14.2	0.5	100.0	10.8	4,887

[1] MICS indicator 4.1; MDG indicator 7.8
[2] MICS indicator 4.3; MDG indicator 7.9
Figures in parenthesis '()' are based on 25-49 unweighted cases.

HANDWASHING

Handwashing with water and soap is the most cost effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children under five. It is most effective when done using water and soap after visiting a toilet or cleaning a child, before eating or handling food and, before feeding a child. Monitoring correct hand washing behaviour at these critical times is challenging. A reliable alternative to observations or self-reported behaviour is assessing the likelihood that correct hand washing behaviour takes place by observing if a household has a specific place where people most often wash their hands and observing if water and soap (or other local cleansing materials) are present at a specific place for hand washing.

In about 6 out of 10 (59%) of the households, a specific place for hand washing was observed, while 30 percent households could not indicate a specific place where household members usually wash their hands, and 3 percent of the households did not give a permission to see the place used for handwashing (Table WS.9). Of those households where place for handwashing was observed, a little over half (53%) had both water and soap present at the designated place. In 10 percent of the households, only water was available at the designated place, while in 14 percent of the households, the place only had soap but no water. The remaining 22 percent of households had neither water nor soap available at the designated place for handwashing. About 92 percent of the households had soap somewhere in the house (either observed or shown), while 16 had no soap in the household (Table WS.10).

There exist some differentials in the observation of a place of hand washing, and of household availability of soap and water by locality, education of household head and wealth index. While 67 percent of households in the richer households had both water and soap at the observed place where hand washing is done, the corresponding percentage for the poorer households was 41 percent. In households where the head had secondary or higher education, 61 percent had both soap and water at the observed place of handwashing, compared to 37 for households where the head had little or no education.

Table WS.9: Water and soap at place for handwashing

Percentage of households where place for handwashing was observed and percent distribution of households by availability of water and soap at place for handwashing, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of households where place for handwashing was observed	Percentage of households where place for handwashing was not observed				Number of households	Percent distribution of households where place for handwashing was observed, where:					Number of household where place for handwashing was observed
		Not in dwelling/ plot/yard	No permission to see	Other reasons	Total		Water and soap are available [1]	Water is available, soap is not available	Water is not available, soap is available	Water and soap are not available	Total	
Locality												
Bubuashie	53.7	36.8	2.1	7.4	100.0	168	63.2	14.1	4.4	18.3	100.0	90
La	55.9	37.2	1.3	5.5	100.0	468	64.4	10.9	3.1	21.7	100.0	262
James Town	30.3	46.5	0.0	23.2	100.0	77	*	*	*	*	*	23
Nima	57.3	25.3	2.1	15.3	100.0	357	31.2	7.4	36.4	25.0	100.0	204
Accra New Town	72.1	18.6	5.5	3.8	100.0	339	55.1	9.6	11.3	24.0	100.0	245
Education of household head												
None	55.6	28.4	3.5	12.5	100.0	213	38.5	14.3	23.5	23.7	100.0	119
Primary	55.9	34.6	0.8	8.7	100.0	144	35.8	13.6	18.2	32.4	100.0	81
Middle/JSS	54.8	32.6	1.0	11.6	100.0	539	55.1	10.2	10.9	23.8	100.0	295
Secondary +	64.6	26.9	4.3	4.3	100.0	506	60.8	8.5	12.8	17.8	100.0	327
Missing/DK	*	*	*	*	*	7	*	*	*	*	*	3
Wealth index quintile												
Lower 60%	51.1	36.9	1.4	10.6	100.0	870	41.3	12.4	16.1	30.2	100.0	445
Upper 40%	70.5	19.3	4.4	5.8	100.0	539	66.9	8.1	11.9	13.1	100.0	380
Total	58.5	30.2	2.5	8.7	100.0	1,409	53.1	10.4	14.1	22.3	100.0	825

[1] MICS indicator 4.5

An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table WS.10: Availability of soap

Percent distribution of households by availability of soap in the dwelling, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Place for handwashing observed					Place for handwashing not observed				Percentage of households with soap anywhere in the dwelling [1]	Number of households
	Soap observed	Soap shown	No soap in household	Not able/Does not want to show soap	Total	Soap shown	No soap in household	Not able/Does not want to show soap	Total		
Locality											
Bubuashie	67.6	27.8	3.0	1.5	100.0	89.1	9.2	1.7	100.0	92.5	168
La	67.4	25.8	4.8	2.0	100.0	86.8	12.0	1.3	100.0	90.4	468
James Town	69.7	26.9	0.0	3.4	100.0	77.4	20.6	2.0	100.0	83.2	77
Nima	67.6	28.1	3.8	0.5	100.0	90.2	9.8	0.0	100.0	93.4	357
Accra New Town	66.4	27.0	5.8	0.8	100.0	92.2	7.8	0.0	100.0	93.1	339
Education of household head											
None	62.0	32.2	5.0	0.8	100.0	86.3	13.7	0.0	100.0	90.7	213
Primary	54.0	39.9	6.1	0.0	100.0	83.3	16.7	0.0	100.0	89.2	144
Middle/JSS	66.0	25.9	6.5	1.7	100.0	86.6	12.0	1.4	100.0	89.5	539
Secondary +	73.7	22.8	2.2	1.4	100.0	93.2	6.0	0.9	100.0	95.3	506
Missing/DK	*	*	*	*	*	*	*	*	*	*	7
Wealth index quintile											
Lower 60%	57.4	33.4	7.4	1.9	100.0	86.3	12.8	0.9	100.0	88.6	870
Upper 40%	78.8	19.5	1.2	0.5	100.0	92.5	6.8	0.7	100.0	96.6	539
Total	67.2	27.0	4.5	1.2	100.0	88.0	11.1	0.9	100.0	91.7	1,409

[1] MICS indicator 4.6

An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed.

FERTILITY

In MICS4, adolescent birth rates and total fertility rates are calculated by using information on the date of last birth of each woman and are based on the one-year period (1-12 months) preceding the survey. Rates are underestimated by a very small margin due to absence of information on multiple births (twins, triplets etc) and on women having multiple deliveries during the one year period preceding the survey.

The adolescent birth rate (age-specific fertility rate for women age 15-19) is defined as the number of births to women age 15-19 years during the one year period preceding the survey, divided by the average number of women age 15-19 (number of women-years lived between ages 15 through 19, inclusive) during the same period, expressed per 1000 women. The total fertility rate (TFR) is calculated by summing the age-specific fertility rates calculated for each of the 5-year age groups of women, from age 15 through to age 49. The TFR denotes the average number of children to which a woman will have given birth by the end of her reproductive years if current fertility rates prevailed. The survey recorded an adolescent birth rate of 29 per 1000 and a TFR of 2.5.

Table RH.1: Adolescent birth rate and total fertility rate		
Adolescent birth rates and total fertility rates, MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Background characteristics	Adolescent birth rate [1] (Age-specific fertility rate for women age 15-19)	Total Fertility Rate
Wealth index quintile		
Lower 60%	22	2.6
Upper 40%	41	2.3
Total	29	2.5
[1] MICS indicator 5.1; MDG indicator 5.4		

Sexual activity and childbearing early in life carry significant risks for young people all around the world. Table RH.2 presents some early childbearing indicators for women age 15-19 and 20-24. As shown in Table RH.2, about 5 percent of women age 15-19 have already had a birth, 1 percent are pregnant with their first child, 6 percent have begun childbearing and close to 1 percent have had a live birth before age 15. The proportion of women age 15-19 that have had a live birth before age 15 is positively correlated with the household wealth. 7 percent of young women 15-19 years from the poorer households have begun childbearing, compared to 4 percent of young women from the richer households. Also, about 8 percent of women aged 20-24 had a live birth before age 18 (4% of women from the richer households, versus 10% of women from the poorer households).

Table RH.2: Early childbearing						
Percentage of women age 15-19 who have had a live birth or who are pregnant with the first child, percentage of women age 15-19 who have begun childbearing before age 15, and the percentage of women age 20-24 who have had a live birth before age 18, MICS in 5 High Densely Populated Localities in Accra, 2010-2011						
Background characteristics	Percentage of women age 15-19 who				Percentage of women age 20-24 who have had a live birth before age 18 [1]	Number of women age 20-24
	Have had a live birth	Are pregnant with first child	Have begun childbearing	Have had a live birth before age 15	Number of women age 15-19	
Wealth index quintile						
Lower 60%	6.4	1.0	7.4	1.1	130	10.1
Upper 40%	2.3	1.2	3.5	0.0	74	3.7
Total	4.9	1.0	6.0	0.7	203	7.7
[1] MICS indicator 5.2						

Table RH.3 presents the trends for early childbearing among women of all age groups. The percentage of

Table RH.3: Trends in early childbearing				
Percentage of women who have had a live birth by age 15 and 18, by age groups, MICS in 5 High Densely Populated Localities in Accra, 2010-2011				
Background characteristics	Percentage of women with a live birth before age 15	Number of women	Percentage of women with a live birth before age 18	Number of women
Age				
15-19	0.7	203	0.0	0
20-24	1.7	221	7.7	221
25-29	1.7	248	6.8	248
30-34	3.2	200	15.6	200
35-39	3.1	194	15.9	194
40-44	6.3	127	18.9	127
45-49	5.9	102	21.9	102
Total	2.8	1,294	13.0	1,091

women with a live birth before their 15th birthday decreases with successive generation of younger women, an indication that younger women are delaying childbirth. For instance close to 6 percent of women aged 45-49 had a live birth before age 15 compared to just 1 percent of women aged 15-19.

A similar pattern is observed when we look at women who gave birth before age 18. While 22 percent of women aged 45-49 gave birth before age 18 just 8 percent of those aged 20-24 gave birth before they were 18 years of age.

CONTRACEPTION

Appropriate family planning is important to the health of women and children by: 1) preventing pregnancies that are too early or too late; 2) extending the period between births; and 3) limiting the number of children. Access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many is critical.

Current use of contraception was reported by 27 percent of women currently married or in union (Table RH.4), with 20 percent of the women using any modern method of contraception, and 6 percent using any traditional method. The most popular method is the injectable which is used by 8 percent of married women. The next most popular methods are periodic abstinence and the pill, which together accounts for 11 percent of married women. Between 1 and 3 percent of women reported use of the IUD, female sterilization, implants, and the male condom. Less than 1 percent use withdrawal or the lactational amenorrhea method (LAM).

According to the survey results, adolescents are less likely to use contraception than older women. Married women or those in union aged 15-19 are hardly using any method of contraception currently. Between 20 to 34 years, use of contraception is between 27 and 29 percent, and rises to 40 percent among women aged 35 to 39 years.

Women's education level has been known to be associated with contraceptive prevalence. However the results do not strongly affirm this as there is no consistency in the rise of prevalence with increased education. The percentage of women using any method of contraception rises from 22 percent among those with no education to 33 percent among women with primary education. It however declines to 24 percent among those with middle or JHS education, and rises again to 30 percent among women with secondary or higher education. In addition to differences in prevalence, the method mix varies by education. One-half of contraceptive users with no education or with primary education use the injectables or the pill. The same methods are used by slightly less than half of those with middle/JHS and secondary education. Noticeably the percent points in the use of periodic abstinence rises from 3 percent for those with no education to 9 for those with secondary education.

Table RH.4A shows current contraceptive use among men age 15-59 years who are currently married or in union. About 72 percent of them indicated they were not using any method while 28 percent were using some method of contraception (23 percent using some modern method and the other 5 percent were using some traditional method). The use of injectables (by women) again ranked as the most widely used method of contraception, accounting for about 8 percent of the contraceptive use. This is followed by the male condom use which made up 6 percent, and then by the use of the pill which contributed 5 percent.

In a highly patriachical society where men dominate in the sphere of decision making, the attitude of men towards contraception would inevitably play a crucial link role in contraceptive use. Among men who were married or in union and who were not using any method of contraception, about 35 percent indicated that they themselves would not want to use a contraceptive method, or allow any of their partner(s) to use any such method. Reason(s) given for the rejection of contraception are given in Fig. RH.1. About 26 percent of men are concerned about the side effects while 22 percent make reference to their religious beliefs about contraceptive use as a barrier.

Table RH.4: Use of contraception

Percentage of women age 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method,
MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Not using any method	Female sterilization	IUD	Inject-ables	Implants	Pill	Male condom	Female condom	Dia-phragm/foam/jelly	LAM	Periodic absti-nence/Rhythm	With-drawal	Any modern method	Any tra-ditional method	Any method [1]	Number of women
Age																
15-19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
20-24	(71.1)	(0.0)	(2.6)	(8.8)	(1.7)	(4.6)	(7.6)	(0.0)	(0.0)	(3.6)	(0.0)	(0.0)	(25.3)	(3.6)	(28.9)	38
25-29	73.2	0.0	0.0	6.9	2.2	7.3	1.3	0.0	0.0	1.5	7.6	0.0	17.7	9.1	26.8	102
30-34	72.9	1.8	1.3	8.4	1.9	4.3	2.0	0.0	0.0	0.0	7.0	0.0	19.6	7.0	26.6	133
35-39	60.1	1.8	3.3	7.8	2.1	10.0	4.0	0.0	0.0	0.0	10.0	0.7	29.0	10.6	39.6	138
40-44	81.9	2.6	0.0	10.4	1.2	1.0	2.3	0.0	0.0	0.0	0.7	0.0	17.4	0.7	18.1	85
45-49	91.1	2.9	0.0	2.4	0.0	2.2	0.9	0.0	0.0	0.0	0.6	0.0	8.4	0.6	8.9	62
Number of living children																
0	91.9	0.0	0.0	0.0	0.0	2.6	4.3	0.0	0.0	0.0	1.2	0.0	6.9	1.2	8.1	55
1	86.2	0.0	0.0	2.3	0.0	3.2	1.0	0.0	0.0	0.8	6.4	0.0	6.5	7.3	13.8	104
2	65.1	0.0	3.1	8.2	2.7	8.3	2.5	0.0	0.0	1.0	8.5	0.0	24.7	9.4	34.2	144
3	68.2	3.7	0.7	10.2	3.4	5.5	2.1	0.0	0.0	0.5	4.8	0.8	25.8	6.0	31.8	119
4+	69.1	3.1	1.4	11.6	1.0	5.3	3.9	0.0	0.0	0.0	4.6	0.0	26.3	4.6	30.9	141
Education																
None	78.1	1.1	0.0	10.2	1.1	3.8	2.3	0.0	0.0	0.0	3.3	0.0	18.6	3.3	21.9	82
Primary	66.6	2.7	0.8	11.3	3.3	6.4	4.0	0.0	0.0	0.6	4.4	0.0	28.4	5.0	33.4	105
Middle/JSS	76.2	1.4	1.6	5.5	1.3	5.8	2.3	0.0	0.0	0.6	4.8	0.4	17.9	5.8	23.7	244
Secondary +	70.2	1.2	2.0	7.0	1.4	5.2	2.4	0.0	0.0	0.7	9.5	0.0	19.2	10.2	29.3	133
Wealth index quintile																
Lower 60%	73.8	1.7	0.3	9.0	1.1	5.8	3.5	0.0	0.0	0.2	4.4	0.0	21.5	4.6	26.1	316
Upper 40%	72.5	1.3	2.6	5.8	2.4	5.0	1.6	0.0	0.0	0.9	7.2	0.4	18.7	8.5	27.2	247
Total	73.3	1.6	1.3	7.6	1.7	5.5	2.7	0.0	0.0	0.5	5.6	0.2	20.3	6.3	26.6	564

[1] MICS indicator 5.3; MDG indicator 5.3

An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table RH.4A: Use of contraception

Percentage of men age 15-59 years currently married or in union who are using (or whose partner is using) a contraceptive method,
MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Not using any method	Male sterilization	IUD	Injectables	Implants	Pill	Male condom	Periodic abstinence/ Rhythm	Withdrawal	Any modern method	Any traditional method	Any method	Number of men
Age													
15-29	*	*	*	*	*	*	*	*	*	*	*	*	21
30-44	65.6	.0	3.7	12.1	.9	4.4	6.6	5.1	1.7	27.6	6.8	34.4	139
45-59	84.6	1.7	.0	4.3	.0	5.4	1.9	1.1	1.1	13.2	2.2	15.4	87
Education													
None	*	*	*	*	*	*	*	*	*	*	*	*	19
Primary	*	*	*	*	*	*	*	*	*	*	*	*	9
Middle/JSS	68.3	.0	5.9	6.2	.7	4.6	8.1	4.0	2.3	25.4	6.3	31.7	105
Secondary +	75.2	1.3	.0	7.0	.4	4.8	5.7	4.8	.8	19.2	5.6	24.8	114
Wealth index quintile													
Lower 60%	68.3	.0	1.6	10.2	.8	6.2	7.3	3.1	2.4	26.2	5.5	31.7	143
Upper 40%	76.4	1.4	3.7	5.8	.0	3.1	4.7	5.0	.0	18.6	5.0	23.6	104
Total	71.7	.6	2.5	8.3	.5	4.9	6.2	3.9	1.4	23.0	5.3	28.3	247

Figure RH.1: Reason for non-use of contraception
Percentage distribution of men who are married or in union by reason for which they would not use or allow any of their partners to use any contraceptive method, MICS in 5 High Densely Populated Localities in Accra, 2010-2011
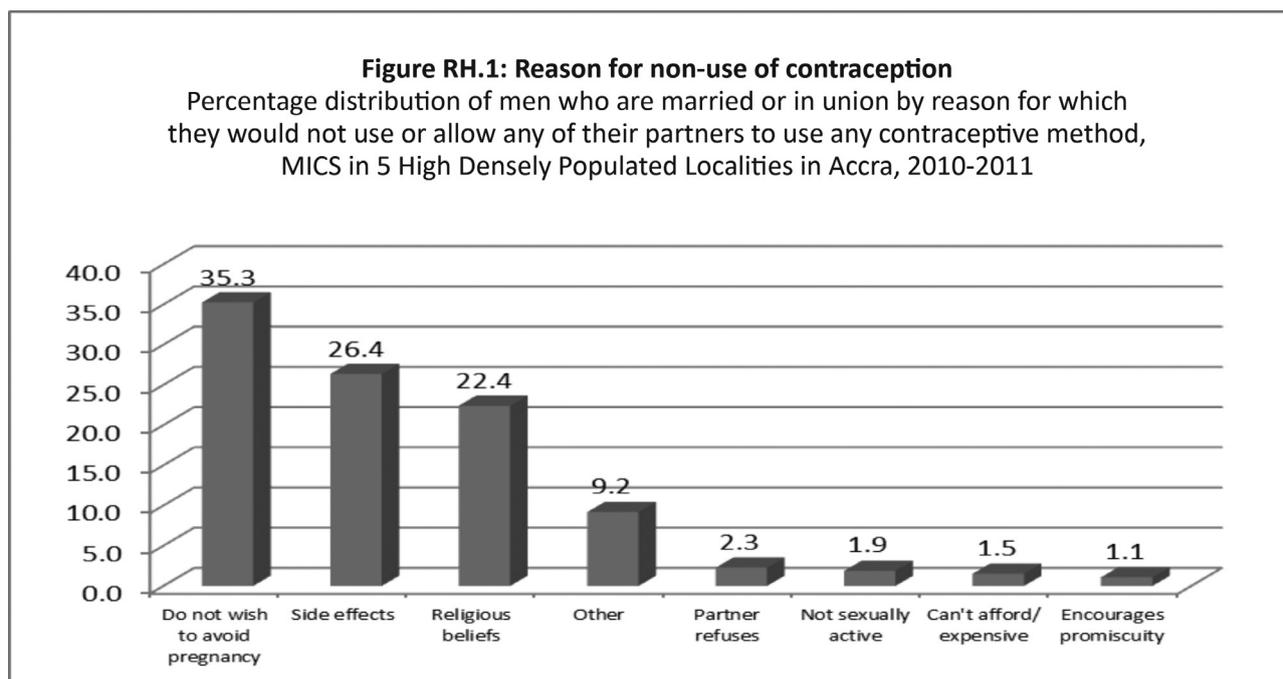
UNMET NEED

Unmet need for contraception refers to fecund women who are not using any method of contraception, but who wish to postpone the next birth (spacing) or who wish to stop childbearing altogether (limiting). Unmet need is identified in MICS by using a set of questions eliciting current behaviours and preferences pertaining to contraceptive use, fecundity, and fertility preferences.

Table RH.5 shows the results of the survey on contraception, unmet need, and the demand for contraception satisfied.

Unmet need for spacing is defined as percentage of women who are not using a method of contraception AND

- are not pregnant and not postpartum amenorrheic[14] and are fecund[15] and say they want to wait two or more years for their next birth OR
- are not pregnant and not postpartum amenorrheic and are fecund and unsure whether they want another child OR
- are pregnant and say that pregnancy was mistimed: would have wanted to wait OR
- are postpartum amenorrheic and say that the birth was mistimed: would have wanted to wait

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[14] A women is postpartum amenorrheic if she had a birth in last two years and is not currently pregnant, and her menstrual period has not returned since the birth of the last child

[15] A women is considered infecund if she is neither pregnant nor postpartum amenorrheic, and

(1a) has not had menstruation for at least six months, or (1b) never menstruated, or (1c) her last menstruation occurred before her last birth, or (1d) in menopause/has had hysterectomy OR

(2) She declares that she has had hysterectomy, or that she has never menstruated or that she is menopausal, or that she has been trying to get pregnant for 2 or more years without result in response to questions on why she thinks she is not physically able to get pregnant at the time of survey OR

(3) She declares she cannot get pregnant when asked about desire for future birth OR

(4) She has not had a birth in the preceding 5 years, is currently not using contraception and is currently married and was continuously married during the last 5 years preceding the survey

Unmet need for limiting is defined as percentage of women who are not using a method of contraception AND
- are not pregnant and not postpartum amenorrheic and are fecund and say they do not want any more children OR
- are pregnant and say they didn't want to have a child OR
- are postpartum amenorrheic and say that they didn't want the birth

Total unmet need for contraception is simply the sum of unmet need for spacing and unmet need for limiting. Table RH. 5 gives the distribution of the indicators of unmet need. 27 percent of women 15-49 years have unmet need for contraception. Fifteen percent have unmet need for spacing, and 13 percent have unmet need for limiting. More than one third (36%) of women age 20-24 have unmet need for family planning, the highest among the age-groups. As expected unmet need is lowest among women aged 45-49 as they tend to have far less need for contraception due to menopause (14%). Unmet need is about 30 percent for women in the age groups 25-29, 30-34 and 40-44. Differences exist among women's level of education and their unmet need for family planning. For instance 25 percent of women with no education have unmet need as compared to 27 percent of those with primary education and 29 percent of those with middle or JSS education. However those with secondary or more education have less unmet need (25%) than those with primary and middle school education. Women from the poorer households have more unmet need than those from the richer households (30% versus 24%).

Met need for limiting includes women who are using a contraceptive method and who want no more children, those that are using male or female sterilization or those who have indicated they are infecund. Met need for spacing includes women who are using a contraceptive method and who want to have another child or are undecided whether to have another child. The total of met need for spacing (14%) and limiting (13%) adds up to the total met need for contraception (27%). 40 percent of women aged 35-39 years have their need for family planning met. This is higher than the met needs for women in other age categories.

Using information on contraception and unmet need, the percentage of demand for contraception satisfied is also estimated from the MICS data. Percentage of demand satisfied is defined as the proportion of women currently married or in a marital union who are currently using contraception, of the total demand for contraception. The total demand for contraception includes women who currently have an unmet need (for spacing or limiting), plus those who are currently using contraception. Nearly half (50%) of women consider their demand for contraception as satisfied. Close to 63 percent of women aged 35-39 indicate that their need for contraception had been satisfied. This is much higher than the proportions of women in the other age-groups whose demands are satisfied. Also, women from the richer households (54%) are more likely to have their demand for contraception satisfied than women from the poorer households (47%).

Table RH.5: Unmet need for contraception

Percentage of women aged 15-49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Met need for contraception - For spacing	Met need for contraception - For limiting	Met need for contraception - Total	Unmet need for contraception - For spacing	Unmet need for contraception - For limiting	Unmet need for contraception - Total [1]	Number of women currently married or in union	Percentage of demand for contraception satisfied	Number of women currently married or in union with need for contraception
Age									
15-19	*	*	*	*	*	*	4	*	3
20-24	(25.1)	(3.8)	(28.9)	(29.2)	(7.0)	(36.3)	38	(44.4)	25
25-29	23.1	3.8	26.8	20.6	8.6	29.2	102	47.9	57
30-34	11.4	15.7	27.1	22.4	7.2	29.5	133	47.9	75
35-39	20.4	19.9	40.3	7.9	16.0	23.9	138	62.8	89
40-44	4.8	13.4	18.1	7.1	23.1	30.2	85	(37.5)	41
45-49	0.9	8.0	8.9	0.0	13.5	13.5	62	*	14
Education									
None	14.4	8.2	22.6	12.1	12.8	24.9	82	(47.6)	39
Primary	16.8	16.6	33.4	10.4	16.5	26.9	105	55.4	63
Middle/JSS	10.5	13.3	23.8	17.4	11.6	29.0	244	45.1	129
Secondary +	19.7	10.1	29.8	13.7	11.3	25.1	133	54.4	73
Wealth index quintile									
Lower 60%	13.6	12.6	26.2	13.6	16.0	29.6	316	46.9	176
Upper 40%	15.4	12.3	27.7	15.6	8.3	23.9	247	53.7	128
Total	14.4	12.5	26.8	14.5	12.6	27.1	564	49.8	304

[1] MICS indicator 5.4; MDG indicator 5.6

An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

ANTENATAL CARE

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. Better understanding of foetal growth and development and its relationship to the mother's health has resulted in increased attention to the potential of antenatal care as an intervention to improve both maternal and newborn health. For example, if the antenatal period is used to inform women and families about the danger signs and symptoms and about the risks of labour and delivery, it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider. The antenatal period also provides an opportunity to supply information on birth spacing, which is recognized as an important factor in improving infant survival. Tetanus immunization during pregnancy can be life-saving for both the mother and infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy and treatment of STIs can significantly improve foetal outcomes and improve maternal health. Adverse outcomes such as low birth weight can be reduced through a combination of interventions to improve women's nutritional status and prevent infections (e.g., malaria and STIs) during pregnancy. More recently, the potential of the antenatal period as an entry point for HIV prevention and care, in particular for the prevention of HIV transmission from mother to child, has led to renewed interest in access to and use of antenatal services.

WHO recommends a minimum of four antenatal visits based on a review of the effectiveness of different models of antenatal care. WHO guidelines are specific on the content on antenatal care visits, which include:
- Blood pressure measurement
- Urine testing for bateriuria and proteinuria
- Blood testing to detect syphilis and severe anemia
- Weight/height measurement (optional).

The type of personnel providing antenatal care to women aged 15-49 years who gave birth in the two years preceding the survey is presented in Table RH.6. Coverage of antenatal care (by a doctor, nurse, or midwife) is almost universal with 97 percent of women receiving antenatal care at least once during the pregnancy. More than half (56%) of women are attended to by a doctor, 40 percent are attended by a nurse/midwife, and less than 1 percent are attended by an auxiliary midwife. Women from the richer households are more likely to be seen by a doctor (60%), than those from the poorer households (54%).

Table RH.6: Antenatal care provider

Percent distribution of women aged 15-49 who gave birth in the two years preceding the survey by type of personnel providing antenatal care, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Person providing antenatal care					Total	At least once by skilled personnel [1]	Number of women who gave birth in the preceding two years
	Doctor	Nurse / Midwife	Auxiliary midwife	Other missing	No antenatal care received			
Education								
None	(51.4)	(36.5)	(1.3)	(0.0)	(10.8)	100	89.2	26
Primary	(57.5)	(37.6)	0.0)	(2.3)	(2.7)	100	95.1	39
Middle/JSS	59.2	39.9	0.0	0.0	0.9	100	99.1	88
Secondary +	(52.8)	(45.7)	(1.5)	(0.0)	(0.0)	100	100.0	43
Wealth index quintile								
Lower 60%	54.2	41.2	0.8	0.0	3.8	100	96.2	122
Upper 40%	60.1	38.7	0.0	1.2	0.0	100	98.8	73
Total	56.4	40.3	0.5	0.4	2.4	100	97.2	196

[1] MICS indicator 5.5a; MDG indicator 5.5
Figures in parenthesis '()' are based on 25-49 unweighted cases.

UNICEF and WHO recommend a minimum of at least four antenatal care visits during pregnancy. This recommendation is taken on by the Ghana Ministry of Health. Table RH.7 shows number of antenatal care visits during the last pregnancy during the two years preceding the survey, regardless of provider by selected characteristics. Almost nine in ten mothers (88%) receive antenatal care four or more times, 6% received three visits and less than 1 percent received two visits. Two percent of the women who had a live birth during the two years preceding the survey received no antenatal visits. Mothers from the poorer households are less likely than the more advantaged mothers to receive ANC four or more times. For example, 84 percent of the women living in poorer households received the recommended four or more antenatal care visits, compared with 95 percent of women living in the richer households.

Table RH.7: Number of antenatal care visits

Percentage of women who had a live birth during the two years preceding the survey by number of antenatal care visits by any provider, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percent of women who had:					Total	Number of women who gave birth in the preceding two years
	No antenatal care visits	Two visits	Three visits	4 or more visits [1]	Missing / DK		
Wealth index quintile							
Lower 60%	3.8	0.8	7.1	84.0	4.2	100	122
Upper 40%	0.0	0.0	4.4	94.5	1.1	100	73
Total	2.4	0.5	6.1	87.9	3.0	100	196

[1] MICS indicator 5.5b; MDG indicator 5.5

The types of services pregnant women received are shown in Table RH.8. Among those women who have had a live birth during the two years preceding the survey, 97 percent reported that a blood sample was taken during antenatal care visits, 97 percent reported that their blood pressure was checked, a further 97 percent reported that urine specimen was taken. Overall, 96 percent of the women had the 3 tests done.

Women in the richer households are marginally more likely to access services during pregnancy than their counterparts in the poorer households.

Table RH.8: Content of antenatal care
Percentage of women age 15-49 years who had their blood pressure measured, urine sample taken, and blood sample taken as part of antenatal care, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Blood pressure measured	Urine specimen taken	Blood test taken	Blood pressure measured, urine specimen and blood test taken [1]	Number of women who gave birth in two years preceding survey
Wealth index quintile					
Lower 60%	94.7	96.2	96.2	94.7	122
Upper 40%	100.0	100.0	98.5	98.5	73
Total	96.7	97.6	97.1	96.1	196

[1] MICS indicator 5.6

ASSISTANCE AT DELIVERY

Three quarters of all maternal deaths occur during delivery and the immediate post-partum period. The single most critical intervention for safe motherhood is to ensure a competent health worker with midwifery skills is present at every birth, and transport is available to a referral facility for obstetric care in case of emergency. A World Fit for Children goal is to ensure that women have ready and affordable access to skilled attendance at delivery. The indicators are the proportion of births with a skilled attendant and proportion of institutional deliveries. The skilled attendant at delivery indicator is also used to track progress toward the Millennium Development target of reducing the maternal mortality ratio by three quarters between 1990 and 2015.

The MICS included a number of questions to assess the proportion of births attended by a skilled attendant. A skilled attendant includes a doctor, nurse, midwife or auxiliary midwife.

About 98 percent of births occurring in the two years preceding the MICS survey were delivered by skilled personnel (Table RH.9).

More than one in two of the births (58%) in the two years preceding the survey were delivered with assistance of a midwife or nurse. Doctors assisted with the delivery of 40 percent of births. Less than 1 percent was assisted by a traditional birth attendant during delivery, relatives/friends assisted with a further 1 percent of the deliveries, and less than 1 percent of women received no attendance during delivery. There is no marked difference between the rich and the poor in regard to access to skilled attendants at birth. A high proportion of births (22%) were delivered by C-section which is higher than the WHO posited acceptable rate of 5-15 percent. [16]

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[16] *The World Health Organization has determined an "ideal rate" of all cesarean deliveries at 15 percent for a population, given that about 15 percent of women who give birth annually experience some potentially life-threatening complications during pregnancy.*

Table RH.9: Assistance during delivery
Percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by person assisting at delivery and percentage of births delivered by C-section, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Person assisting at delivery						Any skilled personnel [1]	Percent delivered by C-section [2]	Number of women who gave birth in preceding two years
	Doctor	Nurse / Midwife	Traditional birth attendant	Relative / Friend	No attendant	Total			
Wealth index quintile									
Lower 60%	40.5	56.2	1.3	1.0	1.0	100.0	96.7	23.9	122
Upper 40%	38.7	60.3	0.0	1.0	0.0	100.0	99.0	19.8	73
Total	39.8	57.7	0.8	1.0	0.6	100.0	97.5	22.4	196

[1] MICS indicator 5.7; MDG indicator 5.2
[2] MICS indicator 5.9

PLACE OF DELIVERY

Increasing the proportion of births that are delivered in health facilities is an important factor in reducing the health risks to both the mother and the baby. Proper medical attention and hygienic conditions during delivery can reduce the risks of complications and infection that can cause morbidity and mortality to either the mother or the baby. Table RH.10 presents the percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by place of delivery and the percentage of births delivered in a health facility, according to background characteristics.

Almost all births in the last two years (97%) were delivered in a health facility; 87 percent of deliveries occur in public sector facilities and 10 percent occur in private sector facilities while 3 percent of women delivered at home. Women from the richer households are almost 2 times more likely to deliver in a private health facility than women from poorer households (13% and 8 % respectively).

Table RH.10: Place of delivery
Percent distribution of women age 15-49 with a birth in two years preceding the survey by place of delivery, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Place of delivery				Delivered in health facility [1]	Number of women who gave birth in preceding two years
	Public sector health facility	Private sector health facility	Home	Total		
Wealth index quintile						
Lower 60%	88.5	7.5	4.0	100.0	96.0	122
Upper 40%	85.6	13.4	1.0	100.0	99.0	73
Total	87.4	9.7	2.9	100.0	97.1	196

[1] MICS indicator 5.8
 Figures in parenthesis '()' are based on 25-49 unweighted cases

POSTNATAL HEALTH CHECKS

Skilled care for mothers and their newborn in the hours and days after delivery is critical to ensure the safety of the newborn and the complete recovery of the woman. Up to 45 percent of all maternal deaths occur within one day of delivery, and 65 percent occur within the first week. This period is also critical to newborn survival because 50 to 70 percent of life-threatening newborn illnesses occur within the first week of life (AED, the Manoff Group, and USAID, 2005).[17]

[17] *Academy for Educational Development (AED), the Manoff Group, and USAID, 2005. Maternal survival: Improving access to skilled care, a behaviour approach, CHANGE project. Washington, DC (www.manoffgroup.com).*

Postnatal check-up in the first week of delivery is therefore seen as an important component of a complete maternal health care schedule to ensure optimal maternal and newborn health. In Ghana, the first postnatal check-up is advised within the first three days of delivery with subsequent check-ups are made as appropriate.

In the MICS survey for the 5 localities, women with a live birth in the 2 years preceding the survey were asked where they delivered their children. For those whose births took place in a health facility, the mothers were asked the duration of stay in the facility. Since almost all the deliveries in the five localities took place in a health facility (public or private), Table RH.11 presents information on the duration of stay in a health facility for women 15-49 years who gave birth in the two years preceding the survey. The Table reveals that 5 percent of the women stayed in the facility for less than 6 hours, 8 percent stayed for 6-11 hours, and a further 8 percent stayed for 12-23 hours. Overall, one in two (51%) of the women stayed in the health facility between 1-2 days, and 27 percent of the women stayed for 3 or more days. About 87 percent stayed in the facility for 12 or more hours.

Table RH.11: Post-partum stay in health facility
Percent distribution of women age 15-49 years who gave birth in a health facility in the two years preceding the survey by duration of stay in health facility following their last live birth, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background Characteristics	Duration of stay in health facility:					Total	12 hours or more [1]	Number of women who gave birth in a health facility in the preceding two years
	Less than 6 hours	6-11 hours	12-23 hours	1-2 days	3 days or more			
ANC visits								
None	*	*	*	*	*	100.0	*	3
1-3 visits	*	*	*	*	*	100.0	*	12
4+ visits	4.9	8.1	7.9	51.0	28.0	100.0	86.9	169
Missing/DK	*	*	*	*	*	100.0	*	6
Education								
None	(.0)	(2.8)	(4.0)	(59.5)	(33.7)	100.0	(97.2)	25
Primary	(6.1)	(13.8)	(7.4)	(46.7)	(26.0)	100.0	(80.0)	38
Middle/JSS	5.5	9.8	6.6	54.2	23.8	100.0	84.6	84
Secondary +	(6.4)	(2.2)	(13.6)	(45.7)	(32.2)	100.0	(91.4)	43
Wealth index quintiles								
Lower 60%	4.5	7.9	8.5	51.1	28.0	100.0	87.5	117
Upper 40%	5.8	8.5	7.5	52.3	25.9	100.0	85.7	73
Total	5.1	8.0	8.0	51.4	27.4	100.0	86.9	190

[1] MICS indicator 5.10
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

In the MICS survey for the 5 localities, women with a live birth in the 2 years preceding the survey were also asked about post-natal health check on their newborn and themselves, while at the health facility or at home. The distribution of the timing of a health check following the birth, and the first post-natal care (PNC) visit for newborns is shown in Table RH.12. The data reveals that 93 percent of the newborns received a health check following the birth. However, newborns from wealthier households are more likely to receive a health check (98%), compared to children from poorer households (90%).

Also, 11 percent of the newborns received their first post-natal care visit the same day of birth, 5 percent received the PNC visit one day following birth, while 4 percent received the PNC visit 2 days following birth. Nearly one in ten (9%) of the children received the PNC visit 3-6 days following the birth, and 42 percent received the PNC visit after the first week following the birth. Overall, 28 percent of the newborns did not receive any post-natal care visit. One in three newborns (33%) in the poorer households did not receive a post-natal care visit, compared to 21 percent of newborns in the richer households. For newborns who received a PNC visit within one week of birth, 87 percent received the visit in a public facility, and in 97 percent of cases, a Doctor, nurse or midwife provided the post-natal care (data not shown).

Table RH.12: Post-natal health checks for newborns Percentage of newborns born in the last two years who received health checks and post-natal care (PNC) visits from any health provider after birth, MICS in 5 High Densely Populated Localities in Accra, 2010-2011										
	PNC visit								Post-natal health check for the newborn [1]	Number of last births in the two years preceding the survey
Background Characteristics	Health check following birth while in facility or at home	Same day	1 day following birth	2 days following birth	3-6 days following birth	After the first week following birth	No post-natal care visit	Total		
Education										
None	(93.7)	(2.9)	(.0)	(4.0)	(17.1)	(38.3)	37.7	100.0	93.7	26
Primary	(91.4)	(7.2)	(2.7)	(5.2)	(19.5)	(36.5)	23.5	100.0	91.4	39
Middle/JSS	91.8	13.1	7.9	2.7	6.9	36.4	33.0	100.0	93.3	88
Secondary +	(95.8)	(13.1)	(3.9)	(3.6)	(.0)	(61.7)	17.7	100.0	95.8	43
Wealth index quintiles										
Lower 60%	89.8	9.1	4.9	3.5	9.9	39.3	32.7	100.0	91.0	122
Upper 40%	97.6	12.5	5.6	3.7	8.2	47.6	20.7	100.0	97.6	73
Total	92.9	10.6	4.9	3.5	9.2	42.3	28.4	100.0	93.5	196
[1] MICS indicator 5.11 *Figures in parenthesis '()' are based on 25-49 unweighted cases.*										

Table RH.13 provides results of post-natal health checks for mothers who gave birth in the 2 years preceding the survey. Overall, 91 percent of women received a health check following the birth of their child while in the health facility or at home. However, mothers from wealthier households are more likely to receive a health check (96%), compared to mothers from poorer households (87%). Seven percent of the mothers received their first post-natal care the same day of the birth, 5 percent received it one day after delivery, 3 percent received the PNC two days following the birth, while 5 percent received the first post-natal care visit within 3 to 6 days after delivery.

About 42 percent of the women with a live birth in the 2 years before the survey received their first postnatal health check after the first week following the birth, while 36 percent of the women did not received any post-natal care visit. Women from the wealthier households are less likely to receive no post-natal care visit (30%), compared to women from the poorer households (39%). For mothers who gave birth in the preceding 2 years before the survey, and received a post-natal care visit within one week of birth, 84 percent received the visit in a public facility, while 8 percent received the PNC visit at home. Also, in 95 percent of cases, a Doctor, nurse or midwife provided the post-natal care, while in 3 percent of cases; a Traditional birth attendant provided the PNC care (data not shown).

Table RH.13: Post-natal health checks for mothers

Percentage of women age 15-49 years who gave birth in the 2 years preceding the survey who received health checks and post-natal care (PNC) visits from any health provider after birth, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background Characteristics	Health check following birth while in facility or at home	PNC visit					No post-natal care visit	Missing/DK	Total	Post-natal health check for the mother [1]	Number of women who gave birth in the two years preceding the survey
		Same day	1 day following birth	2 days following birth	3-6 days following birth	After the first week following birth					
Education											
None	(87.1)	(2.9)	(.0)	(7.7)	(7.9)	(36.0)	(45.4)	(.0)	100.0	(87.1)	26
Primary	(91.4)	(2.3)	(10.0)	(5.2)	(9.4)	(38.2)	(27.1)	(8.0)	100.0	(91.4)	39
Middle/JSS	87.3	8.1	5.0	2.4	1.6	40.6	40.7	1.6	100.0	88.7	88
Secondary +	(98.1)	(10.0)	(1.1)	(.0)	(5.3)	(49.9)	(26.5)	(7.2)	100.0	(98.1)	43
Wealth index quintiles											
Lower 60%	87.1	6.6	5.2	4.0	4.9	39.3	38.8	1.2	100.0	88.2	122
Upper 40%	95.5	6.4	3.4	1.6	4.4	45.9	30.2	8.2	100.0	95.5	73
Total	90.5	6.7	4.5	3.1	4.8	41.6	35.5	3.9	100.0	91.1	196

[1] MICS indicator 5.12

Figures in parenthesis '()' are based on 25-49 unweighted cases.

The survey results reveal that in majority of cases, health checks or post-natal care visits within 2 days of birth were provided for both mother and her newborn baby. Table RH.14 indicate that 89 percent of both mothers and their newborns received a health check or a post-natal care visit within 2 days of birth. One percent of mothers only and 4 percent of newborns only received a health check or post-natal care visit within 2 days of birth.

Table RH.14: Post-natal health checks for mothers and newborns
Percent distribution of women age 15-49 who gave birth in the two years preceding the survey by receipt of health checks and post-natal care (PNC) visits within 2 days of birth, for the mother and newborn, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background Characteristics	Both mothers and newborns	Mothers only	Newborns only	Neither mother nor newborn	Total	Number of women age 15-49 years who gave birth in the 2 years preceding the survey
Type of delivery						
Vaginal birth	88.8	1.3	3.3	5.8	100.0	152
C-section	(91.8)	(.0)	(4.0)	(4.2)	100.0	44
Education						
None	(87.1)	(.0)	(6.6)	(6.3)	100.0	26
Primary	(85.6)	(2.7)	(2.7)	(5.9)	100.0	39
Middle/JSS	88.7	.0	4.6	6.7	100.0	88
Secondary +	(95.8)	(2.3)	(.0)	(1.9)	100.0	43
Wealth index quintiles						
Lower 60%	87.4	.8	3.6	8.2	100.0	122
Upper 40%	92.4	1.4	3.4	1.0	100.0	73
Total	89.4	1.0	3.5	5.5	100.0	196

Figures in parenthesis '()' are based on 25-49 unweighted cases.

EARLY CHILDHOOD EDUCATION AND LEARNING

Attendance to pre-school education in an organized learning or child education program is important for the readiness of children to school.

As can be expected in a large city like Accra, pre-school attendance of children 36-59 months is quite high in the five localities, with 88 percent attendance (Table CD.1). No gender differential exists, but differentials by socioeconomic status are noteworthy. The majority of children living in richer households (93%) attend pre-school, while the figure drops to 85 percent for children in the poorer households. Also, 90 percent of children aged 48-59 months are attending pre-school, compared to 86 percent of those aged 36-47. Pre-school attendance increases with a mother's/care taker's education: only 77 percent of children whose mothers have little or no education attend pre-school. This increases to 89 percent for children whose mothers have middle/JSS education, and to 96 percent for children whose mothers have a secondary or higher education.

Table CD.1: Early childhood education		
Percentage of children age 36-59 months who are attending some form of organized early childhood education programme, MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Background characteristics	Percentage of children age 36-59 months currently attending early childhood education [1]	Number of children aged 36-59 months
Sex		
Male	88.9	79
Female	86.8	87
Age		
36-47 months	86.1	83
48-59 months	89.5	83
Mother's education		
None	(77.0)	30
Primary	(86.5)	31
Middle/JSS	89.0	72
Secondary +	(96.0)	34
Wealth index quintile		
Lower 60%	84.7	100
Upper 40%	92.6	65
Total	87.8	166
[1] MICS indicator 6.7 *Figures in parenthesis '()' are based on 25-49 unweighted cases.*		

It is well recognized that a period of rapid brain development occurs in the first 3-4 years of life, and the quality of home care is the major determinant of the child's development during this period. In this context, adult activities with children, presence of books in the home, for the child, and the conditions of care are important indicators of quality of home care. Children should be physically healthy, mentally alert, emotionally secure, socially competent and ready to learn.

Information on a number of activities that support early learning was collected in the survey. These included the involvement of adults with children in the following activities: reading books or looking at picture books, telling stories, singing songs, taking children outside the home, compound or yard, playing with children, and spending time with children naming, counting, or drawing things.

For more than half (57%) of 36-59 month old children, an adult household member engaged in more than four activities that promote learning and school readiness during the 3 days preceding the survey (Table CD.2). The average number of activities that adults engaged with children was 3.5. The table also indicates that the father's involvement in such activities was somewhat limited. For 43 percent of children, the father was engaged in one or more activities and the average number of activities that fathers engaged with children was 1.0. One in three children (34%) of children were living in a household without their fathers.

	Percentage of children aged 36-59 months		Mean number of activities			
Background characteristics	With whom adult household members engaged in four or more activities [1]	With whom the father engaged in one or more activities [2]	Any adult household member engaged with the child	The father engaged with the child	Percentage of children not living with their natural father	Number of children aged 36-59 months
Sex						
Male	53.6	46.3	3.4	1.1	34.4	79
Female	60.7	40.3	3.7	1.0	33.3	87
Age						
36-47 months	62.3	46.0	3.7	1.1	35.0	83
48-59 months	52.3	40.3	3.3	0.9	32.7	83
Wealth index quintile						
Lower 60%	49.5	36.2	3.2	0.8	38.0	100
Upper 40%	69.4	53.8	4.0	1.3	27.4	65
Total	57.3	43.2	3.5	1.0	33.8	166

Table CD.2: Support for learning
Percentage of children age 36-59 months with whom an adult household member engaged in activities that promote learning and school readiness during the last three days, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

[1] MICS indicator 6.1
[2] MICS Indicator 6.2.

Gender differentials in terms of adult engagement in activities with children exist. Generally, more adults engaged in activities with female children (61%), compared to male children (54%). The reverse is true where fathers are concerned – a larger proportion of fathers engaged in activities with male children (46%) than with female children (40%). Strong differentials by socio-economic status are also observed: Adult engagement in activities with children was greater in the richer household (69%), as opposed to those living in the poorer households (50%). Father's involvement showed a similar pattern in terms of adults' engagement in such activities.

Exposure to books in early years not only provides the child with greater understanding of the nature of print, but may also give the child opportunities to see others reading, such as older siblings doing school work. Presence of books is important for later school performance and IQ scores. The mother/caretaker of all children under 5 were asked about number of children's books or picture books they have for the child, household objects or outside objects, and homemade toys or toys that came from a shop that are available at home.

In the five localities, only 16 percent of children age 0-59 months live in households where at least 3 children's books are present (Table CD.3), and children with 10 or more books declines to 3 percent. Gender differentials are also observed, with 18 percent of male children and 14 percent of female children living in households with 3 or more children's books. Twenty-seven percent of children living in the wealthiest households appear to have more access to children's books than those living in the poorest households (9%). The presence of children's books is positively correlated with the child's age; in the homes of 26 percent of children aged 24-59 months, there are 3 or more children's books, while the figure is 2 percent for children aged 0-23 months. Availability of 3 or more children's books also positively correlates with the mother's education – 8 percent for children whose mothers have little or no education, 10 percent for children whose mothers have primary education, 16 percent for children whose mothers have middle/JSS education, and 25 percent for children whose mothers have secondary and above education.

When children for whom there are 10 or more children's books or picture books are taken into account, 6 percent of children living in the wealthier households appear to have more access to 10 or more children's books than those living in the poorer households (1%).

Table CD.3 also shows that half (51%) of children aged 0-59 months had 2 or more playthings to play with in their homes. The playthings in MICS included homemade toys (such as dolls and cars, or other toys made at home), toys that came from a store, and household objects (such as pots and bowls) or objects and materials found outside the home (such as sticks, rocks, animal shells, or leaves). It is interesting to note that 67 percent of children play with toys that come from a store; however, the percentages of children playing with household objects/objects found outside the home is 53 percent, and children playing with homemade toys is 22 percent. The proportion of children who have 2 or more playthings is 48 percent among male children and 54 percent among female children.

54 percent of children from richest households have two or more play things, compared to 48 percent of children from the poorest households. Differences are also observed in relation to a mother's education – 56 percent of children whose mothers have secondary or higher education have 2 or more playthings, while the proportion is 47 percent for children whose mothers have no education.

Table CD.3: Learning materials
Percentage of children under age 5 by numbers of children's books present in the household, and by playthings that child plays with, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Household has for the child:		Child plays with:				
	3 or more children's books [1]	10 or more children's books	Homemade toys	Toys from a shop/ manufactured toys	Household objects/ objects found outside	Two or more types of playthings [2]	Number of children under age 5
Sex							
Male	17.9	3.0	22.4	64.3	50.9	47.6	226
Female	14.0	2.9	21.4	69.6	54.5	53.6	227
Locality							
Bubuashie	16.5	2.2	8.1	78.5	32.5	26.9	64
La	22.2	5.9	28.6	77.9	57.8	57.8	127
James Town	(0.0)	(0.0)	(16.2)	(55.6)	(77.9)	(68.6)	31
Nima	15.0	4.0	23.4	64.6	69.0	62.0	113
Accra New Town	14.0	0.0	22.3	54.1	36.0	40.3	118
Age							
0-23 months	1.7	0.0	17.1	63.4	36.4	39.8	186
24-59 months	25.9	5.0	25.2	69.5	64.1	58.2	267
Education							
None	8.2	2.0	20.3	55.7	55.2	47.0	69
Primary	9.5	1.0	13.7	60.2	50.9	36.9	82
Middle/JSS	16.3	2.1	22.0	65.7	53.6	54.5	191
Secondary +	24.9	6.5	28.8	81.3	50.8	56.4	111
Wealth index quintile							
Lower 60%	8.5	0.8	22.1	60.1	55.3	48.2	268
Upper 40%	26.7	6.1	21.7	77.0	48.9	54.1	185
Total	15.9	3.0	21.9	67.0	52.7	50.6	453

[1] MICS indicator 6.3
[2] MICS indicator 6.4
Figures in parenthesis '()' are based on 25-49 unweighted cases.

Leaving children alone or in the presence of other young children is known to increase the risk of accidents. In MICS, two questions were asked to find out whether children aged 0-59 months were left alone during the week preceding the interview, and whether children were left in the care of other children under 10 years of age.

Table CD.4 shows that 6 percent of children aged 0-59 months were left in the care of other children, while 12 percent were left alone during the week preceding the interview. Combining the two care indicators, it is calculated that 14 percent of children were left with inadequate care during the week preceding the survey, either left alone or in the care of another child. Little differences were observed by the sex of the child. On the other hand, inadequate care was more prevalent among children whose mothers had little or no education (17%), as opposed to children whose mothers had at least secondary education (10%). Children aged 24-59 months were left with inadequate care more (19%), than those aged 0-23 months (8%). Also, children from the poorer households were left with inadequate care more (17%), than those from the richer households (10%).

	Table CD.4: Inadequate care			
	Percentage of children under age 5 left alone or left in the care of other children under the age of 10 years for more than one hour at least once during the past week, MICS in 5 High Densely Populated Localities in Accra, 2010-2011			
	Percentage of children under age 5			
Background characteristics	Left alone in the past week	Left in the care of another child younger than 10 years of age in the past week	Left with inadequate care in the past week [1]	Number of children under age 5
Sex				
Male	12.7	6.7	15.0	226
Female	12.0	4.4	13.7	227
Locality				
Bubuashie	5.0	4.7	6.4	64
La	8.6	5.9	11.8	127
James Town	(31.6)	(16.2)	(31.6)	31
Nima	19.8	5.3	23.4	113
Accra New Town	8.3	3.0	8.3	118
Age				
0-23 months	6.9	4.0	7.7	186
24-59 months	16.2	6.6	19.0	267
Mother's Education				
None	14.3	7.7	16.5	69
Primary	15.9	9.3	17.1	82
Middle/JSS	13.3	4.6	15.0	191
Secondary +	6.9	3.0	9.9	111
Wealth index quintile				
Lower 60%	14.8	7.4	17.4	268
Upper 40%	8.9	2.8	9.9	185
Total	12.4	5.5	14.4	453
[1] MICS indicator 6.5 *Figures in parenthesis '()' are based on 25-49 unweighted cases.*				

EARLY CHILDHOOD DEVELOPMENT

Early child development is defined as an orderly, predictable process along a continuous path, in which a child learns to handle more complicated levels of moving, thinking, speaking, feeling and relating to others. Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development, which is a basis for overall human development.

A 10-item module that has been developed for the MICS programme was used to calculate the Early Child Development Index (ECDI). The indicator is based on some benchmarks that children would be expected to have if they are developing as the majority of children in that age group. The primary purpose of the ECDI is to inform public policy regarding the developmental status of children in Ghana.

Each of the 10 items is used in one of the four domains, to determine if children are developmentally on track in that domain. The domains in question are:

- Literacy-numeracy: Children are identified as being developmentally on track based on whether they can identify/name at least ten letters of the alphabet, whether they can read at least four simple, popular words, and whether they know the name and recognize the symbols of all numbers from 1 to 10. If at least two of these is true, then the child is considered developmentally on track.

- Physical: If the child can pick up a small object with two fingers, like a stick or a rock from the ground and/or the mother/caretaker does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.

- In the social-emotional domain, children are considered to be developmentally on track if two of the following is true: If the child gets along well with other children, if the child does not kick, bite, or hit other children and if the child does not get distracted easily

- Learning: If the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in the learning domain.

ECDI is then calculated as the percentage of children who are developmentally on track in at least three of these four domains.

The results are presented in Table CD.5. In the five localities of Accra, 81 percent of children aged 36-59 months are developmentally on track and little gender differentials are observed. As expected, ECDI is much higher in older age group (86% among 48-59 months old compared to 76% among 36-47 months old), since children mature more skills with increasing age. Also, 86 percent of children attending preschool are developmentally on track, as is observed from Table CD.5. Little differentials are observed in socio-economic quintiles. Children whose mothers have secondary or higher education have a higher ECDI (95%), compared to children whose mothers have little or no education (57%). The analysis of four domains of child development shows that nearly all children are on track in the physical domain, but less on track (65%) in the social-emotional, 72 percent in literacy-numeracy, and 83 percent in the learning domain. In virtually all the domains, higher scores are associated with children living in the richer households, with children attending preschool, older children, and among boys.

Table CD.5: Early child development index

Percentage of children age 36-59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and the early child development index score, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

| Background characteristics | Percentage of children age 36-59 months who are on track | | | | Early child development index score [1] | Number of children age 36-59 months |
	Literacy-numeracy	Physical	Social-Emotional	Learning		
Sex						
Male	73.1	100.0	67.1	82.2	80.3	79
Female	70.0	99.0	63.3	82.9	81.9	87
Age						
36-47 months	60.9	98.9	62.1	79.6	75.9	83
48-59 months	82.1	100.0	68.1	85.6	86.4	83
Preschool attendance						
Attending preschool	80.8	100.0	66.2	86.2	85.9	146
Not attending preschool	*	*	*	*	*	20
Mother's education						
None	(50.2)	(100.0)	(50.3)	(63.9)	(57.2)	30
Primary	(70.5)	(100.0)	(63.9)	(90.6)	(84.0)	31
Middle/JSS	76.2	98.7	64.0	82.8	83.2	72
Secondary +	(81.0)	(100.0)	(81.5)	(91.5)	(95.3)	34
Wealth index quintile						
Lower 60%	67.9	99.1	63.2	83.3	80.8	100
Upper 40%	76.9	100.0	68.0	81.5	81.6	65
Total	71.5	99.5	65.1	82.6	81.1	166

[1] MICS indicator 6.6
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

LITERACY AMONG YOUNG MEN AND WOMEN

One of the World Fit for Children goals is to assure adult literacy. Adult literacy is also an MDG indicator, relating to both men and women. The literacy among the young men and women age 15-24 years is shown in Table ED.1. Literacy was assessed on the ability of women to read a short simple statement or on school attendance. In terms of school attendance, those with secondary or higher education were taken as literate by default. Those with lower than secondary education were made to read the sentences. Examples of a sentence used include "I feel good today" and "It will rain". Table ED.1 indicates that among females age 15-24, 78 percent are literate in the five localities, and that literacy status varies greatly by household wealth: 88 percent of young women from the richer households are literate, compared to 72 percent from the poorer households. Of women who stated that primary school was their highest level of education, only 46 percent were actually able to read the statement shown to them. Also, younger women (15-19 years) are more literate (82%), compared to women age 20-24 years (74%). The literacy level among the men was slightly higher than it is for the women. Overall, 86 percent of the men were literate compared to the 78 percent recorded for the women. The literacy by education, age and wealth index follows the same trend as that of the women.

Table ED.1: Literacy among young men and women				
Percentage of men and women age 15-24 years who are literate, MICS in 5 High Densely Populated Localities in Accra, 2010-2011				
	Men		Women	
Background characteristics	Percentage literate [1]	Number of men age 15-24 years	Percentage literate [1]	Number of women age 15-24 years
Education				
None	*	5	(15.2)	28
Primary	*	17	30.5	54
Middle/JSS	85.4	63	78.2	151
Secondary +	100.0	109	100.0	192
Age				
15-19	89.0	83	81.8	203
20-24	84.3	113	74.3	221
Wealth index quintile				
Lower 60%	80.5	130	71.9	267
Upper 40%	97.9	65	88.1	157
Total	86.3	195	77.9	424
[1] MICS indicator 7.1; MDG indicator 2.3 *An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.*				

SCHOOL READINESS

Attendance to pre-school education in an organised learning or child education programme is important for the readiness of children to school. Table ED.2 shows the proportion of children in the first grade of primary school who attended pre-school the previous year. Overall, 90 percent of children who are currently attending the first grade of primary school were attending pre-school the previous year. The proportion among males is slightly higher (92%) than females (88%). Socioeconomic status appears to have a positive correlation with school readiness – while the indicator is only 87 percent among the poorer households, it increases to 98 percent among those children living in the richer households.

Table ED.2: School readiness Percentage of children attending first grade of primary school who attended pre-school the previous year, MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Background characteristics	Percentage of children attending first grade who attended preschool in previous year [1]	Number of children attending first grade of primary school
Sex		
Male	(92.2)	48
Female	88.3	63
Wealth index quintile		
Lower 60%	87.2	84
Upper 40%	(98.3)	28
Total	90.0	111
[1] MICS indicator 7.2 *An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.*		

PRIMARY AND SECONDARY SCHOOL PARTICIPATION

Universal access to basic education and the achievement of primary education by the world's children is one of the most important goals of the Millennium Development Goals and A World Fit for Children. Education is a vital prerequisite for combating poverty, empowering women, protecting children from hazardous and exploitative labour and sexual exploitation, promoting human rights and democracy, protecting the environment, and influencing population growth.

The indicators for primary and secondary school attendance include:
• Net intake rate in primary education
• Primary school net attendance ratio (adjusted)
• Secondary school net attendance ratio (adjusted)
• Female to male education ratio (or gender parity index - GPI) in primary and secondary school
• The indicators of school progression include:
• Children reaching last grade of primary
• Primary completion rate
• Transition rate to secondary school

Of children who are of primary school entry age 6 in the five localities, 66 percent are attending the first grade of primary school (Table ED.3). Sex differentials exist, with more female (73%) than male (60%) aged 6 years entering grade 1. A positive correlation with the socioeconomic status is observed; in the richer households, the proportion is about 71 percent, while it is 62 percent among children living in the poorer households.

Table ED.3: Primary school entry Percentage of children of primary school entry age entering grade 1 (net intake rate), MICS in 5 High Densely Populated Localities in Accra, 2010-2011		
Background characteristics	Percentage of children of primary school entry age entering grade 1 [1]	Number of children of primary school entry age
Sex		
Male	60.2	56
Female	(73.0)	42
Wealth index quintile		
Lower 60%	61.8	58
Upper 40%	(71.3)	40
Total	65.7	98
[1] MICS indicator 7.3 *Figures in parenthesis '()' are based on 25-49 unweighted cases.*		

Table ED.4 provides the percentage of children of primary school age [6 to 11 years] who are attending primary or secondary school.[18] The majority of children of primary school age are attending school (91%). However, about one in ten children are out of school when they are expected to be participating in school. No differentials are observed by sex, but as expected, primary school attendance is higher for children from the wealthier households (94%) compared to those from the poorer households (89%). The net attendance ratio increases with the age of a child – for example, only 68 percent of the children aged 6 years are attending school, compared to 100 percent for those aged 11 years at the beginning of the school year.

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[18] *Ratios presented in this table are "adjusted" since they include not only primary school attendance, but also secondary school attendance in the numerator.*

Table ED.4: Primary school attendance
Percentage of children of primary school age attending primary or secondary school (Net attendance ratio),
MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Male Net attendance ratio (adjusted) [1]	Number of children	Female Net attendance ratio (adjusted) [1]	Number of children	Total Net attendance ratio (adjusted) [1]	Number of children
Locality						
Bubuashie	(93.8)	26	(92.5)	41	93.0	68
La	86.4	96	89.1	86	87.7	181
James Town	(94.6)	25	*	13	(89.6)	38
Nima	90.4	70	94.7	89	92.8	159
Accra New Town	93.0	80	90.9	73	92.0	153
Age at beginning of school year						
6	63.9	56	(73.0)	42	67.8	98
7	91.6	54	92.3	54	92.0	108
8	(95.5)	37	87.9	54	91.0	91
9	(98.1)	43	(96.4)	49	97.2	93
10	98.2	65	95.1	52	96.8	117
11	(100.0)	42	100.0	50	100.0	92
Mother's education						
None	96.4	59	88.1	61	92.2	120
Primary	85.8	54	95.8	54	90.8	108
Middle/JSS	88.3	124	89.1	133	88.7	257
Secondary +	93.3	59	95.5	54	94.4	113
Wealth index quintile						
Lower 60%	88.0	190	90.3	190	89.1	380
Upper 40%	95.0	107	92.8	112	93.9	219
Total	90.5	297	91.2	302	90.9	599

[1] MICS indicator 7.4; MDG indicator 2.1
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

The secondary school net attendance rate is presented in Table ED.5.[19] More dramatic than in primary school where about 10 percent of the children are not attending school at all, is the fact that only two out of three children of secondary school age are attending secondary school. Of the remaining 35 percent, some of them are either out of school or attending primary school.   Overall, boys of secondary school age are more likely to attend secondary school (67%), compared to girls (62%). As in the case of primary school attendance, the secondary school attendance also increases with increasing household wealth index.

Table ED.5: Secondary school attendance

Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio), and percentage of children attending primary school, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Back-ground character-istics	Male Net attendance ratio (adjusted) [1]	Percent attending primary school	Number of children	Female Net attendance ratio (adjusted) [1]	Percent attending primary school	Number of children	Total Net attendance ratio (adjusted) [1]	Percent attending primary school	Number of children
Locality									
Bubuashie	(65.9)	(24.7)	31	(48.9)	(29.7)	40	56.2	27.5	71
La	64.4	19.5	64	75.5	14.0	76	70.4	16.5	140
James Town	*	*	17	*	*	21	65.1	17.2	38
Nima	65.2	19.1	78	52.5	29.1	76	58.9	24.0	154
Accra New Town	69.2	17.6	82	66.5	21.4	95	67.7	19.6	177
Age at beginning of school year									
12	(39.5)	(60.5)	39	40.6	51.3	57	40.2	55.0	96
13	(70.8)	(28.3)	39	60.2	38.2	57	64.5	34.1	95
14	(65.6)	(24.8)	48	70.4	17.3	52	68.1	20.9	100
15	(87.9)	(5.5)	37	(61.7)	(16.8)	49	73.0	12.0	86
16	78.2	4.1	50	(73.4)	(3.2)	45	75.9	3.7	95
17	63.2	0.0	59	(69.3)	(1.1)	48	66.0	0.5	107
Mother's education									
None	(59.6)	(33.5)	48	52.3	36.6	61	55.5	35.3	109
Primary	(79.1)	(20.9)	33	(60.3)	(30.8)	44	68.4	26.6	77
Middle/JSS	76.0	19.1	87	72.1	17.3	95	74.0	18.2	183
Secondary +	*	*	24	(67.2)	(28.2)	37	66.2	28.2	61
Wealth index quintile									
Lower 60%	64.6	18.6	179	57.7	27.3	203	60.9	23.2	382
Upper 40%	73.0	18.7	93	69.9	14.1	105	71.3	16.3	198
Total	67.4	18.6	272	61.8	22.8	308	64.5	20.9	580

[1] MICS indicator 7.5
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

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[19] Ratios presented in this table are "adjusted" since they include not only secondary school attendance, but also attendance to higher levels in the numerator.

The percentage distribution of children of secondary school age (14–17 years) attending primary school by selected characteristics in the five localities is also presented in Table ED.5. One in five (21%) of the children of secondary school age are attending primary school when they should be attending secondary school while the remaining 14 percent are not attending school at all. The proportion of secondary school age children attending primary school declines with increase in child's age. Similarly, the proportion declines with increase in the mother's education. The differentials by sex of the child show that, a higher proportion of female children in the secondary school age are attending primary school than male children, 23 percent compared to 19 percent.

The percentage of children entering first grade who eventually reach the last grade of primary school is presented in Table ED.6. Of all children starting grade one, the majority of them (98%) will eventually reach the last grade. Notice that this number includes children that repeat grades and that eventually move up to reach last grade.

Table ED.6: Children reaching last grade of primary school Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school), MICS in 5 High Densely Populated Localities in Accra, 2010-2011						
Background characteristics	Percent attending grade 1 last year who are in grade 2 this year	Percent attending grade 2 last year who are attending grade 3 this year	Percent attending grade 3 last year who are attending grade 4 this year	Percent attending grade 4 last year who are attending grade 5 this year	Percent attending grade 5 last year who are attending grade 6 this year	Percent who reach grade 6 of those who enter grade 1 [1]
Sex						
Male	100.0	100.0	99.3	98.9	100.0	98.2
Female	100.0	100.0	97.5	100.0	100.0	97.5
Wealth index quintile						
Lower 60%	100.0	100.0	99.4	100.0	100.0	99.4
Upper 40%	100.0	100.0	96.8	98.6	100.0	95.5
Total	100.0	100.0	98.4	99.4	100.0	97.9
[1] MICS indicator 7.6; MDG indicator 2.2						

The primary school completion rate and transition rate to secondary education are presented in Table ED.7. The primary completion rate is the ratio of the total number of students, regardless of age, entering the last grade of primary school for the first time, to the number of children of the primary graduation age at the beginning of the current (or most recent) school year. At the moment of the survey, the primary school completion rate is 144 percent. The primary school completion rate can have values above 100 percent (as in the case of the 5 localities), and this is a symptom of late entry, grade repetition, or of an enrollment push at some point in the past, as a consequence of the free primary education in Ghana. Also, 96 percent of the children that completed successfully the last grade of primary school were found at the moment of the survey, to have transitioned to secondary schools.

Table ED.7: Primary school completion and transition to secondary school				
Primary school completion rates and transition rate to secondary school, MICS in 5 High Densely Populated Localities in Accra, 2010-2011				
Background characteristics	Primary school completion rate [1]	Number of children of primary school completion age	Transition rate to secondary school [2]	Number of children who were in the last grade of primary school the previous year
Sex				
Male	(142.7)	42	96.1	50
Female	145.0	50	96.2	53
Wealth index quintile				
Lower 60%	146.2	57	99.0	60
Upper 40%	(140.4)	35	(92.2)	44
Total	144.0	92	96.1	103
[1] MICS indicator 7.7				
[2] MICS indicator 7.8				
Figures in parenthesis '()' are based on 25-49 unweighted cases.				

The ratio of girls to boys attending primary and secondary education is provided in Table ED.8. These ratios are better known as the Gender Parity Index (GPI). Notice that the rate included here are obtained from net attendance rate rather than gross attendance ratios. The last rates provide an erroneous description of the GPI mainly because in most of the cases the majority of over-aged children attending primary education tend to be boys. The table shows that gender parity for primary school is 1.01, indicating no difference in the attendance of girls and boys to primary school. However, the indicator drops to 0.92 for secondary education. The disadvantage of girls is particularly pronounced among children living in the poorer households (0.89), compared to those in the richer households (0.96).

Table ED.8: Education gender parity						
Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, MICS in 5 High Densely Populated Localities in Accra, 2010-2011						
Background characteristics	Primary school adjusted net attendance ratio (NAR), girls	Primary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school adjusted NAR [1]	Secondary school adjusted net attendance ratio (NAR), girls	Secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school adjusted NAR [2]
Locality						
Bubuashie	92.5	93.8	0.99	48.9	65.9	0.74
La	89.1	86.4	1.03	75.5	64.4	1.17
James Town	79.7	94.6	0.84	50.0	83.6	0.60
Nima	94.7	90.4	1.05	52.5	65.2	0.81
Accra New Town	90.9	93.0	0.98	66.5	69.2	0.96
Mother's education						
None	88.1	96.4	0.91	52.3	59.6	0.88
Primary	95.8	85.8	1.12	60.3	79.1	0.76
Middle/JSS	89.1	88.3	1.01	72.1	76.0	0.95
Secondary +	95.5	93.3	1.02	67.2	64.6	1.04
Wealth index quintile						
Lower 60%	90.3	88.0	1.03	57.7	64.6	0.89
Upper 40%	92.8	95.0	0.98	69.9	73.0	0.96
Total	91.2	90.5	1.01	61.8	67.4	0.92
[1] MICS indicator 7.9; MDG indicator 3.1						
[2] MICS indicator 7.10; MDG indicator 3.1						

BIRTH REGISTRATION

The International Convention on the Rights of the Child states that every child has the right to a name and a nationality and the right to protection from being deprived of his or her identity. Birth registration is a fundamental means of securing these rights for children. The World Fit for Children states the goal to develop systems to ensure the registration of every child at or shortly after birth, and fulfil his or her right to acquire a name and a nationality, in accordance with national laws and relevant international instruments. The indicator is the percentage of children under 5 years of age whose birth is registered.

In Ghana, the Registration of Births and Deaths Act (301) of 1965 made birth registration compulsory and mandated the Births and Death Registry to undertake all registrations. Despite significant progress made by Government with support from stakeholders including UNICEF, there are still many children whose births are not registered every year. Children from poor families and those in rural areas are least likely to have a birth certificate. With UNICEF's focus on equity as a strategy in meeting MDGs, and renewed Government commitment in ensuring that, at least 90 percent of births are registered at birth by 2013, the stakes are high that the target set are attainable.

According to the Survey, the births of 80 percent of children under five years in the five localities have been registered (Table CP.1). Eighty three percent of children in the richer households have their births registered, compared to 78 percent from the poorer households. Birth registration increases with age – while birth registration is fully subsidized for children below 12 months, only 61 percent of children in this age group were registered. This increases to 79 percent for children 12-23 months and to 87 percent for children 48-59 months. This means that some parents are still not taking advantage of free registration, and are registering their children after the age of 12 months. Variations in birth registration is also seen by sex, where 82 percent of female children have their birth registered, compared to 77 percent for males. Also, for children whose births are registered, 76 percent have birth certificates, where 37 percent of the certificates were seen, and 40 percent of the certificates were not seen. For 20 percent of children whose births are not registered, 81 percent of the mothers know how to register the birth.

Table CP.1: Birth registration
Percentage of children under age 5 by whether birth is registered and percentage of children not registered whose mothers/
caretakers know how to register birth, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Children under age 5 birth registered with civil authorities					Children under age 5 whose birth is not registered	
	Has birth certificate						
	Seen	Not seen	No birth certificate	Total registered [1]	Number of children	Percent of children whose mother/ caretaker knows how to register birth	Number of children without birth registration
Sex							
Male	29.1	44.4	3.8	77.3	226	81.5	51
Female	44.4	34.6	2.9	81.9	227	(79.5)	41
Age							
0-11 months	22.8	32.1	5.9	60.8	103	(87.0)	41
12-23 months	36.6	40.8	1.2	78.6	83	*	18
24-35 months	43.4	41.6	0.9	85.9	101	*	14
36-47 months	43.8	43.8	2.0	89.6	83	*	9
48-59 months	39.3	40.4	6.8	86.5	83	*	11
Mother's education							
None	44.5	25.9	7.8	78.2	69	*	15
Primary	39.1	33.5	2.3	74.9	82	*	20
Middle/JSS	34.3	42.2	3.1	79.6	191	(79.9)	39
Secondary +	34.4	47.8	1.8	84.0	111	*	18
Wealth index quintile							
Lower 60%	38.8	35.4	3.4	77.6	268	77.9	60
Upper 40%	33.9	45.4	3.3	82.6	185	(85.6)	32
Total	36.8	39.5	3.4	79.6	453	80.6	92

[1] MICS indicator 8.1
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

CHILD LABOUR

Article 32 of the Convention on the Rights of the Child states: "States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development..." The World Fit for Children mentions nine strategies to combat child labour and the MDGs call for the protection of children against exploitation. In the MICS questionnaire, a number of questions addressed the issue of child labour, that is, children 5-14 years of age involved in labour activities. A child is considered to be involved in child labour activities at the moment of the survey if during the week preceding the survey:

- Ages 5-11: at least one hour of economic work or 28 hours of domestic work per week.
- Ages 12-14: at least 14 hours of economic work or 28 hours of domestic work per week.

This definition allows differentiation between child labour and child work to identify the type of work that should be eliminated. As such, the estimate provided here is a minimum of the prevalence of child labour since some children may be involved in hazardous labour activities for a number of hours that could be less than the numbers specified in the criteria explained above. Table CP.2 presents the results of child labour by the type of work. Percentages do not add up to the total child labour as children may be involved in more than one type of work. In the five localities, nearly half (46%) of the children are involved in child labour activities. The incidence is much higher where children are not in school (57%) compared to those participating in school (45%). A similar negative association is observed between prevalence of child labour and household wealth index (38% for children in the poorer households, and 31% for those in the richer households). Also, child labour appears higher for the children 5-11 years (46%), compared to children 12-14 years (10%).

Table CP.2: Child labour

Percentage of children by involvement in economic activity and household chores during the past week, according to age groups, and percentage of children age 5-14 involved in child labour, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of children age 5-11 involved in								Percentage of children age 12-14 involved in											
	Economic activity								Economic activity										
	Working outside household		Working for family business	Economic activity for at least one hour	Household chores less than 28 hours	Household chores for 28 hours or more	Child labour	Number of children age 5-11	Working outside household		Working for family busines	Economic activity less than 14 hours	Economic activity for 14 hours or more	House-hold chores less than 28 hours	House-hold chores for 28 hours or more	Child labour	Number of children age 12-14	Total child labour [1]	Number of children age 5-14 years
	Paid work	Unpaid work							Paid work	Unpaid work									
Sex																			
Male	2.0	21.6	27.4	43.1	45.0	0.9	43.6	363	1.3	29.5	60.6	65.7	5.3	73.9	1.7	5.8	118	34.4	481
Female	2.4	20.1	34.5	47.8	60.2	0.6	47.8	355	1.6	18.6	79.7	70.5	11.3	85.3	3.6	12.8	174	36.3	529
Locality																			
Bubuashie	3.4	40.1	32.7	59.5	61.7	0.0	59.5	82	1.5	41.2	74.0	79.5	6.3	93.4	0.0	6.3	31	45.0	112
La	0.2	25.8	28.9	46.0	57.2	0.4	46.0	212	4.7	27.6	72.6	65.8	11.8	89.8	2.4	13.0	71	37.7	283
James Town	1.7	25.5	40.3	51.7	57.8	6.6	55.6	47	0.0	20.7	61.2	49.3	11.9	78.8	0.0	11.9	15	44.8	62
Nima	2.8	9.8	35.7	45.8	52.4	0.0	45.8	190	0.5	7.3	76.1	68.7	9.4	74.4	5.0	9.4	86	34.5	276
Accra New Town	3.4	17.0	25.3	36.8	42.0	0.6	36.8	188	0.0	28.6	68.7	70.0	6.5	75.4	2.6	9.1	89	27.9	277
School participation																			
Yes	2.3	20.5	30.8	45.1	53.0	0.7	45.3	695	1.1	23.5	72.0	69.6	8.0	80.9	2.9	9.1	286	34.8	981
No	*	*	*	*	*	*	*	23	*	*	*	*	*	*	*	*	6	(56.0)	29
Mother's education																			
None	4.8	17.1	28.9	44.1	48.3	0.8	44.1	147	1.9	18.5	76.0	71.8	10.2	72.2	6.5	11.2	79	32.6	225
Primary	3.5	33.1	37.3	59.1	53.4	2.0	60.4	135	0.0	27.8	78.8	66.7	14.9	87.9	1.2	16.1	50	48.5	185
Middle/JSS	0.9	18.1	32.4	44.3	53.5	0.4	44.3	300	2.4	21.3	71.6	68.2	6.6	79.9	2.3	8.1	116	34.2	416
Secondary +	1.0	18.7	23.6	35.9	53.8	0.0	35.9	135	0.0	29.1	59.4	65.6	5.9	89.7	0.0	5.9	46	28.3	181
Wealth index quintile																			
Lower 60%	3.3	23.9	33.0	49.3	52.0	1.0	49.7	448	2.0	21.8	78.8	74.6	8.7	82.7	3.6	9.6	191	37.7	640
Upper 40%	0.3	15.9	27.4	39.0	53.4	0.3	39.0	269	0.4	25.4	59.1	57.0	9.3	76.9	1.4	10.7	101	31.3	370
Total	2.2	20.9	30.9	45.5	52.5	0.7	45.7	718	1.5	23.0	72.0	68.5	8.9	80.7	2.9	10.0	292	35.4	1,010

[1] MICS indicator 8.2

An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis () are based on 25-49 unweighted cases.

Table CP.3 presents the percentage of children classified as student labourers or as labourer students by selected characteristics in the five localities in Accra. Student labourers are children attending school but at the same time also involved in child labour activities at the time of the surveys. More specifically, of the 97 percent of the children aged 5-14 years attending school, 35 percent are also involved in child labour activities. On the other hand, 96 percent of children classified as child labourers are reportedly attending school. No differentials were noticed between the boys and girls.

Table CP.3: Child labour and school attendance
Percentage of children age 5-14 years involved in child labour who are attending school, and percentage of children age 5-14 years attending school who are involved in child labour,MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of children involved in child labour	Percentage of children attending school	Number of children age 5-14 years	Percentage of child labourers who are attending school [1]	Number of children age 5-14 years involved in child labour	Percentage of children attending school who are involved in child labour [2]	Number of children age 5-14 years attending school
Sex							
Male	34.4	97.8	481	96.4	165	33.9	470
Female	36.3	96.6	529	94.7	192	35.6	511
Locality							
Bubuashie	45.0	98.4	112	97.8	50	44.7	111
La	37.7	96.0	283	95.4	107	37.5	272
James Town	44.8	96.0	62	100.0	28	46.6	60
Nima	34.5	96.2	276	91.4	95	32.7	265
Accra New Town	27.9	99.0	277	97.5	77	27.5	274
Age							
5-11 years	45.7	96.9	718	96.1	328	45.3	695
12-14 years	10.0	97.8	292	89.0	29	9.1	286
Mother's education							
None	32.6	95.9	225	94.9	73	32.3	216
Primary	48.5	97.5	185	96.2	90	47.8	181
Middle/JSS	34.2	96.4	416	93.7	142	33.2	402
Secondary +	28.3	100.0	181	100.0	51	28.3	181
Wealth index quintile							
Lower 60%	37.7	97.3	640	95.8	241	37.2	622
Upper 40%	31.3	96.9	370	94.8	116	30.6	359
Total	35.4	97.1	1,010	95.5	357	34.8	981
[1] MICS indicator 8.3 [2] MICS indicator 8.4							

CHILD DISCIPLINE

As stated in A World Fit for Children, "children must be protected against any acts of violence …" and the Millennium Declaration calls for the protection of children against abuse, exploitation and violence. In the five localities in Accra, mothers/caretakers of children age 2-14 years were asked a series of questions on the ways parents tend to use to discipline their children when they misbehave. Note that for the child discipline module, one child aged 2-14 per household was selected randomly during fieldwork. Out of these questions, the two indicators used to describe aspects of child discipline are: 1) the number of children 2-14 years that experience psychological aggression as punishment or minor physical punishment or severe physical punishment; and 2) the number of parents/caretakers of children 2-14 years of age that believe that in order to raise their children properly, they need to physically punish them.

Table CP.4: Child discipline
Percentage of children age 2-14 years according to method of disciplining the child, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of children age 2-14 years who experienced:					Number of children age 2-14 years	Respondent believes that the child needs to be physically punished	Number of respondents to the child discipline module
	Only non-violent discipline	Psychological aggression	Physical punishment		Any psy-chological or physical-discipline method [1]			
			Any	Severe				
Sex								
Male	2.2	87.9	82.9	14.6	97.0	569	68.0	311
Female	5.1	88.7	74.7	12.6	92.7	729	61.6	392
Locality								
Bubuashie	6.9	81.0	75.7	16.6	92.9	154	53.4	83
La	2.6	90.1	80.9	13.6	94.9	360	70.7	212
James Town	(0.0)	(99.2)	(86.0)	(27.0)	(99.2)	(80)	(59.3)	48
Nima	3.2	87.3	76.4	14.0	95.6	356	56.0	190
Accra New Town	5.4	88.3	76.8	8.3	92.9	348	72.9	170
Age								
2-4 years	1.5	89.3	83.8	13.8	93.2	263	60.7	153
5-9 years	2.4	91.1	84.3	16.1	97.1	504	68.0	269
10-14 years	6.3	85.3	69.7	10.7	93.0	530	63.1	280
Wealth index quintile								
Lower 60%	3.2	90.7	80.0	14.9	96.3	808	65.9	438
Upper 40%	4.9	84.5	75.3	11.1	91.8	489	62.0	265
Total	3.8	88.3	78.3	13.5	94.6	1,297	64.4	703

[1] MICS indicator 8.5
Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table CP.4 shows that in the five localities, 95 percent of children age 2-14 years were subjected to at least one form of psychological or physical punishment by household members during the one month preceding the survey. The preferred modes of punishing children in these localities include minor physical punishment (78%), severe physical punishment (14%), and to a large extent, psychological punishment (88%).

Only 4 percent of children received only non-violent discipline. The differentials by selected characteristics did not reflect any consistent pattern. Nearly two out of three (64%) mothers/caretaker believe that a child needs to be physically punished to bring them up properly.

This proportion is higher in case of male children (68%) compared with female children (62%). Also, 66 percent of mothers/caretaker from the poorer households believes that a child needs to be physically punished, compared to 62 percent of those from the richer households.

EARLY MARRIAGE AND POLYGYMY

Marriage before the age of 18 is a reality for many young girls. According to UNICEF's worldwide estimates, over 64 million women age 20-24 were married/in union before the age of 18. Factors that influence child marriage rates include: the state of the country's civil registration system, which provides proof of age for children; the existence of an adequate legislative framework with an accompanying enforcement mechanism to address cases of child marriage; and the existence of customary or religious laws that condone the practice.

In many parts of the world parents encourage the marriage of their daughters while they are still children in hopes that the marriage will benefit them both financially and socially, while also relieving financial burdens on the family. In actual fact, child marriage is a violation of human rights, compromising the development of girls and often resulting in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered nature of poverty. The right to 'free and full' consent to a marriage is recognized in the Universal Declaration of Human Rights - with the recognition that consent cannot be 'free and full' when one of the parties involved is not sufficiently mature to make an informed decision about a life partner.

The Convention on the Elimination of all Forms of Discrimination against Women mentions the right to protection from child marriage in article 16, which states: "The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage..." While marriage is not considered directly in the Convention on the Rights of the Child, child marriage is linked to other rights - such as the right to express their views freely, the right to protection from all forms of abuse, and the right to be protected from harmful traditional practices - and is frequently addressed by the Committee on the Rights of the Child. Other international agreements related to child marriage are the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages and the African Charter on the Rights and Welfare of the Child and the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa. Child marriage was also identified by the Pan-African Forum against the Sexual Exploitation of Children as a type of commercial sexual exploitation of children.

Young married girls are a unique, though often invisible, group. Required to perform heavy amounts of domestic work, under pressure to demonstrate fertility, and responsible for raising children while still children themselves, married girls and child mothers face constrained decision-making and reduced life choices. Boys are also affected by child marriage but the issue impacts girls in far larger numbers and with more intensity. Cohabitation - when a couple lives together as if married - raises the same human rights concerns as marriage. Where a girl lives with a man and takes on the role of caregiver for him, the assumption is often that she has become an adult woman, even if she has not yet reached the age of 18. Additional concerns due to the informality of the relationship - for example, inheritance, citizenship and social recognition - might make girls in informal unions vulnerable in different ways than those who are in formally recognized marriages.

Research suggests that many factors interact to place a child at risk of marriage. Poverty, protection of girls, family honour and the provision of stability during unstable social periods are considered as significant factors in determining a girl's risk of becoming married while still a child. Women who married at younger ages were more likely to believe that it is sometimes acceptable for a husband to beat his wife and were more likely to experience domestic violence themselves. The age gap between partners is thought to contribute to these abusive power dynamics and to increase the risk of untimely widowhood. Closely related to the issue of child marriage is the age at which girls become sexually active. Women who are married before the age of 18 tend to have more children than those who marry later in life.

Pregnancy related deaths are known to be a leading cause of mortality for both married and unmarried girls between the ages of 15 and 19, particularly among the youngest of this cohort. There is evidence to suggest that girls who marry at young ages are more likely to marry older men which puts them at increased risk of HIV infection. Parents seek to marry off their girls to protect their honour, and men often seek younger women as wives as a means to avoid choosing a wife who might already be infected. The demand for this young wife to reproduce and the power imbalance resulting from the age differential lead to very low condom use among such couples.

Two of the indicators are to estimate the percentage of women married or entered into a marital union before 15 years and 18 years of age. The percentage of women married at various ages is provided in Table CP.5. Examining the percentages married before age 15 and 18 by different age groups allow us to see the trends in early marriage over time.

In the five localities, 2 percent of the women 15-49 were first married or entered a marital union before their 15th birthday. Also, 3 percent and 13 percent of women 20-49 years were married or entered a marital union before their 15th and 18th birthday respectively. Marriage/union before the age of 15 and 18 years is more common for women aged 30 years and above, compared to younger women. Early marriage/union is also strongly related to the level of education – it is more common for those with little or no education, as compared to those with middle/JSS or higher education. The data also reveals that about 2 percent of young women age 15-19 years is currently married.

The percentage of women in a polygynous union is also provided in Table CP.5. 12 percent of women aged 15-49 years are in polygynous marriage/union. More women from the poorer households (15 percent) are in polygynous marriages/union, compared to those in the richer households (9 percent). Also, more women with little or no education are in polygynous marriage/union compared to those with secondary or higher education.

Table CP.5: Early marriage and polygyny

Percentage of women age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women age 15-19 years currently married or in union, and the percentage of women currently married or in union who are in a polygynous marriage or union, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of women 15-49 years married before age 15 [1]	Number of women age 15-49 years	Percentage of women 20-49 years married before age 15	Percentage of women 20-49 years married before age 18 [2]	Number of women age 20-49 years	Percentage of women 15-19 years currently married/in union [3]	Number of women age 15-19 years	Percentage of women age 15-49 years in polygynous marriage/union [4]	Number of women age 15-49 years currently married/in union
Locality									
Bubuashie	2.1	161	2.5	12.5	135	(3.4)	26	11.7	81
La	1.6	364	1.8	12.6	320	(3.8)	44	14.0	173
James Town	11.7	60	(11.3)	(29.4)	47	*	13	(23.8)	39
Nima	4.2	330	5.1	15.1	271	0.0	59	11.3	132
Accra New Town	0.3	379	0.3	9.7	318	0.0	61	8.2	138
Age									
15-19	0.9	203	na.	na.	0	2.1	203	*	4
20-24	1.3	221	1.3	6.4	221	na	0	(11.3)	38
25-29	1.6	248	1.6	4.4	248	na	0	5.9	102
30-34	3.8	200	3.8	15.4	200	na	0	6.0	133
35-39	3.5	194	3.5	17.5	194	na	0	18.9	138
40-44	3.3	127	3.3	22.4	127	na	0	18.8	85
45-49	4.0	102	4.0	24.1	102	na	0	14.5	62
Education									
None	6.8	138	7.5	24.1	125	*	13	19.5	82
Primary	4.0	205	4.6	25.4	181	*	24		
Middle/JSS	2.1	515	2.1	11.6	435	5.4	80	11.1	244
Secondary +	0.6	435	0.8	4.5	349	0.0	86	7 .9	133
Wealth index quintile									
Lower 60%	3.5	778	3.9	16.8	649	1.4	130	14.6	316
Upper 40%	0.8	516	0.9	7.6	442	3.5	74	9.4	247
Total	2.4	1,294	2.7	13.1	1,091	2.1	203	12.3	564

[1] MICS indicator 8.6
[2] MICS indicator 8.7
[3] MICS indicator 8.8
[4] MICS indicator 8.9

An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

FEMALE GENITAL MUTILATION/CUTTING

Female genital mutilation/cutting (FGM/C) is the partial or total removal of the female external genitalia or other injury to the female genital organs. FGM/C is always traumatic with immediate complications including excruciating pain, shock, urine retention, ulceration of the genitals and injury to adjacent tissue. Other complications include septicaemia, infertility, obstructed labour, and even death. The procedure is generally carried out on girls between the ages of 4 and 14; it is also done to infants, women who are about to be married and, sometimes, to women who are pregnant with their first child or who have just given birth. It is often performed by traditional practitioners, including midwives and barbers, without anaesthesia, using scissors, razor blades or broken glass.

FGM/C is a fundamental violation of human rights, and it has been illegal in Ghana since 1994. In the absence of any perceived medical necessity, it subjects girls and women to health risks and has life-threatening consequences. Among those rights violated are the rights to the highest attainable standard of health and to bodily integrity. Furthermore, it could be argued that girls (under 18) cannot be said to give informed consent to such a potentially damaging practice as FGM/C.

Although all forms of FGM are illegal in Ghana, FGM still persist. The practice was still widespread in the north partly because there have been only a handful of prosecutions in the decade since the law was introduced and also because the practise as a rite of passage to womanhood, is undertaken for girls between 15 and 19 years old. In 2007, the criminal Code, 1960 (ACT 29) was amended not only for those who performed the operation, but including those who request, incite or promote it and all face imprisonment and/or fines.

In Ghana, FGM is highest in the three Northern Regions- Upper East, Upper West and Northern) ethnic groups including the Kusasis; Frafras; Kassenas; Nankan's Busangas; Wallas; Dagarbas; Builsas and Sisalas practise it. Some ethnic groups in the Brong Ahafo and Volta Region also practice FGM. Due to migration, the practice occurs also in urban slums in Southern Ghana where the various ethnic groups of Northern extraction and other African countries like Burkinabe, Nigeriens, etc. live and have carried their customs with them.

With the passage of FGM bill, the practice is higher among older women than young girls. According to the 2007/8 District MICS survey, FGM is highest in the Upper West region where one in every two women have had an FGM. Upper East has 20 percent of women who have experienced the practice while it is about 5 percent in the Northern Region.

Table CP.6 presents the prevalence of FGM/C among women and the type and extent of the procedure. The table shows in the five localities, only 2 percent of women aged 15-49 had some form of female genital mutilation. The percentages declined from 9 percent for women with little or no education to about 1 percent for women with secondary education and above. The practice appears more common for women aged 45-49 years (5%) compared to women of other age groups. The practice is also more common in the Nima locality, where 5 percent of women had some form of female genital mutilation. Less than 2 percent of women in Bubuashie locality also had FGM/C. The practice is not common in the other three localities, where almost all women 15-49 years had not experienced it.

Table CP.6: Female genital mutilation/cutting (FGM/C) among women Percent distribution of women age 15-49 years by FGM/C status, MICS in 5 High Densely Populated Localities in Accra, 2010-2011								
	Percent distribution of women age 15-49 years:						Percentage who had any form of FGM/C [1]	Number of women aged 15-49 years
		Who had FGM/C						
Background character-istics	No FGM/C	Had flesh removed	Were nicked	Were sewn closed	Form of FGM/C not determined	Total		
Locality								
Bubuashie	98.5	0.8	0.0	0.0	0.7	100.0	1.5	161
La	99.7	0.3	0.0	0.0	0.0	100.0	0.3	364
James Town	100.0	0.0	0.0	0.0	0.0	100.0	0.0	60
Nima	94.8	4.1	0.1	0.4	0.6	100.0	5.2	330
Accra New Town	100.0	0.0	0.0	0.0	0.0	100.0	0.0	379
Age								
15-19	98.3	0.4	0.0	0.7	0.7	100.0	1.7	203
20-24	99.6	0.4	0.0	0.0	0.0	100.0	0.4	221
25-29	98.9	1.1	0.0	0.0	0.0	100.0	1.1	248
30-34	99.5	0.5	0.0	0.0	0.0	100.0	0.5	200
35-39	97.5	2.3	0.2	0.0	0.0	100.0	2.5	194
40-44	97.8	1.3	0.0	0.0	0.9	100.0	2.2	127
45-49	95.2	4.2	0.0	0.0	0.6	100.0	4.8	102
Education								
None	90.9	7.4	0.3	1.0	0.5	100.0	9.1	138
Primary	100.0	0.0	0.0	0.0	0.0	100.0	0.0	205
Middle/JSS	99.0	0.8	0.0	0.0	0.2	100.0	1.0	515
Secondary +	99.4	0.3	0.0	0.0	0.3	100.0	0.6	435
Wealth index quintile								
Lower 60%	98.2	1.7	0.0	0.0	0.1	100.0	1.8	778
Upper 40%	98.7	0.5	0.0	0.3	0.5	100.0	1.3	516
Total	98.4	1.2	0.0	0.1	0.2	100.0	1.6	1,294
[1] MICS indicator 8.12								

During the Urban MICS survey, mothers in the five localities were asked if any of their daughters aged 0-14 years had had FGM/C. Overall, virtually all women reported that none of their living daughters had undergone FGM/C (data not shown). This is consistent with women's attitudes towards FGM/C, as presented in Table CP.7. Regarding opinion as to whether the practice should be continued or discontinued, a large majority of women (96%) thought it should be discontinued, 1 percent proposed it should be continued, while 2 percent indicated that it depended on the situation. Little variations are observed by background characteristics.

Table CP.7: Approval of female genital mutilation/cutting (FGM/C)
Percentage of women age 15-49 years who have heard of FGM/C, and percent distribution of women according to attitudes towards whether the practice of FGM/C should be continued, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background character-istics	Percentage of women who have heard of FGM/C	Number of women aged 15-49 years	Percent distribution of women who believe the practice of FGM/C should be:					Number of women age 15-49 years who have heard of FGM/C
			Continued [1]	Discontinued	Depends	Don't know/ Missing	Total	
Locality								
Bubuashie	87.9	161	0.0	100.0	0.0	0.0	100.0	142
La	87.7	364	0.9	96.8	1.1	1.2	100.0	319
James Town	79.7	60	0.0	87.5	0.0	12.5	100.0	48
Nima	89.5	330	0.0	95.5	2.7	1.7	100.0	295
Accra New Town	76.3	379	1.3	93.8	2.4	2.5	100.0	289
Age								
15-19	87.1	203	0.0	100.0	0.0	0.0	100.0	177
20-24	85.2	221	0.0	96.3	2.1	1.6	100.0	188
25-29	83.9	248	0.0	91.1	3.5	5.4	100.0	208
30-34	80.3	200	0.0	96.1	0.6	3.3	100.0	160
35-39	83.9	194	1.0	96.3	1.8	0.8	100.0	162
40-44	90.4	127	0.0	97.2	1.5	1.3	100.0	115
45-49	80.7	102	2.0	95.6	0.9	1.5	100.0	82
Education								
None	74.2	138	0.0	95.4	3.2	1.4	100.0	102
Primary	73.5	205	0.0	95.8	0.7	3.6	100.0	151
Middle/JSS	82.6	515	0.0	96.1	1.7	2.2	100.0	426
Secondary +	95.2	435	2.4	94.6	1.4	1.6	100.0	414
FGM/C experience								
No FGM/C	84.2	1,273	0.6	95.4	1.7	2.3	100.0	1,072
Had FGM/C	*	21	*	*	*	*	*	21
Wealth index quintile								
Lower 60%	80.2	778	0.0	96.2	1.8	2.0	100.0	624
Upper 40%	91.0	516	1.4	94.7	1.4	2.6	100.0	469
Total	84.5	1,294	0.6	95.6	1.6	2.2	100.0	1,093

[1] MICS indicator 8.11
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed.

ATTITUDES TOWARD DOMESTIC VIOLENCE

A number of questions were asked of women and men age 15-49 years to assess their attitudes towards whether husbands are justified to hit or beat their wives/partners for a variety of scenarios. These questions were asked to have an indication of cultural beliefs that tend to be associated with the prevalence of violence against women by their husbands/partners. The main assumption here is that women that agree with the statements indicating that husbands/partners are justified to beat their wives/partners under the situations described in reality tend to be abused by their own husbands/partners. The responses to these questions can be found in Table CP.8.

Overall, nearly one in every four women (23%) in the five localities indicated that their husband/partner has a right to hit or beat them for at least one of a variety of reasons, including:

- If she goes out without telling him

- If she neglects the children

- If she argues with him

- If she refuses sex with him

- If she burns the food

- For any of these reasons

Women who approve their partner's violence, in most cases agree and justify violence in instances when they neglect the children (15%), or if they demonstrate their autonomy, e.g. go out without telling their husbands (10%) or argue with them (15%). Only 5 percent of women believe that their partner has a right to hit or beat them if they refuse to have sex with him, while 3 percent if they burn the food. Acceptance of domestic violence is more common among the poorer women, where 28 percent of them believe that a husband is justified in beating his wife/partner, compared to 16 percent among women from the richer households. The more educated a women is, the less likely she is to accept domestic violence – (37% for those with little or no education, 28% for those with primary education, 25% for those with middle/JSS and 15% for those with secondary or higher education). Also, formerly married women are more accepting towards domestic violence (29%), compared to those currently married/in union (22%), and those never married (23%).

Locality differentials exist. In the James Town locality, nearly one in two (44%) women aged 15-49 years agree that a husband is justified in beating his wife/partner for any of the given reasons, compared to the other localities: Bubuashie (16%), La (27%), Nima (30%), and Accra New Town (14%).

Interestingly, overall, men are less likely than women to believe that wife beating is justified for any of the individual specified reasons (see Table CP.8A.). Eighteen percent of men agree that it is justifiable to beat their wives/partners for any of the given reasons. Eight percent of men justify domestic violence when their wife/partner goes out without telling them, 10 percent when she neglects the children, 12 percent when she argues with him, 5 percent if she refuses to have sex with him, and 2 percent when she burns the food.

In all instances, men from the poorer households are more likely to accept domestic violence than men from the richer households. For instance, 17 percent of men from the poorer households justify domestic violence when their wife/partner argues with him, compared to 6 percent of men from the richer households. Also, acceptance of domestic violence is also correlated with education (37% for those with no education, 28% with primary education, 25% for those with middle/JSS, and 15% for those with secondary and above education).

Table CP.8: Attitudes toward domestic violence
Percentage of women age 15-49 years who believe a husband is justified in beating his wife/partner in various circumstances, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage who believe husband is justified in beating						Number of women age 15-49 years
	If she goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these reasons [1]	
Locality							
Bubuashie	7.2	13.2	10.1	5.9	3.3	15.7	161
La	9.8	17.3	15.7	5.7	2.6	26.8	364
James Town	25.6	28.7	30.8	13.9	6.3	43.5	60
Nima	14.3	18.2	20.2	6.9	4.0	30.1	330
Accra New Town	6.1	8.4	7.9	2.4	0.5	13.6	379
Age							
15-19	10.3	15.1	13.0	7.4	4.0	25.4	203
20-24	8.1	12.0	14.7	6.7	0.8	21.6	221
25-29	7.6	13.0	15.4	4.8	2.5	22.0	248
30-34	12.3	17.5	15.2	6.5	3.3	24.5	200
35-39	12.6	18.7	16.1	3.5	1.6	24.9	194
40-44	13.1	15.3	11.2	3.6	4.2	20.0	127
45-49	9.5	13.5	15.2	4.3	2.1	23.1	102
Marital/ Union status							
Currently married/in union	11.2	15.7	14.5	5.4	2.4	22.3	564
Formerly married/in union	15.0	19.1	20.7	6.9	5.3	29.1	155
Never married/in union	8.1	13.1	13.0	5.1	2.0	22.5	575
Education							
None	17.7	24.7	26.9	10.7	4.1	37.0	138
Primary	13.6	21.0	20.0	10.7	2.1	28.0	205
Middle/JSS	11.0	15.5	15.7	4.4	3.9	24.6	515
Secondary +	5.5	8.3	6.7	2.5	0.8	14.7	435
Wealth index quintile							
Lower 60%	12.5	18.0	18.7	7.3	2.9	28.3	778
Upper 40%	6.9	10.3	8.4	2.7	2.1	15.5	516
Total	10.3	15.0	14.6	5.4	2.6	23.2	1,294

[1] MICS indicator 8.14

Table CP.8A: Attitudes toward domestic violence
Percentage of men age 15-59 years who believe a husband is justified in beating his wife/partner in various circumstances, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage who believe a husband is justified in beating						Number of men age 15-59 years
	If she goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these reasons[1]	
Locality							
Bubuashie	1.7	2.3	3.1	1.5	0.8	3.8	70
La	8.4	11.6	12.9	6.3	1.7	19.4	185
James Town	21.3	25.6	38.4	2.6	0.0	50.4	30
Nima	7.2	7.7	12.1	5.7	2.1	17.4	146
Accra New Town	7.3	11.5	11.4	3.1	2.8	16.1	176
Age							
15-19	13	21.9	20.1	8.1	7.0	31.6	83
20-24	6.6	12.1	12.3	7.2	2.0	19.7	113
25-29	6.8	10.0	13.7	3.6	0.6	17.6	105
30-34	12.7	5.5	13.4	2.6	0.0	17.5	78
35-39	0.9	3.7	5.1	2.9	0.9	5.8	73
40-44	8.5	12.5	13.2	2.7	2.1	17.3	57
45-49	(9.2)	(9.9)	(12.4)	(6.2)	(3.1)	(18.5)	44
50-54	(0.0)	(4.1)	(11.1)	(0.0)	(0.0)	(11.1)	26
55-59	(6.3)	(1.3)	(1.3)	(1.3)	(0.0)	(6.3)	28
Marital/Union status							
Currently married/in union	7.4	8.3	9.4	2.2	0.8	13.7	247
Formerly married/ in union	(3.2)	(11.3)	(18.2)	(5.3)	(4.2)	(19.3)	29
Never married/in union	8.3	11.6	14.2	6.2	2.6	20.5	332
Education							
None	(6.6)	(5.5)	(21.3)	(5.5)	(6.4)	(22.4)	26
Primary	(9.1)	(14.6)	(19.2)	(6.6)	(7.9)	(25.1)	34
Middle/JSS	12.6	13.3	18.4	5.7	1.7	21.5	233
Secondary +	3.9	7.9	6.5	3.4	1.1	13.7	313
Wealth index quintile							
Lower 60%	9.8	13.0	16.6	5.7	3.0	22.7	370
Upper 40%	4.4	6.0	5.8	2.6	0.3	9.8	237
Total	7.7	10.2	12.4	4.5	1.9	17.7	607

[1] MICS indicator 8.14
Figures in parenthesis '()' are based on 25-49 unweighted cases.

KNOWLEDGE ABOUT HIV TRANSMISSION AND MISCONCEPTIONS ABOUT HIV/AIDS

One of the most important prerequisites for reducing the rate of HIV infection is accurate knowledge of how HIV is transmitted and strategies for preventing transmission. Correct information is the first step toward raising awareness and giving young people the tools to protect themselves from infection. Misconceptions about HIV are common and can confuse young people and hinder prevention efforts. Different regions are likely to have variations in misconceptions although some appear to be universal (for example that sharing food can transmit HIV or mosquito bites can transmit HIV). The UN General Assembly Special Session on HIV/AIDS (UNGASS) called on governments to improve the knowledge and skills of young people to protect themselves from HIV. The indicators to measure this goal as well as the MDG of reducing HIV infections by half include improving the level of knowledge of HIV and its prevention, and changing behaviours to prevent further spread of the disease. The HIV module was administered to women 15-49 years of age.

One indicator which is both an MDG and UNGASS indicator is the percent of young women who have comprehensive and correct knowledge of HIV prevention and transmission. All women who have heard of AIDS were asked whether they knew of the two main ways of HIV transmission – having only one faithful uninfected partner, using a condom every time. The results are presented in Table HA.1. Almost all the interviewed women (99%) have heard of AIDS, but only 69 percent of them know of the two main ways of preventing HIV transmission. While 84 percent of women know "having one faithful uninfected sex partner" as a preventive measure, 76 percent know using a condom every time there is a sexual encounter prevents infection.

Table HA.1 also present the percent of women who can correctly identify misconceptions concerning HIV. The indicator is based on the two most common and relevant misconceptions that HIV can be transmitted by sharing food with someone with HIV/AIDS and mosquito bites. The table also provides information on whether women know that HIV cannot be transmitted by super natural means. About one in two women (53%) aged 15-49, reject the two most common misconceptions and know that a healthy-looking person can be infected. As a standalone indicators however, 89 percent of women know that a healthy-looking person can be infected. About 82 percent and 65 percent respectively know that sharing food with someone with AIDS, and mosquito bites are not means of transmitting the virus.

Women who have comprehensive knowledge about HIV prevention include women who know of the two ways of HIV prevention (having only one faithful uninfected partner and using a condom every time), who know that a healthy looking person can have the AIDS virus, and who reject the two most common misconceptions. Tables HA.1 also present the percentage of women with comprehensive knowledge. Comprehensive knowledge of HIV prevention methods and transmission is still fairly low. Overall, 40 percent of women aged 15-49 are found to have comprehensive knowledge. Further the percentage of women with comprehensive knowledge of HIV/AIDS transmission increases consistently with rise in education. Women with secondary education are almost three times (61%) likely to have comprehensive knowledge of HIV/AIDS transmission than their counterparts with little no education (20%). Also, women from the richer households (49%), as well as women who have never married or in union (44%) have higher comprehensive knowledge than women from the poorer households (33%), and those married/in union (36%).

Results for men age 15-59 years are presented in Table HA.1A All men who have heard of AIDS were asked whether they knew of the two main ways of HIV transmission – having only one faithful uninfected partner, using a condom every time. Almost all the interviewed men (99%) have heard of AIDS, and almost one in four (73%) of them know of the two main ways of preventing HIV transmission. While 89 percent of men know "having one faithful uninfected sex partner" as a preventive measure, 79 percent know using a condom every time there is a sexual encounter prevents infection.

Table HA.1A also present the percent of men who can correctly identify misconceptions concerning HIV. The indicator is based on the two most common and relevant misconceptions that HIV can be transmitted by sharing food with someone with HIV/AIDS and mosquito bites. The table also provides information on whether men know that HIV cannot be transmitted by super natural means. 65 percent of the men aged 15-59, reject the two most common misconceptions and know that a healthy-looking person can be infected. As a standalone indicators however, 90 percent of men know that a healthy-looking person can be infected. About 84 percent and 76 percent respectively know that sharing food with someone with AIDS, and mosquito bites are not means of transmitting the virus. Also, 61 percent of the mean know that HIV cannot be transmitted by supernatural means.

Men who have comprehensive knowledge about HIV prevention include men who know of the two ways of HIV prevention (having only one faithful uninfected partner and using a condom every time), who know that a healthy looking person can have the AIDS virus, and who reject the two most common misconceptions. Tables HA.1A also present the percentage of men with comprehensive knowledge. Comprehensive knowledge of HIV prevention methods and transmission is still fairly low. Overall, 50 percent of men aged 15-49 are found to have comprehensive knowledge. Further the percentage of men with comprehensive knowledge of HIV/AIDS transmission increases consistently with rise in education. Men with secondary education are twice as likely (60%) to have comprehensive knowledge of HIV/AIDS transmission than their counterparts with little no education (30%).

Table HA.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among women

Percentage of women age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

| Background characteristics | Percent who have heard of AIDS | Percentage who know transmission can be prevented by: | | Percentage of women who know both ways | Percentage who know that a healthy looking person can have the AIDS virus | Percentage who know that HIV cannot be transmitted by: | | | Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus | Percentage with comprehensive knowledge [1] | Number of women |
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with AIDS			
Age											
15-24	99.4	81.9	72.5	63.6	87.5	74.0	54.4	84.3	60.7	42.5	424
25-29	100.0	88.7	80.3	75.4	89.7	72.1	41.0	78.8	56.6	47.4	248
30-39	98.9	85.8	78.2	72.5	90.6	56.6	35.7	84.6	47.4	37.4	393
40-49	98.8	81.7	72.6	63.3	90.5	56.3	32.3	75.9	44.1	30.0	229
Marital status											
Ever married/in union	98.9	84.3	75.9	69.1	89.2	59.0	34.5	80.6	47.1	36.1	719
Never married/in union	99.8	84.5	75.6	67.7	89.6	73.0	51.9	83.4	60.2	44.2	575
Education											
None	96.1	75.0	58.7	49.9	82.2	43.2	23.9	69.9	28.8	20.4	138
Primary	98.8	75.5	64.7	53.0	87.5	59.5	26.0	72.3	43.2	25.4	205
Middle/JSS	99.7	84.7	79.1	71.4	88.9	58.2	36.5	81.7	46.2	33.0	515
Secondary +	100.0	91.0	82.5	78.3	93.2	83.2	62.5	90.5	73.2	60.5	435
Wealth index quintile											
Lower 60%	98.9	82.1	72.0	64.2	87.3	61.7	39.5	79.4	47.0	33.4	778
Upper 40%	99.8	87.7	81.4	75.0	92.6	70.5	46.3	85.7	61.8	49.1	516
Total	99.3	84.4	75.8	68.5	89.4	65.2	42.2	81.9	52.9	39.7	1,294

[1] MICS indicator 9.1

Table HA.1A: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among men

Percentage of men age 15-59 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percent who have heard of AIDS	Percentage who know transmission can be prevented by:		Percentage of men who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge [1]	Number of men
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with AIDS			
Age											
15-24	99.0	83.1	78.9	68.5	86.5	75.0	62.4	81.7	58.4	42.7	195
25-29	100.0	94.9	79.6	77.7	90.8	85.2	65.1	86.4	74.8	58.7	105
30-39	99.2	93.1	80.3	78.0	90.8	69.5	60.1	82.3	57.9	49.5	151
40-49	96.0	84.9	75.6	67.7	91.7	78.0	58.4	82.1	68.9	51.9	101
50-59	100.0	90.9	83.0	74.6	100.0	79.1	57.4	97.5	79.1	60.0	54
Marital status											
Ever married/ in union	98.1	90.7	78.7	74.9	93.0	73.5	57.9	85.0	65.3	51.8	275
Never married/in union	99.4	86.9	79.6	71.2	88.2	78.6	63.9	83.4	64.3	48.9	332
Education											
None	(89.9)	(64.1)	(66.3)	(50.9)	(74.8)	(40.3)	(24.4)	(75.6)	(34.8)	(30.2)	26
Primary	(92.5)	(84.8)	(71.0)	(71.0)	(89.6)	(40.0)	(54.8)	(59.8)	(30.3)	(28.1)	34
Middle/JSS	99.5	86.6	76.2	68.8	87.0	71.5	58.5	82.0	56.7	43.0	233
Secondary +	99.7	92.6	83.3	77.9	94.2	86.8	66.9	89.1	76.9	59.7	313
Wealth index quintile											
Lower 60%	98.1	88.0	78.1	72.9	88.9	71.7	56.5	80.1	60.2	49.0	370
Upper 40%	100.0	89.6	80.9	72.8	92.7	83.5	68.5	90.4	71.8	52.1	237
Total	98.8	88.6	79.2	72.9	90.4	76.3	61.2	84.1	64.7	50.2	607

[1] MICS indicator 9.1

Figures in parenthesis '()' are based on 25-49 unweighted cases.

The results for women age 15-24 are separately presented in Table HA.2. Knowledge of AIDS stands at 99 percent for women age 15-24 years. With regard to how to prevent its transmission, 82 percent of the young women know that maintaining one faithful and uninfected sex partner is a good measure of protection. The Use of condom every time is another method of prevention known by 73 percent, while 64 percent of the women 15-24 know of both ways of preventing HIV transmission. 88 percent of the young women 15-24 years also know that a healthy looking person can have the AIDS virus.

For young women 15-24 years, 84 percent of them reject the notion that AIDS can be spread by sharing food with a person living with the AIDS virus while 74 percent reject the fact that AIDS can be transmitted through mosquito bite. However just one in two (54%) know that HIV cannot be transmitted by supernatural means. Overall, 61 percent or women aged 15-24 reject the two major misconceptions about transmission and know that a healthy looking person can have the AIDS virus. However, less than half (43%) of the women 15-24 years have comprehensive knowledge about HIV transmission.

The results for men age 15-24 are presented in Table HA.2A. Similar to the case of young women, almost all (99%) young men interviewed have heard of AIDS. With regard to how to prevent its transmission, 83 percent of the young men know that maintaining one faithful and uninfected sex partner is a good measure of protection. Also, 79 percent know that transmission can be prevented by using a condom every time, while 69 percent of the men 15-24 know of both methods. Eighty-seven percent of the young men 15-24 years also know that a healthy looking person can have the AIDS virus.

For young men 15-24 years, 82 percent of them reject the notion that AIDS can be spread by sharing food with a person living with AIDS patient while 75 percent reject the fact that AIDS can be transmitted through mosquito bite. However, only 62 percent know that HIV cannot be transmitted by supernatural means. Overall, only 58 percent of men aged 15-24 reject the two major misconceptions about transmission, but less than half (43%) of the men 15-24 years have comprehensive knowledge about HIV transmission.

These knowledge levels are far short of the UNGASS target of 95 percent by 2010 set for young men and women aged 15-24 years. The low comprehensive figures mean that a lot more still needs to be done to attain the UNGASS target. While both women and men should be targeted with education on HIV prevention, concerted efforts should be directed at young people as many continue to get infected due to low levels of comprehensive HIV knowledge.

Table HA.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young women

Percentage of young women age 15-24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percent who have heard of AIDS	Percentage who know transmission can be prevented by:		Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge [1]	Number of women
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with AIDS			
Age											
15-19	100.0	79.6	71.5	62.1	83.4	73.8	57.2	82.3	56.2	37.6	203
20-24	98.9	83.9	73.5	65.0	91.2	74.0	51.8	86.2	64.9	47.0	221
Marital status											
Ever married/in union	(97.9)	(76.7)	(71.6)	(61.3)	(79.8)	(67.5)	(43.8)	(83.6)	(53.1)	(38.3)	49
Never married/in union	99.6	82.5	72.7	63.9	88.5	74.8	55.8	84.4	61.7	43.0	375
Education											
None	(95.0)	(68.8)	(52.1)	(42.5)	(70.3)	(45.7)	(25.2)	(62.0)	(36.2)	(20.3)	28
Primary	98.1	59.0	46.2	35.1	79.9	71.7	28.5	61.9	44.2	17.6	54
Middle/JSS	100.0	81.7	78.5	66.7	86.7	62.4	49.5	85.2	50.1	35.3	151
Secondary +	100.0	90.3	78.2	72.2	92.7	87.8	69.7	93.1	77.3	58.3	192
Wealth index quintile											
Lower 60%	99.1	79.1	70.2	60.4	86.0	73.5	53.3	84.3	59.1	41.4	267
Upper 40%	100.0	86.6	76.6	69.0	90.0	74.7	56.3	84.3	63.5	44.4	157
Total	99.4	81.9	72.5	63.6	87.5	74.0	54.4	84.3	60.7	42.5	424

[1] MICS indicator 9.2; MDG indicator 6.3

Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table HA.2A: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young men

Percentage of young men age 15-24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background character-istics	Percent who have heard of AIDS	Percentage who know transmission can be prevented by: Having only one faithful uninfected sex partner	Using a condom every time	Percentage of men who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Percentage who know that HIV cannot be transmitted by: Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge [1]	Number of men
Age											
15-19	100.0	79.9	79.1	66.5	85.1	74.3	60.9	83.3	51.8	37.9	83
20-24	98.3	85.4	78.7	70.0	87.5	75.6	63.5	80.5	63.3	46.1	113
Education											
None	*	*	*	*	*	*	*	*	*	*	5
Primary	*	*	*	*	*	*	*	*	*	*	17
Middle/JSS	98.3	75.1	78.5	63.6	74.9	74.3	55.7	86.4	51.4	37.4	63
Secondary +	100.0	88.5	80.9	72.2	93.4	80.8	68.0	85.4	68.8	49.1	109
Wealth index quintile											
Lower 60%	98.5	85.0	78.2	71.7	85.8	73.8	56.0	79.5	57.5	46.8	130
Upper 40%	100.0	79.2	80.3	62.2	87.8	77.6	75.1	86.0	60.3	34.4	65
Total	99.0	83.1	78.9	68.5	86.5	75.0	62.4	81.7	58.4	42.7	195

[1] MICS indicator 9.2; MDG indicator 6.3

An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed.

Figure HA.1: Percentage of women who have comprehensive knowledge of HIV/AIDS transmission, MICS in 5 High Densely Populated Localities in Accra, 2010-2011
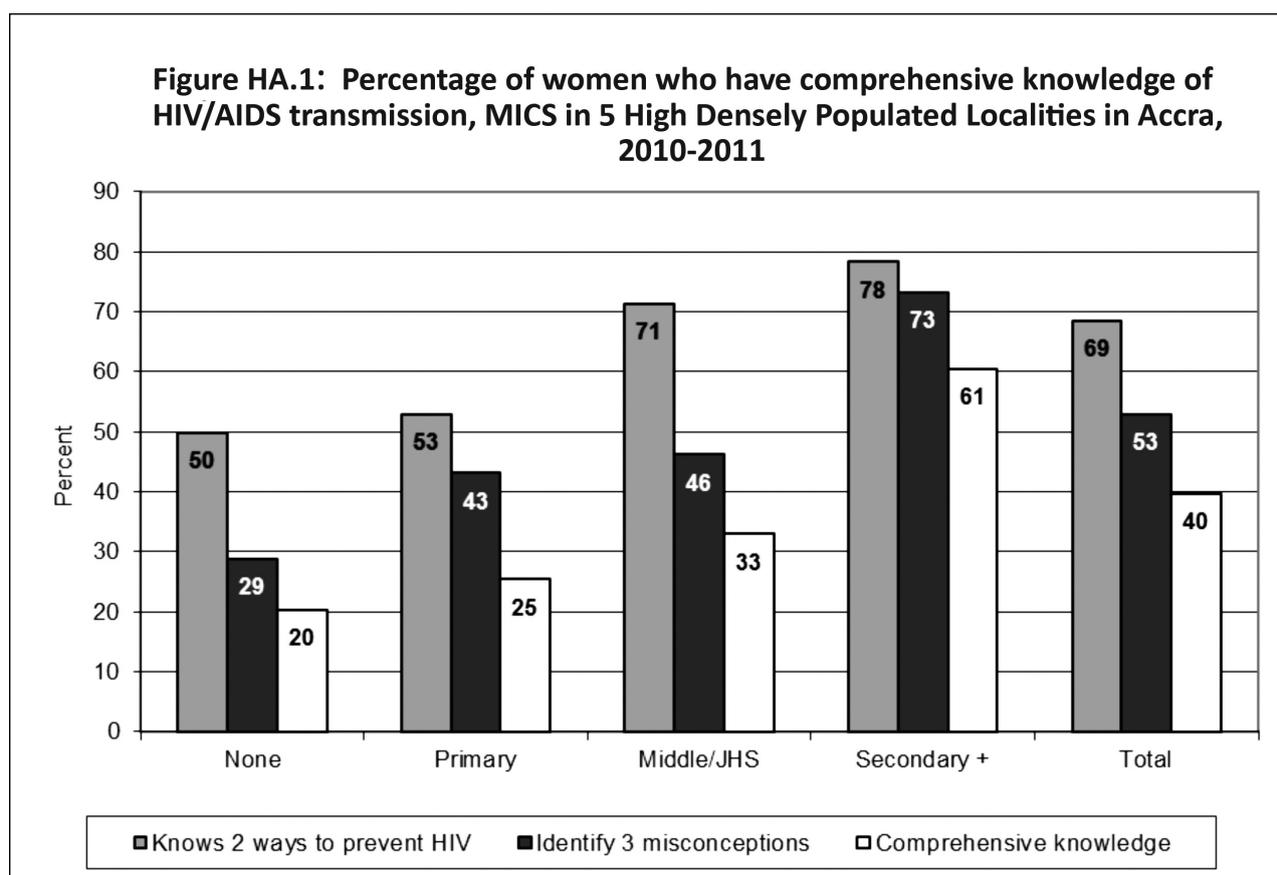
MOTHER-TO-CHILD TRANSMISSION OF HIV

Knowledge of mother-to-child transmission of HIV is also an important first step for women to seek HIV testing when they are pregnant to avoid infection in the baby. Women should know that HIV can be transmitted during pregnancy, delivery, and through breastfeeding. The level of knowledge among women age 15-49 years concerning mother-to-child transmission is presented in Table HA.3. Overall 92 percent of women know that HIV can be transmitted from mother to child. One in three (77%) women know that HIV can be transmitted from mother-to-child during pregnancy, 72 percent know that transmission can take place during delivery, and 83 percent know that a mother can transmit HIV to her child by breastfeeding. Overall, close to 59 percent know of all three modes of mother to child transmission.

Table HA.3: Knowledge of mother-to-child HIV transmission
Percentage of women age 15-49 years who correctly identify means of HIV transmission from mother to child,
MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage who know HIV can be transmitted from mother to child	Percent who know HIV can be transmitted:				Does not know any of the specific means	Number of women
		During pregnancy	During delivery	By breastfeeding	All three means [1]		
Age group							
15-24	92.4	77.2	69.8	81.8	57.4	7.0	424
25+	92.1	76.5	72.3	83.1	59.4	7.1	870
15-19	92.5	81.1	69.9	82.4	61.6	7.5	203
20-24	92.4	73.6	69.7	81.2	53.5	6.5	221
25-29	90.9	70.7	65.6	81.8	52.7	9.1	248
30-39	91.7	77.9	73.3	82.7	59.6	7.2	393
40-49	94.3	80.4	77.8	84.9	66.5	4.6	229
Marital status							
Ever married/in union	91.9	76.8	73.1	83.0	59.3	6.9	719
Never married/ in union	92.6	76.7	69.5	82.2	58.1	7.1	575
Education							
None	85.5	80.5	68.5	76.6	61.2	10.6	138
Primary	89.5	73.5	67.5	81.1	56.3	9.4	205
Middle/JSS	93.1	75.7	74.5	85.8	61.6	6.6	515
Secondary +	94.7	78.2	70.7	81.5	55.7	5.3	435
Wealth index quintile							
Lower 60%	92.0	76.1	69.0	82.9	57.2	6.9	778
Upper 40%	92.6	77.6	75.3	82.2	61.2	7.3	516
Total	92.2	76.7	71.5	82.6	58.8	7.0	1,294
[1] MICS indicator 9.3							

Similar questions on the knowledge of mother-to-child transmission of HIV were asked to men 15-59 years. The level of knowledge among men age 15-59 years concerning mother-to-child transmission is presented in Table HA.3A. Overall 91 percent of the men know that HIV can be transmitted from mother to child. Four in every five (81%) men know that HIV can be transmitted from mother-to-child during pregnancy, 70 percent know that transmission can take place during delivery, and 72 percent know that a mother can transmit HIV to her child by breastfeeding. Overall, 55 percent know of all three modes of mother to child transmission, and 8 percent do not know of any of the specific means of transmitting the virus from mother to her child.

		Percent who know HIV can be transmitted:					
Background characteristics	Percentage of men who know HIV can be transmitted from mother to child	During pregnancy	During delivery	By breastfeeding	All three means [1]	Does not know any of the specific means	Number of men
Age group							
15-19	85.9	79.9	67.0	70.1	57.4	14.1	83
20-24	92.3	79.3	70.1	72.1	52.0	6.0	113
25-29	90.8	81.4	69.7	70.0	54.2	9.2	105
30-39	92.2	79.2	73.3	78.7	56.1	6.9	151
40-49	87.7	79.7	65.0	61.5	47.4	8.3	101
50-59	95.8	92.8	79.0	79.9	65.4	4.2	54
Marital status							
Ever married/in union	91.2	83.1	70.5	71.5	54.8	6.9	275
Never married/ in union	90.3	79.3	70.2	72.5	54.3	9.1	332
Education							
None	71.4	71.4	55.4	57.8	45.5	18.5	26
Primary	76.0	64.1	61.2	60.8	48.3	16.5	34
Middle/JSS	89.8	81.9	70.4	72.2	57.5	9.8	233
Secondary +	94.6	82.9	72.5	74.3	53.8	5.1	313
Wealth index quintile							
Lower 60%	89.0	79.3	68.4	71.7	54.1	9.1	370
Upper 40%	93.4	83.6	73.4	72.6	55.2	6.6	237
Total	90.7	81.0	70.3	72.0	54.6	8.1	607

Table HA.3A: Knowledge of mother-to-child HIV transmission
Percentage of men age 15-59 years who correctly identify means of HIV transmission from mother to child, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

[1] MICS indicator 9.3
Figures in parenthesis '()' are based on 25-49 unweighted cases.

ACCEPTING ATTITUDES TOWARD PEOPLE LIVING WITH HIV/AIDS

The indicators on attitudes toward people living with HIV measure stigma and discrimination in the community. Stigma and discrimination are low if respondents report an accepting attitude on the following four questions: 1) would care for family member sick with AIDS; 2) would buy fresh vegetables from a vendor who was HIV positive; 3) thinks that a female teacher who is HIV positive should be allowed to teach in school; and 4) would not want to keep HIV status of a family member a secret. Table HA.4 presents the attitudes of women towards people living with HIV and AIDS. 91 percent of women who have heard of AIDS agree with at least one accepting statement but only 13 percent express accepting attitudes on all four indicators. The most common accepting attitude is willing to care for a family member with the AIDS virus in own house (76%) while only 43 percent indicated they would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus. Two in three women (67%) believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching, and 35 percent indicated that they would not want to keep secret that a family member got infected with the AIDS virus.

The proportion of respondents expressly accepting attitudes on all four indicators looks varied. Respondents with secondary and higher education (18%) are more likely to have higher accepting attitudes on all four indicators than women with little or no education (8%). Likewise women from the richer households have higher accepting attitudes (15%) than those from the poorer households (11%). Only 13 percent of young women 15-24 years expressed accepting attitudes on all four indicators.

Table HA.4: Accepting attitudes toward people living with HIV/AIDS

Percentage of women age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percent of women who:						
	Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators [1]	Number of women who have heard of AIDS
Age group							
15-19	75.7	42.3	64.7	36.8	89.6	13.4	203
20-24	82.5	42.4	75.1	28.5	94.2	9.6	218
15-24	79.2	42.4	70.1	32.5	92.0	11.5	422
25-29	76.4	51.6	75.1	34.6	93.5	15.8	248
30-39	74.1	41.6	65.4	37.5	89.1	11.8	389
40-49	75.1	39.3	56.9	37.1	90.3	13.4	226
Marital status							
Ever married/ in union	73.6	42.0	63.7	38.5	91.5	13.0	710
Never married/in union	79.8	45.1	71.8	31.2	90.7	12.5	574
Education							
None	78.0	42.3	56.4	30.9	88.8	8.4	133
Primary	66.8	42.5	58.4	35.4	87.5	12.7	203
Middle/JSS	74.1	35.6	61.6	37.4	90.9	9.9	514
Secondary +	83.0	53.4	81.6	34.0	93.7	17.5	435
Wealth index quintile							
Lower 60%	74.8	41.5	64.2	35.7	92.1	11.2	770
Upper 40%	78.7	46.3	72.1	34.6	89.7	15.0	515
Total	76.4	43.4	67.3	35.3	91.1	12.7	1,284

[1] MICS indicator 9.4

Similar questions on attitudes toward people living with HIV were asked to men 15-59 years, and results are presented in Table HA.4A. 95 percent of men who have heard of AIDS agree with at least one accepting statement but only one in four men (25%) express accepting attitudes on all four indicators. The most common accepting attitude is willing to care for a family member with the AIDS virus in own house (79%) while only 50 percent indicated they would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus. 71 percent of the men believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching, and 60 percent indicated that they would not want to keep secret that a family member got infected with the AIDS virus.

The proportion of respondents expressly accepting attitudes on all four indicators looks varied. Men from the richer households have higher accepting attitudes (30%) than those from the poorer households (22%). Only 22 percent of young men 15-24 years expressed accepting attitudes on all four indicators.

The low levels of accepting attitudes towards people living with HIV and Aids, requires sensitization strategies to increase accepting attitudes towards people living with HIV/AIDS, and to encourage care and support to those infected by HIV. According to the Ghana Aids Commission, this includes developing programmes to educate on modes of transmission and how to prevent HIV infection, to debunk common misconceptions of the disease, and to promote regular HIV testing.

Table HA.4A: Accepting attitudes toward people living with HIV/AIDS
Percentage of men age 15-59 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators [1]	Number of men who have heard of AIDS
Age group							
15-24	75.6	38.0	63.9	66.7	92.7	22.3	193
25+	80.6	55.1	75.0	56.4	95.5	26.2	406
15-19	66.2	35.0	54.3	68.2	90.4	23.0	83
20-24	82.6	40.3	71.0	65.6	94.4	21.8	111
25-29	81.4	47.8	74.1	58.4	98.7	23.4	105
30-39	81.4	63.1	77.1	58.3	96.7	28.0	150
40-49	75.5	50.8	67.1	48.2	88.4	24.5	97
50-59	85.8	54.6	85.1	62.1	98.9	29.8	54
Marital status							
Ever married / in union	78.8	51.8	74.0	53.7	94.3	23.6	270
Never married /in union	79.1	47.8	69.3	64.6	94.9	26.1	330
Education							
None	*	*	*	*	*	*	23
Primary	(68.7)	(53.3)	(55.8)	(55.9)	(86.5)	(28.3)	32
Middle/JSS	72.5	42.0	63.6	61.6	92.8	20.7	232
Secondary +	83.8	54.4	78.9	58.0	96.7	26.4	313
Wealth index quintile							
Lower 60%	75.3	48.0	67.5	58.8	93.8	21.9	363
Upper 40%	84.6	51.9	77.5	61.1	95.8	29.6	237
Total	79.0	49.6	71.4	59.7	94.6	24.9	600

[1] MICS indicator 9.4
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

KNOWLEDGE OF A PLACE FOR HIV TESTING, COUNSELLING AND TESTING DURING ANTENATAL CARE

Another important indicator is the knowledge of where to be tested for HIV and use of such services. In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment. Questions related to knowledge among women of a facility for HIV testing and whether they have ever been tested is presented in Table HA.5. 73 percent of women knew where to be tested, but only 37 percent have ever been tested and only 14 percent in the last 12 months. Of those who had been tested, only 9 percent have been told the result. The proportion of respondents who have been tested and received results is highest among ages 25 to 29 year women (13%). Ever married or ever in union women are more than twice (49%) likely to be tested than women who have never married/been in union (21%).

Table HA.5: Knowledge of a place for HIV testing					
Percentage of women age 15-49 years who know where to get an HIV test, percentage of women who have ever been tested, percentage of women who have been tested in the last 12 months, and percentage of women who have been tested and have been told the result, MICS in 5 High Densely Populated Localities in Accra, 2010-2011					
	Percentage of women who:				
Background characteristics	Know a place to get tested [1]	Have ever been tested	Have been tested in the last 12 months	Have been tested and have been told result [2]	Number of women
Age					
15-19	63.9	13.3	7.1	5.6	203
20-24	76.2	31.0	17.3	10.1	221
25-29	78.5	45.2	21.2	12.9	248
30-34	80.6	52.0	16.4	8.7	200
35-39	73.8	53.6	17.1	11.7	194
40-44	64.0	31.2	7.8	5.3	127
45-49	59.3	19.5	3.1	3.1	102
Marital status					
Ever married/in union	74.4	49.0	16.6	8.7	719
Never married/in union	70.1	21.3	11.3	9.2	575
Wealth index quintile					
Lower 60%	67.1	34.3	14.1	7.9	778
Upper 40%	80.7	40.3	14.5	10.5	516
Total	72.5	36.7	14.2	8.9	1,294
[1] MICS indicator 9.5 [2] MICS indicator 9.6					

Table HA.5A presents results of knowledge of a place for HIV testing for men, 15-59 years. In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment. 76 percent of the men knew where to get tested, but only one in four (24%) have ever been tested, and 9 percent were tested in the last 12 months. Of those who had been tested, only 8 percent have been told the result. The proportion of respondents who have ever been tested is high among ages 35 to 39 (30%). Ever married or ever in union men are more likely to have ever been tested (27%) than men who have never married/been in union (21%). However, the reverse is true for those who have been tested and received their results (11% for never married/been in union, and 4% for those ever married/in union).

Table HA.5A: Knowledge of a place for HIV testing

Percentage of men age 15-59 years who know where to get an HIV test, percentage of men who have ever been tested, percentage of men who have been tested in the last 12 months, and percentage of men who have been tested and have been told the result, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of men who:				Number of men
	Know a place to get tested [1]	Have ever been tested	Have been tested in the last 12 months	Have been tested and have been told result [2]	
Age					
15-19	69.6	11.3	7.2	6.3	83
20-24	76.0	16.6	11.5	11.2	111
25-29	83.9	27.8	14.2	14.2	105
30-34	77.3	29.7	10.3	9.0	78
35-39	81.2	29.4	4.2	4.2	71
40-44	66.2	20.7	1.1	0.0	54
45-49	(64.0)	(27.3)	(7.2)	(7.2)	43
50-54	(83.0)	(29.5)	(3.1)	(3.1)	26
55-59	(84.4)	(31.6)	(7.2)	(0.0)	28
Marital status					
Ever married/in union	75.3	26.5	5.8	4.4	270
Never married/in union	77.1	21.0	10.8	10.5	330
Wealth index quintile					
Lower 60%	70.2	18.9	7.0	6.9	363
Upper 40%	85.6	30.5	10.9	9.1	237
Total	76.3	23.5	8.5	7.8	600

[1] MICS indicator 9.5
[2] MICS indicator 9.6
Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table HA.6 presents the same results for sexually active young women. The proportion of young women who have been tested and have been told the result provides a measure of the effectiveness of interventions that promote HIV counselling and testing among young people. This is important to know, because young people may feel that there are barriers to accessing services related to sensitive issues, such as sexual health. Among women aged 15-24 years who had sex in the last 12 months, 78 percent know where to get tested for HIV. 38 percent of the young women have ever been tested, and about half of these (20%) had a test in the last 12 months. Only 11 percent have been tested and have been told the results.

Table HA.6A provides the results for sexually young men 15-24 years. Among the young men who had sex in the last 12 months, 76 percent know where to get tested for HIV. However, only 16 percent have ever been tested, and 12 percent of those were tested in the last 12 months. One in ten young men has been tested and has received their result.

Table HA.6: Knowledge of a place for HIV testing among sexually active young women
Percentage of women age 15-24 years who have had sex in the last 12 months, and among women who have had sex in the last 12 months, the percentage who know where to get an HIV test, percentage of women who have ever been tested, percentage of women who have been tested in the last 12 months, and percentage of women who have been tested and have been told the result, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

| Background characteristics | Percentage who have had sex in the last 12 months | Number of women age 15-24 years | Percentage of women who: | | | | Number of women 15-24 year who have had sex in last 12 months |
			Background characteristics	Percentage who have had sex in the last 12 months	Number of women age 15-24 years	Have been tested and have been told result [1]	
Age							
15-19	18.6	203	(70.7)	(26.1)	(17.7)	(9.5)	38
20-24	55.4	221	80.6	41.4	20.2	12.0	122
Marital status							
Ever married/ in union	(90.3)	49	(88.5)	(61.6)	(26.8)	(11.8)	44
Never married/in union	30.8	375	74.4	28.6	16.8	11.3	116
Education							
None	(31.5)	28	-	-	-	-	9
Primary	48.7	54	(70.4)	(48.5)	(15.0)	(0.0)	26
Middle/JSS	40.5	151	78.2	42.4	29.3	20.4	61
Secondary +	33.4	192	85.6	31.0	14.8	9.1	64
Wealth index quintile							
Lower 60%	40.6	267	76.3	39.7	22.5	12.1	109
Upper 40%	32.8	157	82.5	33.8	13.4	10.0	52
Total	37.7	424	78.3	37.8	19.6	11.4	160

[1] MICS indicator 9.7
Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table HA.6A: Knowledge of a place for HIV testing among sexually active young men
Percentage of men age 15-24 years who have had sex in the last 12 months, and among men who have had sex in the last 12 months, the percentage who know where to get an HIV test, percentage of men who have ever been tested, percentage of men who have been tested in the last 12 months, and percentage of men who have been tested and have been told the result, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

| Background characteristics | Percentage who have had sex in the last 12 months | Number of men age 15-24 years | Percentage of men who | | | | Number of men 15-24 year who have had sex in last 12 months |
			Know a place to get tested	Have ever been tested	Have been tested in the last 12 months	Have been tested and have been told results [1]	
Wealth index quintile							
Lower 60%	30.3	128	(73.2)	(7.5)	(3.6)	(3.6)	39
Upper 40%	33.9	65	(79.5)	(30.7)	(25.8)	(22.2)	22
Total	31.5	193	75.5	15.9	11.7	10.4	61

[1] MICS indicator 9.7
Figures in parenthesis '()' are based on 25-49 unweighted cases.

Among women who had given birth within the two years preceding the survey, the percent who received counselling and HIV testing during antenatal care is presented in Table HA.7. Of the women who had a birth within two years before the survey and received antenatal care from a health professional, 70 percent of them received HIV counselling during the antenatal care. Those who were offered an HIV test and were actually tested for HIV during antenatal form 83 percent, out of which 73 percent received the results. However only 58 percent received HIV counselling, were offered a test, accepted the test and also received the results.

A mother who knows early in her pregnancy that she is HIV infected has more time to make important decisions. She and her health care provider will have more time to decide on effective ways to protect her health and prevent mother-to-child transmission of HIV. She can also take steps to prevent infecting others with HIV.

	Percent of women who:					
Background characteristics	Received antenatal care from a health care professional for last pregnancy	Received HIV counselling during antenatal care [1]	Were offered an HIV test and were tested for HIV during antenatal care	Were offered an HIV test and were tested for HIV during antenatal care, and received the results [2]	Received HIV counselling, were offered an HIV test, accepted and received the results	Number of women who gave birth in 2 year preceding the survey
Age						
15-19	*	*	*	*	*	7
20-24	(94.8)	(62.1)	(76.9)	(67.0)	(55.3)	35
15-24	(95.7)	(68.7)	(77.7)	(69.6)	(59.9)	43
25-29	100.0	64.6	81.0	68.1	48.4	57
30-34	(100.0)	(78.1)	(86.4)	(77.0)	(60.1)	48
35-49	(92.3)	(70.5)	(87.7)	(77.7)	(65.5)	48
Marital status						
Ever married/in union	96.7	70.6	84.0	72.2	57.5	165
Never married/ in union	(100.0)	(68.1)	(79.1)	(77.0)	(60.5)	31
Education						
None	(89.2)	(75.6)	(71.3)	(62.1)	(58.2)	26
Primary	(95.1)	(71.6)	(86.8)	(78.3)	(67.5)	39
Middle/JSS	99.1	74.3	84.3	72.6	58.4	88
Secondary +	(100.0)	(57.6)	(85.2)	(75.4)	(48.4)	43
Wealth index quintile						
Lower 60%	96.2	72.6	79.4	68.6	58.3	122
Upper 40%	98.8	66.3	89.8	80.3	57.3	73
Total	97.2	70.2	83.3	73.0	58.0	196

Table HA.7: HIV counselling and testing during antenatal care
Among women age 15-49 who gave birth in the last 2 years, percentage of women who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counselling, percentage who were offered and accepted an HIV test and received the results, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

[1] MICS indicator 9.8
[2] MICS indicator 9.9
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

SEXUAL BEHAVIOUR RELATED TO HIV TRANSMISSION

Promoting safer sexual behaviour is critical for reducing HIV prevalence. The use of condoms during sex, especially with non-regular partners, is especially important for reducing the spread of HIV. In most countries over half of new HIV infections are among young people 15-24 years thus a change in behaviour among this age group will be especially important to reduce new infections. A module of questions was administered to women 15-24 years of age to assess their risk of HIV infection. Risk factors for HIV include sex at an early age, sex with older men, sex with a non-marital non-cohabitating partner, and failure to use a condom. The frequency of sexual behaviours that increase the risk of HIV infection among women is presented in Table HA.8.

In the five urban localities, about 57 percent of never married women between 15 and 24 years have never had sex. Among women in that age bracket, 6 percent have had sex before attaining age 15, and one out of ten (10%) had sex with a man 10 years or older. Women from the poorer households are almost three times likely to have had sex before age 15 (8%) than women from the richer households (3%).

Table HA.8A. presents results for the never-married men age 15-24 years who have had sex, and those who had sex before age 15. The results reveal that in the five localities, one in two (51% of the never-married young men 15-24 years have had sex, and 5 percent had sex before their 15th birthday.

Table HA.8: Sexual behaviour that increases the risk of HIV infection					
Percentage of never-married young women age 15-24 years who have never had sex, percentage of young women age 15-24 years who have had sex before age 15, and percentage of young women age 15-24 years who had sex with a man 10 or more years older during the last 12 months, MICS in 5 High Densely Populated Localities in Accra, 2010-2011					
Background characteristics	Percentage of never-married women age 15-24 years who have never had sex [1]	Number of never-married women age 15-24 years	Percentage of women age 15-24 years who had sex before age 15 [2]	Number of women age 15-24 years	Percentage of women age 15-24 years who had sex in the last 12 months with a man 10 or more years older [3]	Women 15-24 yr who had sex in the 12 mo preceding the survey
Age						
15-19	74.9	199	7.0	203	(7.0)	38
20-24	35.7	176	5.6	221	10.3	122
Marital status						
Ever married/in union	*	0	(15.3)	49	(21.4)	44
Never married/ in union	56.5	375	5.1	375	4.9	116
Education						
None	*	24	(11.4)	28	*	9
Primary	(51.0)	39	13.9	54	(10.3)	26
Middle/JSS	55.0	131	7.3	151	9.1	61
Secondary +	59.3	181	2.6	192	10.2	64
Wealth index quintile						
Lower 60%	53.0	234	8.2	267	8.6	109
Upper 40%	62.4	141	3.0	157	11.3	52
Total	56.5	375	6.3	424	9.5	160

[1] MICS indicator 9.10
[2] MICS indicator 9.11
[3] MICS indicator 9.12
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table HA.8A: Sexual behavior that increases the risk of HIV infection
Percentage of never-married young men age 15-24 years who have had sex, and percentage of young men
age 15-24 years who have had sex before age 15, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of never-married men age 15-24 years who have had sex[1]	Number of never-married men age 15-24 years	Percentage of men age 15-24 years who had sex before age 15[2]	Number of men age 15-24 years
Age				
15-19	84.7	81	0.4	83
20-24	25.3	110	9.0	113
Wealth index quintile				
Lower 60%	54.4	126	4.0	130
Upper 40%	42.9	64	8.1	65
Total	50.5	191	5.3	195
[1] MICS indicator 9.10 [2] MICS indicator 9.11				

Having sex with more than one partner was assessed in all women and separately for women age 15-24 years who had sex with multiple partners in the previous year. Table HA.9 shows sexual activity and sex with more than one partner in the last 12 months for all women aged 15-49 years. 81 percent of the women 15-49 years have ever had sex, and 60 percent had sex in the last 12 months. Less than 2 percent had sex with more than one partner in the last 12 months. Women aged 25-29 years are more likely to have had sex in the past 12 months (70%) compared to those aged 15-24 years (38%).

Table HA.9A presents results for men age 15-59 who ever had sex, those that had sex in the last 12 months and those that had sex with more than one partner in the last 12 months. Among those who had sex with multiple partners, results of those who used a condom at last sex are also presented. About 81 percent of the men 15-59 years have ever had sex, and 67 percent had sex in the last 12 months. About 13 percent of the men 15-59 years had sex with more than one partner in the last 12 months. Among those who had sex with more than 1 partner in the last 12 months, 27 percent used a condom at last sex.

Table HA.9A also provides the information on sexual activity and sex with more than one partner in the last 12 months among young men aged 15-24 years. Overall, one in every two (51%) young men aged 15-24 years had ever have sex in their lifetime. Men aged 20-24 years are more likely to have ever had sex (75%), than those aged 15-19 years (17%). Among men who have ever had sex, 31 percent had sex within the last 12 months, and about 10 percent of them with multiple sex partners. Given the few cases of young men 15-24 years who had sex with multiple partners in the last 12 months, it was not possible to provide any analysis for those who used a condom at last sex.

Table HA.9: Sex with multiple partners among women
Percentage of women age 15-49 years who ever had sex, percentage who had sex in the last 12 months,
and percentage who have had sex with more than one partner in the last 12 months,MICS in 5 High Densely Populated
Localities in Accra, 2010-2011

Background characteristics	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months [1]	Number of women age 15-49 years
Age				
15-24	50.0	37.7	1.1	424
25-29	90.8	70.4	2.2	248
30-39	98.6	76.6	1.1	393
40-49	99.3	64.0	0.9	229
Marital status				
Ever married/in union	99.8	79.1	1.1	719
Never married/in union	58.2	37.1	1.6	575
Education				
None	88.7	59.3	1.0	138
Primary	88.8	65.9	3.8	205
Middle/JSS	85.5	66.0	0.8	515
Secondary +	70.5	51.7	0.8	435
Wealth index quintile				
Lower 60%	83.2	60.7	1.3	778
Upper 40%	78.5	60.1	1.3	516
Total	81.3	60.4	1.3	1,294

[1] MICS indicator 9.13

Table HA.9A: Sex with multiple partners among men

Percentage of men age 15-59 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with more than one partner in the last 12 months and among those who had sex with multiple partners, the percentage who used a condom at last sex, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of men who:			Number of men age 15-59 years	Among those who had sex with more than 1 partner in the last 12 months, percentage who used a condom at last sex	Men 15-59 year who had more than 1 sexual partner last 12 month
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in the last 12 months [1]			
Age						
15-24	50.8	31.2	9.6	195	*	19
25-29	87.6	72.2	18.9	105	*	20
30-39	97.4	87.1	13.8	151	*	21
40-49	99.3	89.8	14.2	101	*	14
50-59	100.0	88.1	12.3	54	*	7
Marital status						
Ever married/in union	99.0	92.5	13.7	275	(4.8)	38
Never married/ in union	66.5	46.0	12.9	332	(45.6)	43
Wealth index quintile						
Lower 60%	78.9	62.5	13.5	370	23.3	50
Upper 40%	85.0	74.2	12.9	237	(31.7)	30
Total	81.3	67.1	13.3	607	26.5	80

[1] MICS indicator 9.13
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

Table HA.10 shows sexual activity and sex with more than one partner in the last 12 months among young women aged 15-24 years. Overall, one in every two (50%) young women aged 15-24 years had ever have sex in their lifetime. Women aged 20-24 years are more likely to have ever had sex (72%), than those aged 15-19 years (27%). Among women who have ever had sex, 38 percent had sex within the last 12 months, and about 1 percent of them with multiple sex partners.

Table HA.10: Sex with multiple partners among young women

Percentage of women age 15-24 years who ever had sex, percentage who had sex in the last 12 months and percentage who have had sex with more than one partner in the last 12 months, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of women who:			
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months [1]	Number of women age 15-24 years
Age				
15-19	26.7	18.6	0.0	203
20-24	71.6	55.4	2.1	221
Marital status				
Ever married/in union	(100.0)	(90.3)	(0.9)	49
Never married/in union	43.5	30.8	1.1	375
Education				
None	(54.4)	(31.5)	(5.0)	28
Primary	63.1	48.7	0.0	54
Middle/JSS	52.2	40.5	1.2	151
Secondary +	44.0	33.4	0.8	192
Wealth index quintile				
Lower 60%	53.6	40.6	1.2	267
Upper 40%	43.9	32.8	0.9	157
Total	50.0	37.7	1.1	424

[1] MICS indicator 9.14
Figures in parenthesis '()' are based on 25-49 unweighted cases.

Tables HA.11 presents the percentage of women age 15-24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with a non-marital, non-cohabiting partner in the last 12 months and among those who had sex with a non-marital, non-cohabiting partner, the percentage who used a condom the last time they had sex with such a partner.

38 percent of women 15-24 years had sex in the last 12 months, and 77 percent of them had had sex with a non-marital, non-cohabiting partner. On condom use, 42 percent of women aged 15-24 years who have had sex with a non-marital, non-cohabiting partner in the past 12 months reported they used a condom the last time they had sex with such a partner.

Table HA.11: Sex with non-regular partners
Percentage of women age 15-24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with a non-marital, non-cohabiting partner in the last 12 months and among those who had sex with a non-marital, non-cohabiting partner, the percentage who used a condom the last time they had sex with such a partner, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of women 15-24 who:		Number of women age 15-24 years	Percentage who had sex with a non-marital, non-cohabiting partner in the last 12 months [1]	Women 15-24 years who had sex in the last 12 months	Percentage of women age 15-24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months, who also reported that a condom was used the last time they had sex with such a partner [2]	Women 15-24 who had sex with a non-marital, non-cohabiting partner in the last 12 months
	Ever had sex	Had sex in the last 12 months					
Age							
15-19	26.7	18.6	203	(88.6)	38	57.3	34
20-24	71.6	55.4	221	73.9	122	35.6	90
Marital status							
Ever married/ in union	(100.0)	(90.3)	49	(18.5)	44	*	8
Never married/in union	43.5	30.8	375	100.0	116	40.6	116
Education							
None	(54.4)	(31.5)	28	*	9	*	6
Primary	63.1	48.7	54	(56.2)	26	*	15
Middle/JSS	52.2	40.5	151	76.0	61	(35.4)	46
Secondary +	44.0	33.4	192	88.7	64	51.4	57
Wealth index quintile							
Lower 60%	53.6	40.6	267	79.4	109	39.4	86
Upper 40%	43.9	32.8	157	73.1	52	(46.2)	38
Total	50.0	37.7	424	77.4	160	41.5	124

[1] MICS indicator 9.15
[2] MICS indicator 9.16; MDG indicator 6.2
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

ORPHANS

As the HIV epidemic progresses, more and more children are becoming orphaned and vulnerable because of AIDS. Children who are orphaned or in vulnerable households may be at increased risk of neglect or exploitation if the parents are not available to assist them. Monitoring the variations in different outcomes for orphans and vulnerable children and comparing them to their peers gives us a measure of how well communities and governments are responding to their needs.

The frequency of children living with neither parent, mother only, and father only is presented in Table HA.12. 54 percent of the children aged 0-17 years live with both parents but about 18 percent of them are not living with a biological parent. While about 24 percent live with their mother only, just 5 percent live with their father only. For children living with neither of their biological parent, less than 2 percent have only their father or mother alive, and 13 percent have both parents alive. For children living with their mother only, 20 percent have their father alive, while 4 percent of the children have their father dead. For children 0-17 years living with only their father, in 3 percent of the cases, their mothers are alive, and in 1 percent of the cases, their mothers are dead.

The proportion of both fosterage and orphanage is noted to increase with the age of the children – for example, children aged 15-17 years are four times (32%) likely to live with a non-biological parent than children aged 0-4 years (8%). Overall, about one in even ten children (9%) has one or both parents dead, and 1 percent has both parents dead.

Table HA.12: Children's living arrangements and orphanhood

Percent distribution of children age 0-17 years according to living arrangements, percentage of children age 0-17 years in households not living with a biological parent and percentage of children who have one or both parents dead, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background character-istics	Living with both parents	Living with neither parent				Living with Mother only		Living with father Only		Impossible to determine	Total	Not living with a biological parent [1]	One or both parents dead [2]	Number of children age 0-17 years
		Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead					
Sex														
Male	55.4	1.0	1.1	11.0	1.3	20.5	3.9	3.4	1.2	1.2	100.0	14.4	8.5	869
Female	53.1	2.3	1.9	15.2	1.4	19.1	3.5	1.7	0.8	0.9	100.0	20.9	9.9	914
Age														
0-4 years	69.9	0.7	0.2	6.8	0.3	20.7	0.2	0.6	0.0	0.6	100.0	8.0	1.4	478
5-9 years	58.5	1.2	1.0	10.9	0.7	19.0	4.1	2.9	1.2	0.3	100.0	13.8	8.3	499
10-14 years	47.8	2.0	1.9	16.2	2.0	21.5	3.6	3.1	1.4	0.5	100.0	22.2	10.9	511
15-17 years	32.7	3.5	3.9	22.1	3.0	16.6	8.8	4.0	1.6	3.9	100.0	32.4	20.7	296
Wealth index quintile														
Lower 60%	49.8	1.3	2.1	13.9	1.8	21.8	4.4	3.1	1.1	0.7	100.0	19.0	10.7	1,118
Upper 40%	61.7	2.4	0.6	11.9	0.7	16.3	2.4.0	1.7	0.8	1.6	100.0	15.5	6.8	665
Total	54.2	1.7	1.5	13.2	1.3	19.8	3.7	2.5	1.0	1.0	100.0	17.7	9.2	1,784

[1] MICS indicator 9.17
[2] MICS indicator 9.18

In today's world of technology, access to mass media is fast becoming a necessary pre-requisite for living a meaningful life. People often need information to make decisions or take actions, and mass media also serve as a vital link in public education and behavioural change communication activities. Information on the exposure to mass media is therefore considered important in designing an effective communications mix.

In addition to the traditional mass media, the use of computers and the internet is also fast becoming an indispensable source of information and a channel of communication.

The 2011 Urban MICS collected information on the exposure of women age 15-49 years and men age 15-59 to mass media. Information on the use of computers and the internet was asked to young women and men 15-49 years.

This information will help to understand:
- whether respondents are exposed to newspapers/magazines, radio and television
- ever use and current/recent use of computers
- ever use and current/recent use of the internet.

ACCESS TO MASS MEDIA

In the MICS survey, information was collected from individual men and women on their exposure to three main mass media: newspaper, radio and television. Table MT.1 shows the exposure of the women and men to the three media at least once a week.

Among the women, 15 percent read a newspaper at least once a week; 68 percent listened to radio at least once a week and 85 percent watched television at least once a week. About 12 percent of the women were exposed to all three media at least once a week and 4 percent were exposed to none of the media at least once a week. The exposure to newspaper and radio was higher among the men with about 40 percent reading a newspaper at least once a week and 78 percent listening to radio at least once a week. About 89 percent of the men also watched television at least once a week and 34 percent were exposed to all three media at least once with 3 percent exposed to none of the media at least once a week.

As one would reasonably expect, exposure to all media generally increases with household wealth status for both sexes. The proportion of women with exposure to all three media at least once a week is 18 percent among the richer households which is more than double the corresponding figure of 7 percent for women from the poorer households. Among the men, 43 percent of those in the richer households have exposure to all three media at least once a week compared to 28 percent among men in the poorer households.

There is also a general increase in exposure with increasing education for both sexes and the most profound contrast occurs for exposure to newspaper for the obvious reason of ability to read. While 33 percent of women with secondary or higher education were exposed to newspaper, only 1 percent of those with no formal education were exposed to newspaper. This effect is carried over to the overall indicator of exposure to all three media with 27 percent of women with secondary or higher education being exposed to all three media at least once a week compared to 1 percent for those with no education. The pattern for men is essentially the same with 48 percent of men with secondary or higher education being exposed to all three media at least once a week compared to 11 percent for those with no education.

The age pattern of exposure is differs for the two sexes. Among the women, the overall exposure to all three media declines with increasing age but the opposite appears to be the case among the men although there are some irregularities in the trend. Among the women, the overall exposure to all three media at least once a week decreases from 18 percent among those aged 15-19 to 5 percent among those aged 45-49. Among the men, the percentage increases from 21 percent among those age 15-19 to 41 percent among those aged 30-34 and the pattern goes erratic thereafter.

Differences in exposure are also noticeable by locality with the James Town locality being the worst performer for both sexes. Only 4 percent of women and 17 percent of men in this locality have exposure to all three media at least once in a week.

Table MT.1: Exposure to mass media

Percentage of women age 15-49 years, and men aged 15-59 years who are exposed to specific mass media on a weekly basis, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of women age 15-49 who:						Percentage of men age 15-59 who:					
	Read a newspaper at least once a week	Listen to the radio at least once a week	Watch television at least once a week	All three media at least once a week [1]	No media at least once a week	Number of women age 15-49 years	Read a newspaper at least once a week	Listen to the radio at least once a week	Watch television at least once a week	All three media at least once a week [1]	No media at least once a week	Number of men age 15-59 years
Age												
15-19	24.1	58.1	85.2	17.5	6.6	203	30.1	62.8	90.6	20.8	4.3	83
20-24	24.5	70.3	90.6	17.4	3.7	221	33.6	73.3	88.5	28.5	3.5	113
25-29	12.3	74.1	88.7	10.8	1.4	248	41.5	78.5	96.5	36.3	1.7	105
30-34	10.3	72.1	88.7	8.8	1.8	200	44.7	79.4	86.8	41.2	5.9	78
35-39	9.7	68.5	80.5	9.0	2.6	194	46.2	83.2	85.3	38.8	2.7	73
40-44	9.6	59.5	73.0	7.3	8.2	127	19.5	78.2	82.6	17.6	1.0	57
45-49	6.3	67.9	77.8	5.0	3.4	102	(43.7)	(87.7)	(85.9)	(40.8)	(3.4)	44
50-54	na	na	na	na	na	na	(70.8)	(93.2)	(85.7)	(65.5)	(0.0)	26
55-59	na	na	na	na	na	na	(64.5)	(97.6)	(87.4)	(49.5)	(0.0)	28
Locality												
Bubuashie	17.2	73.6	78.3	14.0	3.2	161	42.8	80.7	87.2	36.7	6.5	70
La	16.0	71.0	85.1	13.5	5.3	364	37.7	76.4	89.3	30.7	3.1	185
James Town	8.3	30.4	61.5	4.2	15.8	60	(28.8)	(53.0)	(55.1)	(17.0)	(9.9)	30
Nima	10.8	62.0	86.2	8.4	2.3	330	32.6	78.2	89.1	27.5	1.8	146
Accra New Town	17.2	73.5	89.9	12.7	1.6	379	49.1	83.6	93.9	45.2	1.2	176
Education												
None	1.0	48.3	78.2	1.0	0.3	138	(10.8)	(52.6)	(78.9)	(10.8)	(0.0)	26
Primary	1.6	56.6	79.8	1.6	2.8	205	(4.3)	(80.7)	(79.1)	(4.3)	(0.0)	34
Middle/JSS	8.6	68.2	84.4	5.5	5.8	515	27.2	75.9	85.7	22.1	3.7	233
Secondary +	32.8	79.1	89.8	26.9	2.6	435	55.6	81.9	92.7	48.3	3.0	313
Wealth index quintile												
Lower 60%	9.8	61.5	81.1	7.3	4.1	778	32.9	75.5	85.6	28.2	4.0	370
Upper 40%	22.3	77.5	90.4	18.1	3.1	516	50.8	82.6	93.5	43.4	1.4	237
Total	14.8	67.9	84.8	11.6	3.7	1,294	39.9	78.2	88.7	34.1	3.0	607

[1] MICS indicator MT.1

'na' means not applicable – this module was only administered to women 15-49 years.

USE OF COMPUTERS AND INTERNET

The questions on computer and internet use were asked only to 15-24 year old women and men. Information collected include ever use, use in the past one year and use in the past one month. Table MT. 2 shows the responses on the use of computers and internet among young women and men.

The results reveal that 50 percent of women and 80 percent of men age 15-24 have ever used a computer. In addition, 41 percent of women and 74 percent of the men actually used a computer during the last 12 months preceding the survey. Also, 26 percent of the women and 59 percent of the men used a computer at least once a week during the last one month preceding the survey. Internet use among the young men and women was also appreciable; 35 percent of women and 74 percent of the young men have ever used the internet. Twenty-eight percent of young women, and 71 percent of young men used the internet during the last 12 months. The disparity between the men and women in terms of ever use also translates into current use with about 55 percent of men making use of the internet at least once a week during the past month compared to 17 percent among the young women.

As displayed in the table, for young men, the differentials in terms of background characteristics are generally similar to those observed among young women. One out of four (25%) young women in the wealthier households are more likely to have used internet at least once a week during the last month, compared to only 13 percent of young women in the poorer households. For the young men, about three in four (74%) in the richer households used the internet at least once a week during the last one month, compared to 45 percent of young men in the poorer households. As can be expected, use of internet directly correlates to the level of education – for example, 33 percent of young women with secondary or higher education used internet at least once a week during the last one month, compared to5 percent of young women with middle/JSS education.

Table MT.2: Use of computers and internet

Percentage of young men and women age 15-24 who have ever used a computer, percentage who have used a computer during the last 12 months, and frequency of use during the last one month, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

Background characteristics	Percentage of women age 15-24 who have:			Percentage of women age 15-24 who have:			Number of women age 15-24 years	Percentage of men age 15-24 who have:			Percentage of men age 15-24 who have:			Number of men age 15-24 years
	Ever used a computer	Used a computer during the last 12 months [1]	Used a computer at least once a week during the last one month	Ever used the internet	Used the internet during the last 12 months [2]	Used the internet at least once a week during the last one month		Ever used a computer	Used a computer during the last 12 months [1]	Used a computer at least once a week during the last one month	Ever used the internet	Used the internet during the last 12 months [2]	Used the internet at least once a week during the last one month	
Age														
15-19	54.8	47.4	27.6	37.2	28.6	15.1	203	83.6	76.6	59.8	73.7	70.7	52.3	83
20-24	45.6	35.0	23.6	33.7	28.1	19.2	221	77.4	71.5	59.3	74.5	71.5	56.8	113
Education														
None	(7.5)	(7.5)	(7.5)	(0.0)	(0.0)	(0.0)	28	*	*	*	*	*	*	5
Primary	9.8	9.8	8.1	2.8	2.8	2.8	54	*	*	*	*	*	*	17
Middle/JSS	27.0	19.3	9.0	17.3	10.1	5.0	151	76.3	75.4	50.3	67.7	64.7	45.5	63
Secondary +	85.5	71.6	46.1	63.9	54.1	33.4	192	92.1	81.8	72.1	87.5	85.4	69.7	109
Wealth index quintile														
Lower 60%	43.2	33.8	19.6	30.4	23.7	13.0	267	72.8	64.2	46.7	65.0	62.5	45.3	130
Upper 40%	61.6	53.1	35.6	44.0	36.3	24.5	157	94.5	92.7	85.1	92.3	88.3	74.1	65
Total	50.0	41.0	25.5	35.4	28.4	17.2	424	80.1	73.7	59.5	74.1	71.1	54.9	195

[1] MICS indicator MT.2
[2] MICS indicator MT.3
An asterisk (*) indicates figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis '()' are based on 25-49 unweighted cases.

The National Health Insurance Scheme (NHIS) was founded as one of the key pillars of the Poverty Reduction Programme of the Government of Ghana. It was introduced in 2003 by the National Health Insurance Act, Act 650, with the view of improving financial access of Ghanaians, especially the poor and the vulnerable, to quality basic health care services. The NHIS is a contributory scheme, renewable on an annual basis, and valid card holders can access both public and private healthcare facilities accredited by the National Health Insurance Authority. The contribution is structured in a way that people would contribute according to their ability and each person receives according to your need. In this way, the health subsidizes the sick, and the economically active pays for children, the aged and the indigents (NHIS website).

The Accra MICS study incorporated the NHIS module in the individual women's and men's questionnaires and covered issues on individual membership status, reasons for non-membership, use of services under the scheme, and perception of provider attitude towards registered members.

NATIONAL HEALTH INSURANCE REGISTRATION

Table NH. 1 shows the percentage of women aged 18-49, and men aged 18-59 years who are registered with the NHIS, and the status of a valid NHIS card, by wealth status of the household. Almost one in every two (49%) of the eligible women are registered compared to 39 percent for the men. A higher proportion of those from the richer households are registered compared to those from the poorer households. Children below the age of 18 years are covered by their parent/guardians' registration and so do not register by themselves. This is why the age range is given as 18-49 and 18-59 for the women and men respectively.

Table NH.1: Membership of NHIS Percentage distribution of registration with NHIS and status of NHIS a valid card among women age 18-49 and men age 18-59 by selected background characteristics, MICS in 5 High Densely Populated Localities in Accra, 2010-2011										
	Women					Men				
		Status of valid NHIS Card			Number of women regis- tered with the NHIS		Status of valid NHIS Card			Number of men regis- tered with the NHIS
Back- ground charac- teristics	Percent- age regis- tered	Yes, card seen	Yes, card not seen	No		Percent- age regis- tered	Yes, card seen	Yes, card not seen	No	
Wealth index quintile										
Lower 60%	42.9	42.9	28.6	43.4	699	30.7	25.3	29.1	45.6	333
Upper 40%	57.7	30.4	39.2	39.2	472	52.2	32.6	37.4	39.0	227
Total	48.9	28.9	29.5	41.6	1,172	39.4	29.7	28.2	42.1	560

Table NH.1 further shows that about 4 in 10 of the women and men who claim to be registered with the NHIS were not holding a valid NHIS card. Of the 60 percent who had said they actually had a valid NHIS card, about half of them were not able to show in to the interviewers. The major reason for the non-availability of a valid NHIS card was that people were still awaiting the issuance of their cards even though they had paid fully for the renewal.

Figure NH.1 gives the summary of the reasons why individuals are not registered with the NHIS. The major reason was that the premium was too expensive, which was cited by 50 percent of the women and 29 percent of the men. This is followed by a perception of not being in need of health insurance and a lack of trust in the NHIS.
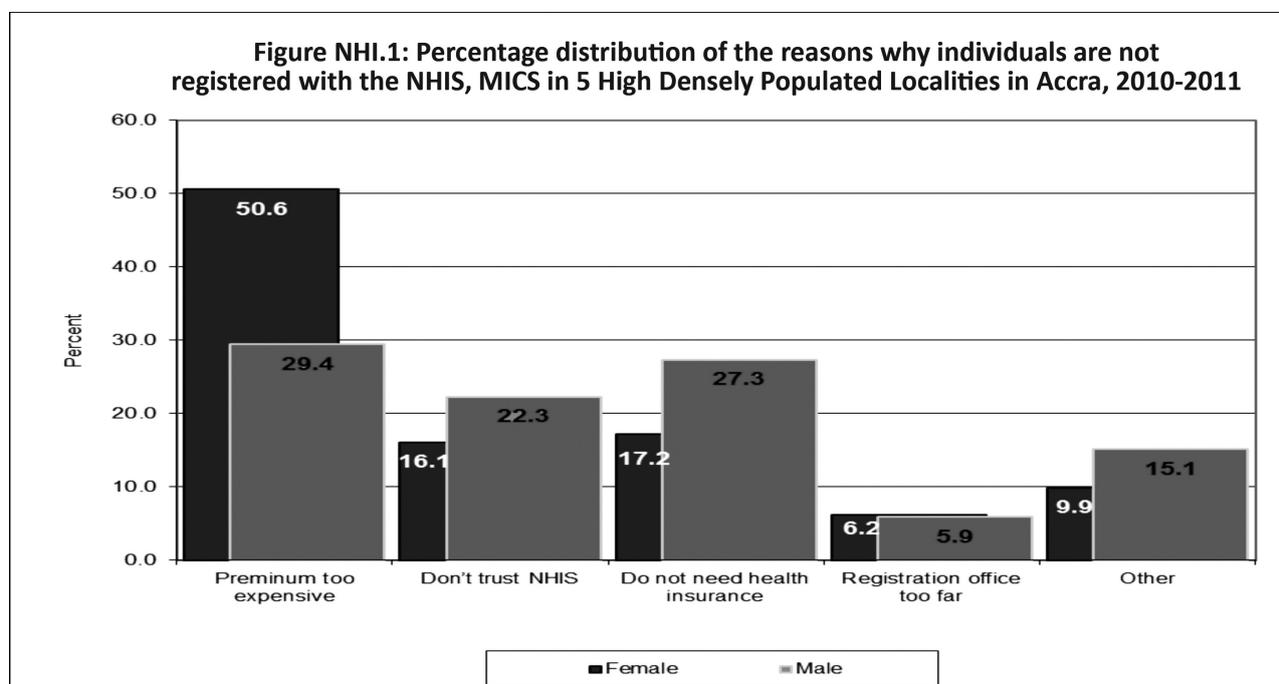
Figure NHI.1: Percentage distribution of the reasons why individuals are not registered with the NHIS, MICS in 5 High Densely Populated Localities in Accra, 2010-2011

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The major features of the sample design are described in this appendix. Sample design features include target sample size, sample allocation, sampling frame and listing, choice of domains, sampling stages, stratification, and the calculation of sample weights.

The primary objective of the sample design for the Accra Multiple Indicator Cluster Survey was to produce statistically reliable estimates of most indicators for these high density population suburbs of Accra. A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample.

SAMPLE SIZE AND SAMPLE ALLOCATION

The target sample size for the Accra MICS was calculated as 1,500 households. For the calculation of the sample size, the key indicator used was full immunization among children aged 12-23 months using the results from the 2006 national MICS. This indicator yielded the largest sample size among 5 potential indicators considered, the others being BCG, Polio 3, MMR and DPT coverage. The following formula was used to estimate the required sample size for this indicator:

$$n = \frac{[4(r)(1-r)(f)(1+t)]}{[(0.12r)^2(p)(\bar{n})]}$$

WHERE

- *n* is the required sample size, expressed as number of households
- 4 is a factor to achieve the 95 percent level of confidence
- *r* is the predicted or anticipated value of the indicator for 2010, expressed in the form of a proportion
- *t* is the non-response level experienced in previous surveys in the country
- *f* is the shortened symbol for deff (design effect)
- *0.12r* is the margin of error to be tolerated at the 95 percent level of confidence, defined as 12 percent of r (relative margin of error of r)
- *p* is the proportion of the total population upon which the indicator, r, is based
- *n* is the average household size (number of persons per household).

The details of the computations involving all 5 indicators are shown in Table SD.1. For the chosen variable of full immunization coverage, r was 73.4 percent. The value of deff (design effect) was taken as 1.175 based on estimates from previous surveys, p (percentage of children aged 12-23 months in the target population) was taken as 0.03, *n* (average household size) was 3.30 and the response rate from the previous round of the survey was 94 percent, giving t as 0.06.

The resulting number of households from this calculation was 1,266 households, which was the minimum sample size required to achieve the desired level of accuracy. Since the calculated sample size is not too far from the previous proposed size that is 1500, the decision is made to maintain this first proposal. The last column of Table SD.2 shows that this sample size reduces the margin of error to 11 percent of the anchor indicator.

Table SD.1: Sample size computation for Accra MICS

Variable	Full Immunization	BCG	Polio3	MMR	DPT	Full Immunization
e	12%	12%	12%	12%	12%	11%
r	0.734	0.943	0.824	0.854	0.835	0.734
f	1.175	1.612	1.434	1.190	1.330	1.175
t	0.06	0.06	0.06	0.06	0.06	0.06
n	3.30	3.30	3.30	3.30	3.30	3.30
p	0.03	0.03	0.03	0.03	0.03	0.03
n	1 266	290	911	605	782	1 507

Primary allocation of the total sample size to the five localities was done using probability proportional to size with the EAs serving as the primary sampling units. The national practice is to select 15 households from each EA for such household surveys and therefore, 100 EAs were required to meet the computed sample size of 1,500. The table below shows the number of EAs in each of the localities, the proportion of EAs the locality represents and the effective number of households allocated to the locality.

Table SD.2: Sample size computation for Accra MICS

Locality	Number of EAs	Population size 2010 census	% of population	Exact allocation of EAs	Adjusted allocation of EAs	Allocation of households
Accra New Town	69	57,803	20.8	20.8	21	315
Bubuashie	45	43,822	15.7	15.7	16	240
James Town	20	14,579	5.2	5.2	5	75
La	106	89,194	32.0	32.0	32	480
Nima	81	72,950	26.2	26.2	26	390
Total	321	278,348	100.0	100	100	1,500

SAMPLING FRAME AND SELECTION OF CLUSTERS

The 2010 census frame was used for the selection of the EAs from each locality by using systematic pps (probability proportional to size) sampling procedures, based on the estimated sizes of the enumeration areas. There were no limitations on the sampling selection as all EAs are known to be accessible.

LISTING ACTIVITIES

Since updated sampling frames for the EAs were not readily available, a new listing of households was conducted in all the sample enumeration areas prior to the selection of households. For this purpose, listing teams were formed, who visited each enumeration area, and listed the occupied households. Teams made up of 5 members each were formed, and were given maps of the EAs to ensure that they stayed within bounds. Listing activities took place in November of 2010. Information collected about the households included the name and sex of the household head, the household size and additional contact information such as phone number.

Selection of Households

Lists of households were prepared by the listing teams in the field for each enumeration area. The households were then sequentially numbered from 1 to n (the total number of households in each enumeration area) for each enumeration area. The selection of 15 households in each enumeration area was carried out using random systematic selection procedures. In addition, the selection of 50 percent of the households for the male interviews was also done using the same procedure.

Calculation of inclusion probabilities and sampling weights

Notations

- *h* indicates the stratum in a domain ;
- *H* is the number of strata in the domain ;
- m_h is the number of PU (primary units) or clusters (or EA) selected in stratum *h* ;
- stratum *h* includes M_h PU (primary units) or EA called 1, 2, …, M_h ;
- primary unit or EA i in stratum *h* is called PU_{hi} ;
- N_{hi} is the size for primary unit PU_{hi} ;
- Size N_{hi} is the population size in primary unit PU_{hi} ;
- N_h is the total for size N_{hi} and is defined by expression

$$N_h = \sum_{i=1}^{M_h} N_{hi} \qquad (1)$$

- n_h is the constant number of households to be selected in each cluster or PU in stratum *h*.

At first stage, m_h primary units or clusters are selected in stratum *h* according to systematic *pps* sampling. At second stage, a constant number n_h of households is selected according to simple systematic sampling from each PU or cluster selected in stratum *h*.

- P_{hi} is inclusion probability for primary unit PU_{hi} into the first stage sample ;
- K_{hi} is the number of households in primary unit PU_{hi} , number observed after mapping updating works in selected primary units or clusters ;
- $P_{j.hi}$ is selection probability for household j in primary unit PU_{hi} ;
- P_{hij} is inclusion probability into stratum sample for household j in primary unit i in stratum *h*.

Calculation of inclusion probabilities

It is proved that inclusion probabilities P_{hi} , $P_{j.hi}$ and P_{hij} are expressed respectively by

$$P_{hi} = m_h \frac{N_{hi}}{N_h} = m_h \frac{N_{hi}}{\sum_{i=1}^{M_h} N_{hi}} \qquad (2)$$

$$P_{j.hi} = \frac{n_h}{K_{hi}} \qquad (3)$$

and $\qquad P_{hij} = P_{hi} P_{j.hi} \qquad (4)$

And finally,

$$P_{hij} = m_h \frac{N_{hi}}{N_h} \frac{n_h}{K_{hi}} \qquad (5)$$

Calculation of sampling weights

We deduce from expression (5) that the sampling weight W_{hij} for household j in primary unit i in stratum h, is given by

$$W_{hij} = \frac{N_h K_{hi}}{m_h n_h N_{hi}} \qquad (6)$$

Calculation of inclusion probability and sampling weight for a household subject to men interviews

Accra MICS survey comprises one questionnaire for adult men. But all eligible men should not be interviewed in all households chosen at the sampling second stage. A subsample will be chosen from the 1500 households selected at the second stage.

Only 50% of the 1500 households will be selected by simple systematic method. Precisely, one household will be chosen out of two. All eligible men in each household of this subsample will be interviewed.

P$_{hij(s)}$ is inclusion probability into stratum sample for household j, in primary unit i, in stratum h for the sample s selected in sampling second stage. Actually, **P$_{hij(s)}$** is **P$_{hij}$** and its value is given above in relation (5).

P$_{hij(ss)}$ is inclusion probability into stratum sample for household j, in primary unit i, in stratum h for the subsample ss of households subject to men interview. In order for a household j to be part of the subsample ss, it is necessary for it to be part of the sample s and then be selected in the simple systematic drawing of one household out of two.

Therefore, we have

$$P_{hij(ss)} = \frac{1}{2} P_{hij(s)} \qquad (7)$$

where ½ is the probability for one household from the sample s to be part of the subsample ss, since we select one household out of two in sample s.

Finally, it comes

$$P_{hij(ss)} = m_h \frac{1}{2} \frac{N_{hi}}{N_h} \frac{n_h}{K_{hi}} \qquad (8)$$

We deduce that sampling weight **W$_{hij(ss)}$** for household j, in primary unit i, in stratum h for the subsample ss of households subject to men interview as follows

$$W_{hij(ss)} = \frac{2 N_h K_{hi}}{m_h n_h N_{hi}} \qquad (9)$$

CALCULATION OF GROSS SAMPLING WEIGHTS AND NORMALIZED SAMPLING WEIGHTS

The inclusion probabilities P_{hij} in relation (5) and the sampling weights W_{hij} in relation (6) are calculated in an Excel sheet for the different selected primary units or EAs. This calculation gives initial sampling weights for each sampled EA. This sampling weight is the same for all selected households in the EA.

Taking into account all non responses observed at the first sampling stage and those found at the second sampling stage, gross sampling weights and normalized sampling weights have been calculated in an appropriate Excel sheet developed for this purpose. This Excel sheet is provided on the www.childinfo.org. All formulae are put in this sheet and for calculations one needs only to put the right data in the right cells.

Gross sampling weights and normalized sampling weights were used for tables' production.

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The sample of respondents selected in the Accra Multiple Indicator Cluster Survey is only one of the samples that could have been selected from the same population, using the same design and 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 the estimates from all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey data.

The following sampling error measures are presented in this appendix for each of the selected indicators:

• Standard error *(se):* Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). Standard error is the square root of the variance of the estimate. The Taylor linearization method is used for the estimation of standard errors.

• Coefficient of variation (se/r) is the ratio of the standard error to the value of the indicator, and is a measure of the relative sampling error.

• Design effect *(deff)* is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect *(deft)* is used to show the efficiency of the sample design in relation to the precision. A *deft* value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a *deft* value above 1.0 indicates the increase in the standard error due to the use of a more complex sample design.

• Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall, with a specified level of confidence. For any given statistic calculated from the survey, the value of that statistic will fall within a range of plus or minus two times the standard error (r + 2.se or r – 2.se) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, SPSS Version 18 Complex Samples module has been used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and unweighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest, for the national level, for the regions, and for urban and rural areas. Three of the selected indicators are based on households, 8 are based on household members, 13 are based on women, and 15 are based on children under 5. All indicators presented here are in the form of proportions. Table SE.1 shows the list of indicators for which sampling errors are calculated, including the base population (denominator) for each indicator. Table SE 2 shows the calculated sampling errors for total sample which was the only domain.

Table SE.1: Indicators selected for sampling error calculations

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, High Densely Populated Localities MICS, Accra, 2010-2011

MICS4 Indicator		Base Population
HOUSEHOLDS		
2.16	Iodized salt consumption	All households in which salt was tested or with no salt
3.12	Household availability of insecticide-treated nets (ITNs)	All households
HOUSEHOLD MEMBERS		
4.1	Use of improved drinking water sources	All household members
4.3	Use of improved sanitation facilities	All household members
7.5	Secondary school net attendance ratio (adjusted)	Children of secondary school age
8.2	Child labour	Children age 5-14 years
9.18	Prevalence of children with at least one parent dead	Children age 0-17 years
8.5	Violent discipline	Children age 2-14 years
WOMEN		
3.20	Intermittent preventive treatment for malaria	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.2	Early childbearing	Women age 20-24 years
5.3	Contraceptive prevalence	Women age 15-49 years who are currently married or in union
5.4	Unmet need	Women age 15-49 years who are currently married or in union
5.5a	Antenatal care coverage - at least once by skilled personnel	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.5b	Antenatal care coverage – at least four times by any provider	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.7	Skilled attendant at delivery	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.8	Institutional deliveries	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.9	Caesarean section	Women age 15-49 years with a live birth in the 2 years preceding the survey
7.1	Literacy rate among young women	Women age 15-24 years
8.7	Marriage before age 18	Women age 20-49 years
8.9	Polygyny	Women age 15-49 years who are currently married or in union
8.12	Prevalence of female genital mutilation/cutting (FGM/C) among women	Women age 15-49 years
9.2	Comprehensive knowledge about HIV prevention among young people	Women age 15-24 years
9.3	Knowledge of mother- to-child transmission of HIV	Women age 15-49 years
9.4	Accepting attitudes towards people living with HIV	Women age 15-49 years who have heard of HIV
9.6	Women who have been tested for HIV and know the results	Women age 15-49 years
9.7	Sexually active young women who have been tested for HIV and know the results	Women age 15-24 years who have had sex in the 12 months preceding the survey
9.11	Sex before age 15 among young women	Women age 15-24 years
9.16	Condom use with non-regular partners	Women age 15-24 years who had a non-marital, non-cohabiting partner in the 12 months preceding the survey
8.13	Prevalence of female genital mutilation/cutting (FGM/C) among girls	Girls age 0-14 years

		UNDER-5s
2.1a	Underweight prevalence	Children under age 5
2.2a	Stunting prevalence	Children under age 5
2.3a	Wasting prevalence	Children under age 5
2.6	Exclusive breastfeeding under 6 months	Total number of infants under 6 months of age
2.14	Age-appropriate breastfeeding	Children age 0-23 months
-	Tuberculosis immunization coverage	Children age 12-23 months
-	Received polio immunization	Children age 12-23 months
-	Received DPT immunization	Children age 12-23 months
-	Received measles immunization	Children age 12-23 months
-	Diarrhoea in the previous 2 weeks	Children under age 5
-	Fever in last two weeks	Children under age 5
3.8	Oral rehydration therapy with continued feeding	Children under age 5 with diarrhoea in the previous 2 weeks
3.15	Children under age 5 sleeping under insecticide-treated nets (ITNs)	Children under age 5
3.18	Anti-malarial treatment of children under age 5	Children under age 5 reported to have had fever in the previous 2 weeks
6.1	Support for learning	Children age 36-59 months
6.7	Attendance to early childhood education	Children age 36-59 months
8.1	Birth registration	Children under age 5

Table SE.2 : Sampling errors:

Total sample standard errors, coefficients of variation, design effect, square root of design effect, unweighted counts, weighted counts and confidence intervals for selected indicators, High Densely Populated Localities MICS, Accra, 2010-2011

Indicator	Table	Estimate, r	Standard Error (se)	Coefficient of Variation (se/r)	Design Effect (deff)	Square Root deff	Unweighted Count	weighted counts	Confidence limits r - 2se	r + 2se
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.5251	0.01739	0.033	1.685	1.298	1,391	1,390	0.49	0.56
Household availability of insecticide-treated nets (ITNs)	CH.10	0.1617	0.01354	0.084	1.903	1.38	1,409	1,409	0.135	0.189
Child discipline	CP. 4	0.946	0.01012	0.011	1.394	1.181	696	703	0.926	0.966
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	WS.1	0.9843	0.00506	0.005	2.33	1.526	1,409	1,409	0.974	0.994
Use of improved sanitation facilities	WS.5	0.8532	0.0141	0.017	2.234	1.495	1,409	1,409	0.825	0.881
Secondary school net attendance ratio (adjusted)	ED.5	0.6447	0.02363	0.037	1.422	1.192	584	580	0.597	0.692
Child labour	CP.2	0.3538	0.01686	0.048	1.229	1.109	989	1,010	0.32	0.388
Prevalence of children with at least one parent dead	HA.12	0.0924	0.00895	0.097	1.677	1.295	1,757	1,784	0.075	0.11
WOMEN										
Intermittent preventive treatment for malaria	CH.16	0.4589	0.03844	0.084	1.095	1.046	185	190	0.382	0.536
Early childbearing	RH.2	0.0769	0.02084	0.271	1.401	1.184	230	221	0.035	0.119
Contraceptive prevalence	RH.4	0.2684	0.02213	0.082	1.394	1.181	560	564	0.224	0.313
Unmet need	RH.5	0.271	0.019	0.07	1.022	1.011	560	564	0.233	0.309

Table SE.2 : Sampling errors:

Total sample standard errors, coefficients of variation, design effect, square root of design effect, unweighted counts, weighted counts and confidence intervals for selected indicators, High Densely Populated Localities MICS, Accra, 2010-2011

Indicator	Code	Value	SE	CV	DEFF	√DEFF	Unweighted count	Weighted count	CI lower	CI upper
Antenatal care coverage - at least once by skilled personnel	RH.6	0.9718	0.01385	0.014	1.323	1.15	190	196	0.944	1
Antenatal care coverage - at least four times by any provider	RH.7	0.8795	0.02285	0.026	0.931	0.965	190	196	0.834	0.925
Skilled attendant at delivery	RH.9	0.9755	0.01137	0.012	1.021	1.01	190	196	0.953	0.998
Institutional deliveries	RH.10	0.971	0.01249	0.013	1.048	1.024	190	196	0.946	0.996
Caesarean section	RH.9	0.2236	0.02539	0.114	0.702	0.838	190	196	0.173	0.274
Literacy rate among young women	ED.1	0.7791	0.02536	0.033	1.651	1.285	443	424	0.728	0.83
Marriage before age 18	CP.5	0.1308	0.0109	0.083	1.129	1.063	1,081	1,091	0.109	0.153
Polygyny	CP.5	0.1231	0.01597	0.13	1.32	1.149	560	564	0.091	0.155
Prevalence of female genital mutilation/cutting (FGM/C) among women	CP.8	0.016	0.00377	0.235	1.164	1.079	1,294	1,294	0.008	0.024
Comprehensive knowledge about HIV prevention among young people	HA.2	0.4249	0.02988	0.07	1.615	1.271	443	424	0.365	0.485
Knowledge of mother-to-child transmission of HIV	HA.3	0.5875	0.0168	0.029	1.506	1.227	1,294	1,294	0.554	0.621
Accepting attitudes towards people living with HIV	HA.4	0.1274	0.01297	0.102	1.943	1.394	1,284	1,284	0.101	0.153
Women who have been tested for HIV during last 12 months and who have been told the results	HA.5	0.0893	0.00912	0.102	1.323	1.15	1,294	1,294	0.071	0.108
Sexually active young women who have been tested for HIV and know the results	HA.6	0.1143	0.02682	0.235	1.179	1.086	167	160	0.061	0.168
Sex before age 15 among young women	HA.8	0.0628	0.01481	0.236	1.648	1.284	443	424	0.033	0.092
Condom use with non-regular partners	HA.11	0.4147	0.04151	0.1	0.923	0.961	131	124	0.332	0.498

Table SE.2 : Sampling errors:
Total sample standard errors, coefficients of variation, design effect, square root of design effect, unweighted counts, weighted counts and confidence intervals for selected indicators, High Densely Populated Localities MICS, Accra, 2010-2011

CHILDREN UNDER 5

Indicator	Code	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Unweighted count (n)	Weighted count	Confidence limits r-2se	Confidence limits r+2se
Underweight prevalence	NU.1	0.1259	0.01679	0.133	1.097	1.047	429	431	0.092	0.159
Stunting prevalence	NU.1	0.11	0.02079	0.189	1.873	1.368	425	428	0.068	0.152
Wasting prevalence	NU.1	0.1413	0.01925	0.136	1.308	1.143	429	432	0.103	0.18
Exclusive breastfeeding under 6 months	NU.3	(0.4573)	(0.04824)	(0.105)	(0.422)	(0.65)	46	46	0.361	0.554
Age-appropriate breastfeeding	NU.5	0.466	0.03326	0.071	0.925	0.962	209	186	0.399	0.533
Tuberculosis immunization coverage	CH.1	0.9895	0.00042	0	0.001	0.037	81	83	0.989	0.99
Received polio immunization	CH.1	0.9108	0.01824	0.02	0.327	0.572	81	83	0.874	0.947
Received DPT immunization	CH.1	0.9299	0.02344	0.025	0.674	0.821	81	83	0.883	0.977
Received measles immunization	CH.1	0.9767	0.00094	0.001	0.003	0.056	81	83	0.975	0.979
Diarrhoea in last two weeks	CH.4	0.1085	0.01875	0.173	1.642	1.281	453	453	0.071	0.146
Fever in last two weeks	CH.14	0.0921	0.01841	0.2	1.833	1.354	453	453	0.055	0.129
Oral rehydration therapy with continued feeding	CH.6	(0.51)	(0.01654)	(0.032)	(0.05)	(0.224)	47	49	0.477	0.543
Children under age 5 sleeping under insecticide-treated nets (ITNs)	CH.12	0.1031	0.01822	0.177	1.594	1.263	445	445	0.067	0.14
Anti-malarial treatment of children under age 5	CH.14	(0.5354)	(0.04936)	(0.092)	(0.402)	(0.634)	42	42	0.437	0.634
Support for learning	CD.2	0.5733	0.04379	0.076	1.325	1.151	170	166	0.486	0.661
Attendance to early childhood education	CD.1	0.8781	0.03093	0.035	1.51	1.229	170	166	0.816	0.94
Birth registration	CP.1	0.7963	0.02381	0.03	1.58	1.257	453	453	0.749	0.844

Table DQ.1: Age distribution of household population
Single-year age distribution of household population by sex, High Densely Populated Localities MICS, Accra, 2010-2011

	Male		Female			Male		Female	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	56	2.4	53	2.0	41	24	1.1	19	0.7
1	38	1.7	43	1.7	42	34	1.5	39	1.5
2	58	2.5	53	2.1	43	33	1.4	20	0.8
3	39	1.7	45	1.7	44	12	0.5	26	1.0
4	48	2.1	46	1.8	45	29	1.3	27	1.0
5	57	2.5	53	2.1	46	22	1.0	23	0.9
6	50	2.2	48	1.8	47	18	0.8	17	0.7
7	58	2.5	52	2.0	48	26	1.1	28	1.1
8	49	2.1	50	1.9	49	17	0.7	17	0.7
9	35	1.5	47	1.8	50	17	0.7	32	1.3
10	65	2.8	58	2.3	51	11	0.5	23	0.9
11	49	2.1	46	1.8	52	13	0.5	24	0.9
12	35	1.5	51	2.0	53	15	0.7	15	0.6
13	49	2.1	62	2.4	54	20	0.9	19	0.7
14	34	1.5	61	2.4	55	14	0.6	17	0.6
15	45	2.0	48	1.9	56	12	0.5	21	0.8
16	52	2.3	44	1.7	57	8	0.4	11	0.4
17	53	2.3	54	2.1	58	10	0.4	15	0.6
18	45	1.9	46	1.8	59	7	0.3	8	0.3
19	37	1.6	47	1.8	60	14	0.6	30	1.2
20	51	2.2	60	2.3	61	10	0.4	5	0.2
21	59	2.5	47	1.8	62	11	0.5	23	0.9
22	63	2.8	48	1.9	63	20	0.9	5	0.2
23	53	2.3	45	1.7	64	13	0.6	11	0.4
24	37	1.6	53	2.0	65	12	0.5	12	0.5
25	57	2.5	72	2.8	66	5	0.2	6	0.3
26	44	1.9	38	1.5	67	2	0.1	10	0.4
27	39	1.7	50	2.0	68	9	0.4	4	0.2
28	37	1.6	69	2.7	69	1	0.0	4	0.1
29	33	1.4	43	1.7	70	13	0.6	15	0.6
30	45	1.9	54	2.1	71	1	0.0	4	0.2
31	20	0.9	32	1.3	72	13	0.6	9	0.3
32	46	2.0	56	2.2	73	6	0.3	7	0.3
33	26	1.1	36	1.4	74	6	0.3	1	0.0
34	22	0.9	32	1.2	75	7	0.3	12	0.5
35	33	1.4	54	2.1	76	1	0.0	3	0.1
36	30	1.3	39	1.5	77	1	0.1	4	0.2
37	27	1.2	51	2.0	78	1	0.1	2	0.1
38	40	1.8	39	1.5	79	2	0.1	0	0.0
39	24	1.0	19	0.7	80+	21	0.9	31	1.2
40	38	1.6	37	1.4	DK/ missing	15	0.7	3	0.1
Total						2,303	100.0	2,584	100.0

Table DQ.2: Age distribution of eligible and interviewed women

Household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed, by five-year age groups, High Densely Populated Localities MICS, Accra, 2010-2011

Age	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed (Completion rate)
	Number	Number	Percent	
10-14	279	na	na	na
15-19	238	204	15.7	85.7
20-24	253	221	17.0	87.3
25-29	273	249	19.1	91.2
30-34	211	201	15.4	95.2
35-39	202	196	15.0	96.9
40-44	140	129	9.9	92.1
45-49	112	102	7.8	90.4
50-54	114	na	na	na
Total (15-49)	1,429	1,301	100.0	91.0
'na' indicates not applicable				
Ratio of 50-54 to 45-49: 1.01				

Table DQ.3: Age distribution of under-5s in household and under-5 questionnaires

Household population of children age 0-7, children age 0-4 whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed, by single ages, High Densely Populated Localities MICS, Accra, 2010-2011

Age	Household population of children 0-7	Interviewed children age 0-4		Percentage of eligible children interviewed (Completion rate)
	Number	Number	Percent	
0	109	105	22.9	
1	82	78	17.1	96.4
2	111	108	23.5	96.1
3	83	83	18.1	97.5
4	93	85	18.4	100.0
5	110	na	na	90.6
6	97	na	na	na
7	111	na	na	na
Total (0-4)	478	459	100.0	na
'na' indicates not applicable				
Ratio of 5 to 4 = 1.18				

Table DQ.4:

Women's completion rates by socio-economic characteristics of households Household population of women age 15-49, interviewed women age 15-49, and percentage of eligible women who were interviewed, by selected social and economic characteristics of the household, High Densely Populated Localities MICS, Accra, 2010-2011

Background characteristics	Total women		Total women interviewed		Completion rate
	Number	Percent	Number	Percent	
Locality					
Bubuashie	181	12.6	159	12.2	88.0
La	403	28.2	379	29.2	94.2
James Town	67	4.7	63	4.8	94.0
Nima	363	25.4	348	26.8	95.9
Accra New Town	416	29.1	351	27.0	84.5
Household size					
1-3	927	64.8	382	29.4	92.9
4-6	404	28.3	707	54.3	92.2
7+	98	6.9	212	16.3	84.5
Education of household head					
None	247	17.3	232	17.8	93.7
Primary	131	9.2	122	9.4	93.1
Middle/JSS	587	41.1	523	40.2	89.0
Secondary +	456	31.9	418	32.1	91.6
Missing/DK	7	.5	7	.5	92.3
Wealth index					
Lower 60%	850	59.5	784	60.3	92.2
Upper 40%	579	40.5	517	39.7	89.2
Total	1429	100.0	1301	100.0	91.0

Table DQ.5: Completion rates for under-5 questionnaires by socio-economic characteristics of households

Household population of under-5 children, under-5 questionnaires completed, and percentage of under-5 children for whom interviews were completed, by selected socio-economic characteristics of the household, High Densely Populated Localities MICS, Accra, 2010-2011

Background characteristics	Total children		Total children interviewed		Completion rate
	Number	Percent	Number	Percent	
Locality					
Bubuashie	68	14.2	66	14.3	97.2
La	134	28.0	132	28.7	98.5
James Town	33	6.8	33	7.1	100.0
Nima	120	25.1	118	25.7	98.3
Accra New Town	124	25.9	111	24.2	89.6
Household size					
1-3	100	20.8	72	15.7	98.7
4-6	322	67.4	316	68.9	95.5
7+	56	11.8	71	15.4	96.1
Education of household head					
None	72	15.0	69	15.0	95.8
Primary	35	7.4	35	7.5	97.4
Middle/JSS	191	40.0	187	40.7	97.7
Secondary +	175	36.6	164	35.8	94.0
Missing/DK	5	1.0	5	1.0	100.0
Wealth index					
Lower 60%	284	59.4	272	59.2	95.7
Upper 40%	194	40.6	187	40.8	96.6
Total	478	100.0	459	100.0	96.1

Table DQ.6: Completeness of reporting

Percentage of observations that are missing information for selected questions and indicators,
High Densely Populated Localities MICS, Accra, 2010-2011

Question/Indicator	Percent with missing/incomplete information*	Number of cases
Age	0.3	4,878
Salt testing	0.2	1,409
Starting time of interview	0.4	1,409
Ending time of interview	0.4	1,409
Woman's date of birth: Only month	6.1	1,294
Woman's date of birth: Both month and year	5.6	1,294
Date of first birth: Only month	4.9	761
Date of first birth: Both month and year	4.5	761
Completed years since first birth	1.6	36
Date of last birth: Only month	3.7	761
Date of last birth: Both month and year	0.9	761
Date of first marriage/union: Only month	42.4	719
Date of first marriage/union: Both month and year	22.3	719
Age at first marriage/union	0.0	719
Age at first intercourse	0.5	212
Time since last intercourse	0.5	212
Starting time of interview	0.4	1,294
Ending time of interview	0.7	1,294
Date of birth: Only month	1.1	453
Date of birth: Both month and year	0.5	453
Anthropometric measurements: Weight	3.3	453
Anthropometric measurements: Height	3.7	453
Anthropometric measurements: Both weight and height	3.1	453
Starting time of interview	1.0	453
Ending time of interview	1.0	453

Table DQ.7:
Completeness of information for anthropometric indicators Distribution of children under 5 by completeness of information for anthropometric indicators, High Densely Populated Localities MICS, Accra, 2010-2011

Weight for Age

Age group	Valid weight and data of birth	Weight not mea-sured	Incom-plete date	Both	Flag	Total	Excluded	Number of children under 5
		Reason for exclusion from analysis						
<6 months	95.7	.0	.0	.0	4.3	100.0	4.3	46
6-11 months	96.4	.0	.0	.0	3.6	100.0	3.6	56
12-23 months	97.5	.0	.0	.0	2.5	100.0	2.5	81
24-35 months	95.0	.0	3.0	.0	2.0	100.0	5.0	100
36-47 months	98.8	.0	.0	.0	1.2	100.0	1.2	81
48-59 months	86.5	1.1	4.5	.0	7.9	100.0	13.5	89
Total	94.7	.2	1.5	.0	3.5	100.0	5.3	453

Height for Age

Age group	Valid height and data of birth	Height not mea-sured	Incom-plete date	Both	Flag	Total	Excluded	Number of children under 5
		Reason for exclusion from analysis						
<6 months	93.5	2.2	.0	.0	4.3	100.0	6.5	46
6-11 months	94.6	.0	.0	.0	5.4	100.0	5.4	56
12-23 months	96.3	.0	.0	.0	3.7	100.0	3.7	81
24-35 months	94.0	1.0	3.0	.0	2.0	100.0	6.0	100
36-47 months	97.5	1.2	.0	.0	1.2	100.0	2.5	81
48-59 months	87.6	.0	4.5	.0	7.9	100.0	12.4	89
Total	93.8	.7	1.5	.0	4.0	100.0	6.2	453

Weight for height

Age	All valid	Weight not mea-sured	Height not mea-sured	Incom-plete date	Weight not mea-sured with incom-plete date	Height not mea-sured with incom-plete date	Weight, height and age invalid	FLAG	Total	Exclud-ed	Num-ber of chil-dren under 5
		Reason for exclusion from analysis									
<6 months	89.1	.0	2.2	.0	.0	.0	.0	8.7	100.0	10.9	46
6-11 months	94.6	.0	.0	.0	.0	.0	.0	5.4	100.0	5.4	56
12-23 months	97.5	.0	.0	.0	.0	.0	.0	2.5	100.0	2.5	81
24-35 months	94.0	.0	1.0	3.0	.0	.0	.0	2.0	100.0	6.0	100
36-47 months	97.5	.0	1.2	.0	.0	.0	.0	1.2	100.0	2.5	81
48-59 months	86.5	1.1	.0	4.5	.0	.0	.0	7.9	100.0	13.5	89
Total	93.4	.2	.7	1.5	.0	.0	.0	4.2	100.0	6.6	453

Table DQ.8: Heaping in anthropometric measurements
Distribution of weight and height/length measurements by digits reported for decimals, High Densely Populated Localities MICS, Accra, 2010-2011

Digits	Weight		Height	
	Number	Percent	Number	Percent
0	46	10.6	58	13.3
1	54	12.4	41	9.4
2	38	8.7	42	9.6
3	40	9.2	45	10.3
4	49	11.2	55	12.6
5	41	9.4	61	14.0
6	40	9.2	42	9.6
7	46	10.6	31	7.1
8	38	8.7	30	6.9
9	44	10.1	32	7.3
Total	436	100.0	437	100.0

Table DQ.9: Observation of bednets and places for hand washing
Percentage of bednets in all households interviewed observed by the interviewer, and percentage of places for handwashing observed by the interviewer in all interviewed households, High Densely Populated Localities MICS, Accra, 2010-2011

Background characteristics	Percentage of bednets observed by interviewer	Total number of bednets	Observation of places for handwashing: Observed	Place for handwashing not in dwelling	No permission to see	Other	Total	Number of households interviewed
Locality								
Bubuashie	42.9	88	52.8	37.2	1.8	8.3	100.0	218
La	64.3	127	55.4	37.9	1.1	5.5	100.0	451
James Town	84.6	16	32.4	45.6	0.0	22.1	100.0	68
Nima	69.2	50	56.0	25.5	2.2	16.3	100.0	368
Accra New Town	34.0	79	72.0	19.7	4.6	3.6	100.0	304
Wealth status								
Lower 60%	56.6	208	49.5	38.0	1.4	11.0	100.0	878
Upper 40%	52.8	152	71.0	19.4	3.6	6.0	100.0	531
Total	55.0	360	57.6	31.0	2.2	9.2	100.0	1409

Table DQ.10: Observation of women's health cards
Percent distribution of women with a live birth in the last 2 years by presence of a health card, and the percentage of health cards seen by the interviewers, High Densely Populated Localities MICS, Accra, 2010-2011

Background characteristics	Woman has health card					Perent seen	Number of women with a live birth in the last two years
	No card	Card seen	Card not seen	Dk	Total		
Locality							
Bubuashie	21.2	21.2	57.6	.0	100.0	26.9	33
La	11.5	32.8	55.7	.0	100.0	37.0	61
James Town	6.7	26.7	66.7	.0	100.0	28.6	15
Nima	16.7	40.5	42.9	.0	100.0	48.6	42
Accra New Town	10.3	46.2	43.6	.0	100.0	51.4	39
Wealth index							
Lowᵃer 60%	13.7	41.9	44.4	.0	100.0	48.5	117
Upper 40%	13.7	23.3	63.0	.0	100.0	27.0	73
Total	13.7	34.7	51.6	.0	100.0	40.2	190

Table DQ.11: Observation of under-5s birth certificates
Percent distribution of children under 5 by presence of birth certificates, and percentage of birth calendar seen, High Densely Populated Localities MICS, Accra, 2010-2011

Background characteristics	Child does not have birth certificate	Child has birth certificate		Missing/DK	Total	Percent of birth certificates seen by the interviewer (1)/(1+2)*100	Number of children under age 5
		Seen by the interviewer (1)	Not seen by the interviewer (2)				
Locality							
Bubuashie	0.0	35.4	30.5	0.0	100.0	53.7	82
La	1.6	37.6	37.6	0.0	100.0	50.0	125
James Town	7.4	25.9	48.1	0.0	100.0	35.0	27
Nima	6.7	47.1	33.6	0.0	100.0	58.3	119
Accra New Town	3.0	28.0	49.0	1.0	100.0	36.4	100
Child's age							
0	5.9	21.6	30.4	0.0	100.0	41.5	102
1	2.5	36.7	40.5	0.0	100.0	47.5	79
2	1.0	46.1	38.2	0.0	100.0	54.7	102
3	2.5	43.8	42.5	0.0	100.0	50.7	80
4	4.4	37.8	42.2	1.1	100.0	47.2	90
Total	3.3	36.9	38.4	0.2	100.0	49.0	453

Table DQ.12: Observation of vaccination cards
Percent distribution of children under 5 by presence of a vaccination card, and the percentage of vaccination cards seen by the interviewers, High Densely Populated Localities MICS, Accra, 2010-2011

Background characteristics	Child does not have vaccination card		Child has vaccination card		Missing/DK	Total	Percent of vaccination cards seen by the interviewer (1)/(1+2)*100	Number of children under age 5
	Had vaccination card previously	Never had vaccination card	Seen by the interviewer (1)	Not seen by the interviewer (2)				
Locality								
Bubuashie	1.2	2.4	81.7	14.6	0.0	100.0	84.8	82
La	0.0	0.0	86.4	13.6	0.0	100.0	86.4	125
James Town	3.7	0.0	88.9	7.4	0.0	100.0	92.3	27
Nima	0.8	0.8	86.6	11.8	0.0	100.0	88.0	119
Accra New Town	1.0	0.0	77.0	22.0	0.0	100.0	77.8	100
Child's age								
0	1.0	0.0	94.1	4.9	0.0	100.0	95.0	102
1	0.0	0.0	89.9	10.1	0.0	100.0	89.9	79
2	1.0	0.0	88.2	10.8	0.0	100.0	89.1	102
3	1.3	0.0	77.5	21.3	0.0	100.0	78.5	80
4	1.1	3.3	66.7	28.9	0.0	100.0	69.8	90
Total	0.9	0.7	83.7	14.8	0.0	100.0	85.0	453

Table DQ.13: Presence of mother in the household and the person interviewed for the under-5 questionnaire

Distribution of children under five by whether the mother lives in the same household, and the person interviewed for the under-5 questionnaire, High Densely Populated Localities MICS, Accra, 2010-2011

Age	Mother in the household		Mother not in the household			Total	Number of children under 5
	Mother interviewed	Other adult female interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed		
0	96.2	0.0	0.0	3.8	0.0	100.0	109
1	96.3	0.7	0.0	3.0	0.0	100.0	82
2	92.1	1.6	0.0	6.3	0.0	100.0	111
3	82.7	0.0	0.0	16.4	1.0	100.0	83
4	82.0	2.1	2.5	13.4	0.0	100.0	93
Total	90.1	0.9	0.5	8.3	0.2	100.0	478

Table DQ.14: Selection of children age 2-14 years for the child discipline module

Percent of households with at least two children age 2-14 years where correct selection of one child for the child discipline module was performed, High Densely Populated Localities MICS, Accra, 2010-2011

Background characteristics	Percent of households where correct selection was performed	Number of households with 2 or more children age 2-14 years
Locality		
Bubuashie	90.9	55
La	88.6	105
James Town	100.0	20
Nima	93.4	106
Accra New Town	90.4	94
Number of of children 2-14		
2	94.1	238
3	88.5	104
4	81.6	38
Total	91.3	380

Table DQ.15: School attendance by single age

Distribution of household population age 5-24 by educational level and grade attended in the current (or most recent) school year, High Densely Populated Localities MICS, Accra, 2010-2011

Age at start of school year	Not at-tending school	Primary							Middle/JSS/JHS			Secondary/ SSS/ SHS/ TECH/ VOC	Higher	Islamic educa-tion (Ma-karanta)	DK	Total	Num-ber of house-hold mem-bers
		Pre school	1	2	3	4	5	6	1	2	3						
5	5.9	84.6	9.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	116
6	3.2	29.0	51.3	14.5	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	98
7	1.6	6.5	30.4	50.0	11.2	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	108
8	2.5	6.5	10.7	28.7	35.9	9.8	5.5	.0	.0	.0	.4	.0	.0	.0	.0	100.0	91
9	2.1	.0	3.3	11.7	35.8	28.7	15.6	.8	1.3	.0	.0	.0	.0	.7	.0	100.0	93
10	3.2	.0	1.4	8.8	11.9	26.4	35.8	10.1	2.0	.0	.3	.0	.0	.0	.0	100.0	117
11	.0	.0	1.0	2.8	6.7	10.8	16.9	52.9	7.8	1.2	.0	.0	.0	.0	.0	100.0	92
12	4.0	.0	.5	.7	6.9	6.4	13.7	26.9	29.1	10.4	.0	.6	.0	.8	.0	100.0	96
13	.0	.0	.0	1.4	.0	1.5	9.0	22.3	31.1	22.3	7.9	3.2	.0	1.4	.0	100.0	95
14	11.0	.0	.0	.0	.7	2.2	6.4	11.6	13.3	28.5	24.0	2.2	.0	.0	.0	100.0	100
15	13.3	.0	.0	.0	.0	.7	3.1	8.1	14.6	15.3	14.2	29.0	.0	1.7	.0	100.0	86
16	16.3	.0	.0	.0	.0	.0	.0	3.7	5.7	4.4	22.2	43.7	.0	4.1	.0	100.0	95
17	32.9	.0	.0	.0	.0	.5	.0	.0	1.2	7.0	9.0	48.8	.0	.6	.0	100.0	107
18	46.4	.0	.0	.0	.0	.0	.0	.0	3.5	5.0	3.6	33.0	6.6	1.8	.0	100.0	82
19	61.6	.0	.0	.0	.0	.0	.0	.0	1.4	1.4	1.3	26.5	7.2	.6	.0	100.0	101
20	68.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	16.4	8.3	4.9	.0	100.0	107
21	74.0	.0	.0	.0	.0	1.4	.0	.0	.0	.0	.0	9.3	15.2	.0	.0	100.0	102
22	79.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.3	15.7	.0	1.0	100.0	108
23	83.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	14.4	.0	.0	100.0	93
24	78.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	5.4	16.2	.0	.0	100.0	105

Table DQ.16: Sex ratio at birth among children ever born and living

Sex ratio (number of males per 100 females) among children ever born (at birth), children living, and deceased children, by age of women, High Densely Populated Localities MICS, Accra, 2010-2011

Age	Children Ever Born			Children Living			Children Deceased			Number of women
	Number of sons ever born	Number of daughters ever born	Sex ratio	Number of sons living	Number of daughters living	Sex ratio	Number of de-ceased sons	Number of deceased daughters	Sex ratio	
15-19	4	3	1.33	4	3	1.33	0	0	.	213
20-24	58	36	1.61	55	34	1.62	3	2	1.50	230
25-29	122	108	1.13	112	100	1.12	10	8	1.25	238
30-34	181	190	0.95	163	178	0.92	18	12	1.50	190
35-39	237	250	0.95	220	232	0.95	17	18	0.94	187
40-44	234	189	1.24	218	173	1.26	16	16	1.00	127
45-49	222	186	1.19	195	166	1.17	27	20	1.35	109
Total	1,058	962	1.20	967	886	1.20	91	76	1.26	1,294

MICS4 INDICATOR		Module[20]	Numerator	Denominator	MDG[21]
2. NUTRITION					
2.1a 2.1b	Underweight prevalence	AN	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median weight for age of the WHO standard	Total number of children under age 5	MDG 1.8
2.2a 2.2b	Stunting prevalence	AN	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median height for age of the WHO standard	Total number of children under age 5	
2.3a 2.3b	Wasting prevalence	AN	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median weight for height of the WHO standard	Total number of children under age 5	
2.4	Children ever breastfed	MN	Number of women with a live birth in the 2 years preceding the survey who breastfed the child at any time	Total number of women with a live birth in the 2 years preceding the survey	
2.5	Early initiation of breastfeeding	MN	Number of women with a live birth in the 2 years preceding the survey who put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey	
2.6	Exclusive breastfeeding under 6 months	BF	Number of infants under 6 months of age who are exclusively breastfed [22]	Total number of infants under 6 months of age	
2.9	Predominant breastfeeding under 6 months	BF	Number of infants under 6 months of age who received breast milk as the predominant source of nourishment [23] during the previous day	Total number of infants under 6 months of age	
2.10	Duration of breastfeeding	BF	The age in months when 50 percent of children age 0-35 months did not receive breast milk during the previous day		
2.11	Bottle feeding	BF	Number of children age 0-23 months who were fed with a bottle during the previous day	Total number of children age 0-23 months	

20 Some indicators are constructed by using questions in several modules. In such cases, only the module(s) which contains most of the necessary information is indicated.

21 MDG indicators as of February 2010

22 Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines

23 Infants who receive breast milk and certain fluids (water and water-based drinks, fruit juice, ritual fluids, oral rehydration solution, drops, vitamins, minerals, and medicines), but do not receive anything else (in particular, non-human milk and food-based fluids)

	MICS4 INDICATOR	Module[20]	Numerator	Denominator	MDG[21]
2.13	Minimum meal frequency	BF	Number of children age 6-23 months receiving solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum times or more, according to breastfeeding status, during the previous day	Total number of children age 6-23 months	
2.14	Age-appropriate breastfeeding	BF	semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum times [24] or more, according to breastfeeding status, during the previous day Number of children age 0-23 months appropriately fed [25] during the previous day	Total number of children age 0-23 months	
2.15	Milk feeding frequency for non-breastfed children	BF	Number of non-breastfed children age 6-23 months who received at least 2 milk feedings during the previous day	Total number of non-breastfed children age 6-23 months	
2.16	Iodized salt consumption	SI	Number of households with salt testing 15 parts per million or more of iodide/iodate	Total number of households in which salt was tested or with no salt	
2.17	Vitamin A supplementation (children under age 5)	IM	Number of children age 6-59 months who received at least one high-dose vitamin A supplement in the 6 months preceding the survey	Total number of children age 6-59 months	
2.18	Low-birth weight infants	MN	Number of last live births in the 2 years preceding the survey weighing below 2,500 grams at birth	Total number of last live births in the 2 years preceding the survey	
2.19	Infants weighed at birth	MN	Number of last live births in the 2 years preceding the survey who were weighed at birth	Total number of last live births in the 2 years preceding the survey	

[24] Breastfeeding children: Solid, semi-solid, or soft foods, two times for infants age 6-8 months, 3 times for children 9-23 months; Non-breastfeeding children: Solid, semi-solid, or soft foods, or milk feeds, four times for children age 6-23 months

[25] Infants age 0-5 who are exclusively breastfed, and children age 6-23 months who are breastfed and ate solid, semi-solid or soft foods

MICS4 INDICATOR	Module[20]	Numerator	Denominator	MDG[21]
3. CHILD HEALTH				
3.1 Tuberculosis immunization coverage[26]	IM	Number of children age 12-23 months who received BCG vaccine before their first birthday	Total number of children age 12-23 months	
3.2 Polio immunization coverage	IM	Number of children age 12-23 months who received OPV3 vaccine before their first birthday	Total number of children age 12-23 months	
3.3 Immunization coverage for diphtheria, pertussis and tetanus (DPT)	IM	Number of children age 12-23 months who received DPT3 vaccine before their first birthday	Total number of children age 12-23 months	
3.4 Measles immunization coverage	IM	Number of children age 12-23 months who received measles vaccine before their first birthday	Total number of children age 12-23 months	MDG 4.3
3.5 Hepatitis B immunization coverage	IM	Number of children age 12-23 months who received the third dose of Hepatitis B vaccine before their first birthday	Total number of children age 12-23 months	
3.6 Yellow fever immunization coverage	IM	Number of children age 12-23 months who received yellow fever vaccine before their first birthday	Total number of children age 12-23 months	
3.7 Neonatal tetanus protection	MN	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who were given at least two doses of tetanus toxoid vaccine within the appropriate interval[27] prior to giving birth	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	
3.8 Oral rehydration therapy with continued feeding	CA	Number of children under age 5 with diarrhoea in the previous 2 weeks who received ORT (ORS packet or recommended homemade fluid or increased fluids) and continued feeding during the episode of diarrhoea	Total number of children under age 5 with diarrhoea in the previous 2 weeks	
3.11 Solid fuels	HC	Number of household members in households that use solid fuels as the primary source of domestic energy to cook	Total number of household members	
3.12 Household availability of insecticide-treated nets (ITNs)[28]	TN	Number of households with at least one insecticide treated net (ITN)	Total number of households	
3.13 Households protected by a vector control method	TN - IR	Number of households with at least one insecticide-treated net (ITN) and/or that received spraying through an IRS campaign in the last 12 months preceding the survey	Total number of households	

[26] Age groups used in indicators 3.1 to 3.6 are applicable when basic immunization schedules are used (with measles administered at 9 months). For the calculation of indicators when different schedules are used, see MICS4 manual for detailed descriptions

[27] See MICS4 manual for a detailed description

[28] An ITN is (a) a factory treated net which does not require any treatment, (b) a pretreated net obtained within the past 12 months, or (c) a net that has been soaked with insecticide within the past 12 months

MICS4 INDICATOR		Module[20]	Numerator	Denominator	MDG[21]
	control method		net (ITN) and/or that received spraying through an IRS[29] campaign in the last 12 months preceding the survey		
3.14	Children under age 5 sleeping under any type of mosquito net	TN	Number of children under age 5 who slept under any type of mosquito net the previous night	Total number of children under age 5	
3.15	Children under age 5 sleeping under insecticide-treated nets (ITNs)	TN	Number of children under age 5 who slept under an insecticide-treated mosquito net (ITN) the previous night	Total number of children under age 5	
3.16	Malaria diagnostics usage	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who had a finger or heel stick for malaria testing	Total number of children under age 5 reported to have had fever in the previous 2 weeks	MDG 6.7
3.17	Anti-malarial treatment of children under 5 the same or next day	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who were treated with any anti-malarial drug within the same or next day of onset of symptoms	Total number of children under age 5 reported to have had fever in the previous 2 weeks	
3.18	Anti-malarial treatment of children under age 5	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who received any antimalarial treatment	Total number of children under age 5 reported to have had fever in the previous 2 weeks	
3.20	Intermittent preventive treatment for malaria	MN	Number of women age 15-49 years who received at least 2 doses of SP/Fansidar to prevent malaria during antenatal care visits for their last pregnancy leading to a live birth in the 2 years preceding the survey	Total number of women age 15-49 years who have had a live birth in the 2 years preceding the survey	MDG 6.8

29 *Indoor residual spraying*

MICS4 INDICATOR		Module[20]	Numerator	Denominator	MDG[21]
4. WATER AND SANITATION					
4.1	Use of improved drinking water sources	WS	Number of household members using improved sources of drinking water	Total number of household members	MDG 7.8
4.2	Water treatment	WS	Number of household members using unimproved drinking water who use an appropriate treatment method	Total number of household members in households using unimproved drinking water sources	
4.3	Use of improved sanitation facilities	WS	Number of household members using improved sanitation facilities	Total number of household members	MDG 7.9
4.4	Safe disposal of child's faeces	CA	Number of children age 0-2 years whose (last) stools were disposed of safely	Total number of children age 0-2 years	
4.5	Place for handwashing	HW	Number of households with a designated place for hand washing where water and soap are present	Total number of households	
4.6	Availability of soap	HW	Number of households with soap anywhere in the dwelling	Total number of households	

MICS4 INDICATOR		Module[20]	Numerator	Denominator	MDG[21]
5. REPRODUCTIVE HEALTH					
5.1	Adolescent birth rate	CM	Age-specific fertility rate for women age 15-19 years		MDG 5.4
5.2	Early childbearing	CM	Number of women age 20-24 years who had at least one live birth before age 18	Total number of women age 20-24 years	
5.3	Contraceptive prevalence rate[M]	CP	Number of women age 15-49 years currently married or in union who are using (or whose partner is using) a (modern or traditional) contraceptive method	Total number of women age 15-49 years who are currently married or in union	MDG 5.3
5.4	Unmet need[30]	UN	Number of women age 15-49 years who are currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception	Total number of women age 15-49 years who are currently married or in union	MDG 5.6
5.5a 5.6b	Antenatal care coverage	MN	Number of women age 15-49 years who were attended during pregnancy in the 2 years preceding the survey (a) at least once by skilled personnel (b) at least four times by any provider	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	MDG 5.5
5.6	Content of antenatal care	MN	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who had their blood pressure measured and gave urine and blood samples during the last pregnancy	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	
5.7	Skilled attendant at delivery	MN	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who were attended during childbirth by skilled health personnel	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	MDG 5.2
5.8	Institutional deliveries	MN	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who delivered in a health facility	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	
5.9	Caesarean section	MN	Number of last live births in the 2 years preceding the survey who were delivered by caesarean section	Total number of last live births in the 2 years preceding the survey	

30 *See MICS4 manual for a detailed description*

MICS4 INDICATOR		Module[20]	Numerator	Denominator	MDG[21]
6. CHILD DEVELOPMENT					
6.1	Support for learning	CE	Number of children age 36-59 months with whom an adult has engaged in four or more activities to promote learning and school readiness in the past 3 days	Total number of children age 36-59 months	
6.2	Father's support for learning	CE	Number of children age 36-59 months whose father has engaged in one or more activities to promote learning and school readiness in the past 3 days	Total number of children age 36-59 months	
6.3	Learning materials: children's books	CE	Number of children under age 5 who have three or more children's books	Total number of children under age 5	
6.4	Learning materials: playthings	CE	Number of children under age 5 with two or more playthings	Total number of children under age 5	
6.5	Inadequate care	CE	Number of children under age 5 left alone or in the care of another child younger than 10 years of age for more than one hour at least once in the past week	Total number of children under age 5	
6.6	Early child development Index	CE	Number of children age 36-59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains	Total number of children age 36-59 months	
6.7	Attendance to early childhood education	CE	Number of children age 36-59 months who are attending an early childhood education programme	Total number of children age 36-59 months	

MICS4 INDICATOR		Module[20]	Numerator	Denominator	MDG[21]
7. LITERACY AND EDUCATION					
7.1	Literacy rate among young men/ women	WB	Number of men/women age 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	Total number of men/ women age 15-24 years	MDG 2.3
7.2	School readiness	ED	Number of children in first grade of primary school who attended pre-school during the previous school year	Total number of children attending the first grade of primary school	
7.3	Net intake rate in primary education	ED	Number of children of school-entry age who enter the first grade of primary school	Total number of children of school-entry age	
7.4	Primary school net attendance ratio (adjusted)	ED	Number of children of primary school age currently attending primary or secondary school	Total number of children of primary school age	MDG 2.1
7.5	Secondary school net attendance ratio (adjusted)	ED	Number of children of secondary school age currently attending secondary school or higher	Total number of children of secondary-school age	
7.6	Children reaching last grade of primary	ED	Proportion of children entering the first grade of primary school who eventually reach last grade	MDG 2.2	
7.7	Primary completion rate	ED	Number of children (of any age) attending the last grade of primary school (excluding repeaters)	Total number of children of primary school completion age (age appropriate to final grade of primary school)	
7.8	Transition rate to secondary school	ED	Number of children attending the last grade of primary school during the previous school year who are in the first grade of secondary school during the current school year	Total number of children who are attending the first grade of secondary school	
7.9	Gender parity index (primary school)	ED	Primary school net attendance ratio (adjusted) for girls	Primary school net attendance ratio (adjusted) for boys	MDG 3.1
7.10	Gender parity index (secondary school)	ED	Secondary school net attendance ratio (adjusted) for girls	Secondary school net attendance ratio (adjusted) for boys	MDG 3.1

MICS4 INDICATOR	Module[20]	Numerator	Denominator	MDG[21]
8. CHILD PROTECTION				
8.1 Birth registration	BR	Number of children under age 5 whose births are reported registered	Total number of children under age 5	
8.2 Child labour	CL	Number of children age 5-14 years who are involved in child labour	Total number of children age 5-14 years	
8.3 School attendance among child labourers	ED - CL	Number of children age 5-14 years who are involved in child labour and are currently attending school	Total number of children age 5-14 years involved in child labour	
8.4 Child labour among students	ED - CL	Number of children age 5-14 years who are involved in child labour and are currently attending school	Total number of children age 5-14 years attending school	
8.5 Violent discipline	CD	Number of children age 2-14 years who experienced psychological aggression or physical punishment during the past month	Total number of children age 2-14 years	
8.6 Marriage before age 15	MA	Number of women age 15-49 years who were first married or in union by the exact age of 15	Total number of women age 15-49 years	
8.7 Marriage before age 18	MA	Number of women age 20-49 years who were first married or in union by the exact age of 18	Total number of women age 20-49 years	
8.8 Young women age 15-19 years currently married or in union	MA	Number of women age 15-19 years who are currently married or in union	Total number of women age 15-19 years	
8.9 Polygyny	MA	Number of women age 15-49 years who are in a polygynous union	Total number of women age 15-49 years who are currently married or in union	
8.11 Approval for female genital mutilation/cutting (FGM/C)	FG	Number of women age 15-49 years favouring the continuation of female genital mutilation/cutting (FGM/C)	Total number of women age 15-49 years who have heard of FGM/C	
8.12 Prevalence of female genital mutilation/cutting (FGM/C) among women	FG	Number of women age 15-49 years who report to have undergone any form of female genital mutilation/cutting (FGM/C)	Total number of women age 15-49 years	
8.14 Attitudes towards domestic violence [M]	DV	Number of women/men who state that a husband/partner is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food	Total number of women/men age 15-49 years	

MICS4 INDICATOR	Module[20]	Numerator	Denominator	MDG[21]
9. HIV/AIDS, SEXUAL BEHAVIOUR AND ORPHANS				
9.1 Comprehensive knowledge about HIV prevention[M]	HA	Number of women age 15-49 years who correctly identify two ways of preventing HIV infection,[31] know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission	Total number of women age 15-49 years	
9.2 Comprehensive knowledge about HIV prevention among young people[M]	HA	Number of women age 15-24 years who correctly identify two ways of preventing HIV infection[32], know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission	Total number of women age 15-24 years	MDG 6.3
9.3 Knowledge of mother-to-child transmission of HIV [M]	HA	Number of women age 15-49 years who correctly identify all three means of mother-to-child transmission of HIV	Total number of women age 15-49 years	
9.4 Accepting attitudes towards people living with HIV[M]	HA	Number of women age 15-49 years expressing accepting attitudes on all four questions[33] toward people living with HIV	Total number of women age 15-49 years who have heard of HIV	
9.5 Women who know where to be tested for HIV[M]	HA	Number of women age 15-49 years who state knowledge of a place to be tested for HIV	Total number of women age 15-49 years	
9.6 Women who have been tested for HIV and know the results[M]	HA	Number of women age 15-49 years who have been tested for HIV in the 12 months preceding the survey and who know their results	Total number of women age 15-49 years	
9.7 Sexually active young women who have been tested for HIV and know the results[M]	HA	Number of women age 15-24 years who have had sex in the 12 months preceding the survey, who have been tested for HIV in the 12 months preceding the survey and who know their results	Total number of women age 15-24 years who have had sex in the 12 months preceding the survey	
9.8 HIV counselling during antenatal care[M]	HA	Number of women age 15-49 years who gave birth in the 2 years preceding the survey and received antenatal care, reporting that they received counselling on HIV during antenatal care	Total number of women age 15-49 years who gave birth in the 2 years preceding the survey	
9.9 HIV testing during antenatal care	HA	Number of women age 15-49 years who gave birth in the 2 years preceding the su rvey and received antenatal care, reporting that they were offered and accepted an HIV test during antenatal care and received their results	Total number of women age 15-49 years who gave birth in the 2 years preceding the survey	

31 Using condoms and limiting sex to one faithful, uninfected partner
32 Transmission during pregnancy, during delivery, and by breastfeeding
33 Women (1) who think that a female teacher with the AIDS virus should be allowed to teach in school, (2) who would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus, (3) who would not want to keep it as a secret if a family member became infected with the AIDS virus, and (4) who would be willing to care for a family member who became sick with the AIDS virus

MICS4 INDICATOR		Module[20]	Numerator	Denominator	MDG[21]
9.10	Young women who have never had sex	SB	Number of never married women age 15-24 years who have never had sex	Total number of never married women age 15-24 years	
9.11	Sex before age 15 among young women	SB	Number of women age 15-24 years who have had sexual intercourse before age 15	Total number of women age 15-24 years	
9.12	Age-mixing among sexual partners	SB	Number of women age 15-24 years who had sex in the 12 months preceding the survey with a partner who was 10 or more years older than they were	Total number of women age 15-24 years who have had sex in the 12 months preceding the survey	
9.13	Sex with multiple partners[M]	SB	Number of women age 15-49 years who have had sexual intercourse with more than one partner in the 12 months preceding the survey	Total number of women age 15-49 years	
9.15	Sex with non-regular partners	SB	Number of sexually active women age 15-24 years who have had sex with a non-marital, non-cohabitating partner in the 12 months preceding the survey	Total number of women age 15-24 years who have had sex in the 12 months preceding the survey	
9.16	Condom use with non-regular partners	SB	Number of women age 15-24 years reporting the use of a condom during sexual intercourse with their last non-marital, non-cohabiting sex partner in the 12 months preceding the survey	Total number of women age 15-24 years who had a non-marital, non-cohabiting partner in the 12 months preceding the survey	MDG 6.2
9.17	Children's living arrangements	HL	Number of children age 0-17 years not living with a biological parent	Total number of children age 0-17 years	
9.18	Prevalence of children with at least one parent dead	HL	Number of children age 0-17 years with at least one dead parent	Total number of children age 0-17 years	

Four separate questionnaires were used for the Accra MICS and these are presented on the following pages in the following order:

- o Household Questionnaire
- o Women's Questionnaire
- o Men's Questionnaire
- o Under five Questionnaire

GHANA HOUSEHOLD QUESTIONNAIRE
ACCRA – 2010

◼◼◼MICS

USEHOLD INFORMATION PANEL	HH

	HH2. Household number: ___ ___
	HH2A: Is household selected for the male survey Yes...1 No...2
HH1. Cluster number: ___ ___ ___ ___ ___ ___ ___	
HH3. Interviewer name and number: Name _____	HH4. Supervisor name and number: Name_____
HH5. Date of interview (DD/ MM / YYYY)	
	___ ___ / ___ ___ / 2010
HH6. Area: Urban...1	HH7. Locality ___ (see codes below)

LOCALITY CODES: BUBUASHIE – 1   LA – 2   JAMES TOWN – 3   NIMA – 4
ACCRA NEW TOWN – 5

WE ARE FROM THE INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH (ISSER) AT THE UNIVERSITY OF GHANA, LEGON. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 45 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ Yes, permission is given   ☐ Go to HH18 to record the time and then begin the interview.
☐ No, permission is not given   ☐ Complete HH9. Discuss this result with your supervisor.

After all questionnaires for the household have been completed, fill in the following information:	
HH8. Name of head of household:	_____
HH9. Result of household interview: Completed...01 No household member or no competent respondent at home at time of visit..................02 Entire household absent for extended period of time...03 Refused.. 04 Dwelling vacant / Address not a dwelling.........05 Dwelling destroyed...06 Dwelling not found..07 Other (specify)...96	HH10. Respondent to household questionnaire: Name: _____ Line Number: ___ ___ HH11. Total number of household members: ___ ___
HH12. Number of women age 15-49 years: ___ ___	HH13. Number of woman's questionnaires completed: ___ ___
HH12. Number of women age 15-49 years: ___ ___	HH15. Number of under-5 questionnaires completed: ___ ___
IF HOUSEHOLD IS NOT SELECTED FOR THE MALE INTERVIEW (HH2A=2), LEAVE HH15A AND HH15B BLANK	
HH15A. Number of men aged 15-59 years ___ ___	HH15B. Number of man's questionnaires completed: ___ ___
HH16. Field edited by (Name and number): Name _____ ___ ___	HH17. Data entry clerk (Name and number): Name _____ ___ ___

HH18.
Record the time.

Hour ....|____|____|

Minutes ......|____|____|

HOUSEHOLD LISTING FORM

FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES HERE, STARTING WITH THE HEAD OF THE HOUSEHOLD.
List the head of the household in line 01. List all household members (HL2), their relationship to the household head (HL3), and their sex (HL4)

Then ask: ARE THERE ANY OTHERS WHO LIVE HERE, EVEN IF THEY ARE NOT AT HOME NOW?

If yes, complete listing for questions HL2-HL4. Then, ask questions starting with HL5 for each person at a time.
Use an additional questionnaire if all rows in the household listing form have been used.

HL1. Line number	HL2. Name	HL3. WHAT IS THE RELATION-SHIP OF (name) TO THE HEAD OF HOUSEHOLD?	HL4. IS (name) MALE OR FEMALE? 1 Male 2 Female		HL5. WHAT IS (name)'s DATE OF BIRTH? 98 DK 9998 DK		HL6. HOW OLD IS (name)? Record in completed years. If age is 95 or above, record '95'.	HL7. For women age 15-49 Circle line number if woman is age 15-49	HL7A. For men age 15-59 If the household is selected for the male interview (HH2A=1): Circle line number if man is age 15-59	HL8. For children age 5-14 WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record line number of mother/caretaker	HL9. For children under age 5 WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record line number of mother/caretaker	HL10. For all household members DID (name) STAY HERE LAST NIGHT? 1 Yes 2 No		HL11. IS (name)'s NATURAL MOTHER ALIVE? 1 Yes 2 No⇨HL13 8 DK⇨HL13	HL12. DOES (name)'s NATURAL MOTHER LIVE IN THIS HOUSEHOLD? Record line number of mother or 00 for "No"	HL13. IS (name)'s NATURAL FATHER ALIVE? 1 Yes 2 No⇨Next Line 8 DK⇨Next Line	HL14. DOES (name)'s NATURAL FATHER LIVE IN THIS HOUSEHOLD? Record line number of father or 00 for "No"
Line	Name	Relation*	M	F	Month	Year	Age	15-49	15-59	Mother	Mother	Y	N	Y N DK	Mother	Y N DK	Father
01		0 1	1	2	|____|____|	|____|____|____|____|	|____|____|	01	01	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
02		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	02	02	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
03		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	03	03	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
04		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	04	04	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
05		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	05	05	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
06		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	06	06	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
07		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	07	07	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
08		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	08	08	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
09		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	09	09	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|
10		|____|____|	1	2	|____|____|	|____|____|____|____|	|____|____|	10	10	|____|____|	|____|____|	1	2	1 2 8	|____|____|	1 2 8	|____|____|

For children age 0-17 years

HL1. Line number	HL2. Name	HL3. WHAT IS THE RELATIONSHIP OF (name) TO THE HEAD OF HOUSEHOLD?	HL4. IS (name) MALE OR FEMALE? 1 Male 2 Female	HL5. WHAT IS (name)'S DATE OF BIRTH? 98 DK 9998 DK		HL6. HOW OLD IS (name)? Record in completed years. If age is 95 or above, record '95' Age	HL7. Circle line number if woman is age 15-49	HL7A. If the household is selected for the male interview (HH2A=1): Circle line number if man is age 15-59	HL8. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record line number of mother/ caretaker	HL9. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record line number of mother/ caretaker	HL10. DID (name) STAY HERE LAST NIGHT? 1 Yes 2 No	HL11. IS (name)'S NATURAL MOTHER ALIVE? 1 Yes 2 No↷HL13 8 DK↷HL13	HL12. DOES (name)'S NATURAL MOTHER LIVE IN THIS HOUSEHOLD? Record line number of mother or 00 for "No"	HL13. IS (name)'S NATURAL FATHER ALIVE? 1 Yes 2 No↷Next Line 8 DK↷Next Line	HL14. DOES (name)'S NATURAL FATHER LIVE IN THIS HOUSEHOLD? Record line number of father or 00 for "No"
Line	Name	Relation*	M F	Month	Year	Age	15-49	15-59	Mother	Mother	Y N	Y N DK	Mother	Y N DK	Father
11		__ __	1 2	__ __	__ __ __ __	__ __	11	11	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
12		__ __	1 2	__ __	__ __ __ __	__ __	12	12	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
13		__ __	1 2	__ __	__ __ __ __	__ __	13	13	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
14		__ __	1 2	__ __	__ __ __ __	__ __	14	14	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
15		__ __	1 2	__ __	__ __ __ __	__ __	15	15	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __

Tick here if additional questionnaire used ☐

Probe for additional household members.
Probe especially for any infants or small children not listed, and others who may not be members of the family (such as servants, friends) but who usually live in the household.
Insert names of additional members in the household list and complete form accordingly.

Now for each woman age 15-49 years, write her name and line number and other identifying information in the information panel of a separate Individual Women's Questionnaire.
Now for each man age 15-59 years, write his name and line number and other identifying information in the information panel of a separate Individual Men's Questionnaire if the household is selected for the Male Interview
For each child under age 5, write his/her name and line number AND the line number of his/her mother or caretaker in the information panel of a separate Under-5 Questionnaire.
You should now have a separate questionnaire for each eligible woman, man and each child under five in the household.

* *Codes for HL3: Relationship to head of household:*

01 Head	06 Parent	11 Niece / Nephew
02 Wife / Husband	07 Parent-In-Law	12 Other relative
03 Son / Daughter	08 Brother / Sister	13 Adopted / Foster / Stepchild
04 Son-In-Law / Daughter-In-Law	09 Brother-In-Law / Sister-In-Law	14 Not related
05 Grandchild	10 Uncle / Aunt	98 Don't know

EDUCATION   **ED**

For household members age 3 and above

For household members age 3-24 years

ED1 Line number	ED2. Name and age *Copy from Household Listing Form, HL2 and HL6*		ED3. HAS (*name*) EVER ATTENDED SCHOOL OR PRE-SCHOOL? 1 Yes 2 No ↘ Next Line	ED4. WHAT IS THE HIGHEST LEVEL OF SCHOOL (*name*) ATTENDED? WHAT IS THE HIGHEST CLASS/YEAR (*name*) COMPLETED AT THIS LEVEL? *If level=0 or 5 skip to ED5*		ED5. DURING THE (**2010-2011**) SCHOOL YEAR, DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No → ED7	ED6. DURING THIS/THAT SCHOOL YEAR, WHICH LEVEL AND CLASS/YEAR IS/WAS (*name*) ATTENDING? *If level=0 or 5 skip to ED7*		ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS (**2009-2010**), DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No → Next Line 8 DK → Next Line	ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND CLASS/YEAR DID (*name*) ATTEND? *If level=0 or 5 go to next person*	
Line	Name	Age	Yes No	Level	Grade *If less than a grade completed, enter 00.* Grade: 98 DK	Yes No	Level	Grade Grade: 98 DK	Y N DK	Level	Grade Grade: 98 DK
01		— —	1 2			1 2			1 2 8		
02		— —	1 2			1 2			1 2 8		
03		— —	1 2			1 2			1 2 8		
04		— —	1 2			1 2			1 2 8		
05		— —	1 2			1 2			1 2 8		
06		— —	1 2			1 2			1 2 8		
07		— —	1 2			1 2			1 2 8		
08		— —	1 2			1 2			1 2 8		
09		— —	1 2			1 2			1 2 8		
10		— —	1 2			1 2			1 2 8		
11		— —	1 2			1 2			1 2 8		
12		— —	1 2			1 2			1 2 8		
13		— —	1 2			1 2			1 2 8		
14		— —	1 2			1 2			1 2 8		
15		— —	1 2			1 2			1 2 8		

CODES FOR EDUCATIONAL LEVEL IN ED4, ED6 AND ED8

0 Preschool	3 Secondary/SSS/SHS/TECH/VOC	8 DK
1 Primary	4 Higher	
2 Middle/JSS/JHS	5 Islamic Education (Makaranta)	

WATER AND SANITATION   W

WS1. WHAT IS THE <u>MAIN</u> SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?	Piped water	
	Piped into dwelling...11	11▸▸WS6
	Piped into compound, yard or plot.......................................12	12▸▸WS6
	Piped to neighbour..13	13▸▸WS6
	Public tap / standpipe...14	14▸▸WS3
	Tube Well, Borehole..21	21▸▸WS3
	Dug well	
	Protected well...31	31▸▸WS3
	Unprotected well...32	32▸▸WS3
	Protected spring…………………………...41	41▸▸WS3
	Unprotected spring...42	42▸▸WS3
	Rainwater collection..51	51▸▸WS3
	Tanker-truck..61	61▸▸WS3
	Cart with small tank / drum...71	71▸▸WS3
	Surface water	
	River/ stream …………………………….......................................81	81▸▸WS3
	Dam, lake, pond, canal, irrigation channel)........................82	82▸▸WS3
	Bottled water..91	
	Sachet water ……………………………...92	
	Other (specify)...96	96▸▸WS3

WS2.
WHAT IS THE <u>MAIN</u> SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING?
	Piped water
	   Piped into dwelling...11
	   Piped into compound, yard or plot.......................................12
	   Piped to neighbour..13
	   Public tap / standpipe...14
	Tube Well, Borehole...21
	Dug well
	   Protected well...31
	   Unprotected well...32
	Water from spring
	   Protected spring..41
	   Unprotected spring..42
	Rainwater collection..51
	Tanker-truck..61
	Cart with small tank / drum...71
	Surface water
	   River/ stream …………………………….......................................81
	   Dam, lake, pond, canal, irrigation channel)...........................82
	
	Other (specify)...96
		11▸▸WS6
		12▸▸WS6
		13▸▸WS6

WS3. WHERE IS THAT WATER SOURCE LOCATED?	In own dwelling...1 In own yard / plot..2 Elsewhere..3	1▸▸WS6 2▸▸WS6
WS4. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	Number of minutes..__ __ __ DK..998	

WS5. WHO USUALLY GOES TO THIS SOURCE TO COLLECT THE WATER FOR YOUR HOUSEHOLD? Probe: IS THIS PERSON UNDER AGE 15? WHAT SEX?	Adult woman (age 15+ years)..11 Adult man (age 15+ years)...12 Female child (under 15)..13 Male child (under 15)...14 Children (both sexes) ……………………....................................15 Adult women and child(ren) …………………...............................16 Adult men and child(ren) …………………....................................17 DK...98	
WS6. DO YOU DO ANYTHING TO THE WATER TO MAKE IT SAFER TO DRINK?	Yes..1 No...2 DK...8	2 ⇥ WS8 8 ⇥ WS8
WS7. WHAT DO YOU USUALLY DO TO MAKE THE WATER SAFER TO DRINK? Probe: ANYTHING ELSE? Record all items mentioned	Boil..A Add bleach / chlorine..B Strain it through a cloth...C Use water filter (ceramic, sand, composite, etc.).....................D Solar disinfection..E Let it stand and settle...F Add camphor/napthalene..G Add water tablet ....H Other (specify)...X DK..Z	

WS8.
WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE?
 	
If "flush" or "pour flush", probe:
          WHERE DOES IT FLUSH TO?
 	
If necessary, ask permission to observe the facility.
	Flush / Pour flush
	Flush to piped sewer system..11
	   Flush to septic tank..12
	   Flush to pit (latrine)...13
	   Flush to somewhere else ...………………...............................14
	   Flush, don't know where..15
	Pit latrine
	   Ventilated Improved Pit latrine (VIP).....................................21
	   Pit latrine with slab..22
	   Pit latrine without slab / Open pit..23
	
	Composting toilet...31
	Bucket..41
	Hanging toilet, Hanging latrine..51
	
	No facility, Bush, Field, Beach...95
	
	Other (specify)... 96
		95 ⇥ Next
		    Module

WS9. DO YOU SHARE THIS FACILITY WITH OTHERS WHO ARE NOT MEMBERS OF YOUR HOUSEHOLD?	Yes..1 No...2	2 ⇥ Next Module
WS10. DO YOU SHARE THIS FACILITY ONLY WITH MEMBERS OF OTHER HOUSEHOLDS THAT YOU KNOW, OR IS THE FACILITY OPEN TO THE USE OF THE GENERAL PUBLIC?	Other households only (not public)..1 Public facility..2	2 ⇥ Next Module
WS11. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY, INCLUDING YOUR OWN HOUSEHOLD?	Number of households (if less than 10) 0 __ Ten or more households...10 DK...98	

HOUSEHOLD CHARACTERISTICS		HC
HC1A. WHAT IS THE RELIGION OF THE HEAD OF THIS HOUSEHOLD?	Catholic...11 Protestant…………………………………….......................…………12 Pentecostal/Charismatic..13 Deeper Life...14 Jehovah Witness…………………………..15 SDA …………………………………………........................……..….16 Moslem…………………………………….......................………..……21 Traditional……………………………….......................……………….31 Spiritualist……………………………………......................……………32 Other religion (specify)... 96 No Religion …………………………………………….........................97	

HC1C.
TO WHAT ETHNIC GROUP DOES THE
HEAD OF THIS HOUSEHOLD BELONG?
 	
    Refer to Manual to get the correct
    Classification
	Akan...11
	Ga/Dangme...12
	Ewe...13
	Guan...14
	Gruma 15
	Mole Dagbani..21
	Grusi...22
	Mande...23
	Non-Ghanaian..24
	
	Other ethnic group (specify)..96	

HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	Number of rooms __ __	

HC3.
Main material of the dwelling floor.
 	
Record observation.
	Natural Floor
	Earth/sand/mud/mud bricks..11
	Rudimentary floor
	  Wood planks...21
	  Palm / Bamboo...22
	  Stone...23
	Finished floor
	  Parquet or polished wood...31
	  Vinyl/Asphalt strips 32
	  Ceramic tiles/marble tiles/porcelain..33
	  Cement/Concrete...34
	  Carpet (woollen/synthetic)..35
	  Carpet (Linoleum/Rubber Carpet) 36
	  Terrazzo...37
	  Burnt Bricks..38
	
	Other (specify)...96	

HC4.
Main material of the roof.
 	
Record observation.
	Natural Roof
	     No Roof...11
	     Thatch / Palm leaf/Raffia...12
	     Sod..13
	Rudimentary Roof
	     Palm/Bamboo...22
	     Wood planks...23
	     Cardboard/Polythene sheets.....................................24
	  Mud/mud bricks/earth 25
	Finished Roof
	     Metal Sheet or slate/asbestos...................................31
	     Parquet/Polished Wood...32
	     Calamine / Cement fibre...33
	     Ceramic tiles...34
	     Cement...35
	     Roofing shingles...36
	
	Other
	(specify)...96	

HC5.
Main material of the exterior walls.
 	
Record observation
	Natural Wall
	     No walls...11
	     Cane / Palm / Trunks...12
	     Dirt...13
	Rudimentary Wall
	     Bamboo with mud...21
	     Stone with mud...22
	     Uncovered adobe...23
	     Plywood..24
	     Cardboard..25
	     Reused wood..26
	  Finished Wall
	     Cement (plastered)...31
	     Stone with lime / cement..32
	     Bricks...33
	     Cement blocks/concrete (not plastered)....................34
	     Covered adobe...35
	     Wood planks / shingles...36
	
	Other (specify)...96	

HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD <u>MAINLY</u> USE FOR COOKING?	Electricity..01 Liquefied Petroleum Gas (LPG)..02 Biogas..04 Kerosene...05 Charcoal..07 Wood/ Firewood...08 Straw / Shrubs / Grass..09 Animal waste...10 Agricultural crop residue/sawdust...11 No food cooked in household...95 Other (specify)...96	01 ⇥ HC8 02 ⇥ HC8 04 ⇥ HC8 05 ⇥ HC8 95 ⇥ HC8
HC7A. IN THIS HOUSEHOLD, IS FOOD COOKED ON AN OPEN FIRE, AN OPEN STOVE OR A CLOSED STOVE?	Open fire...1 Open stove/coal pot...2 Closed stove..3 Other (specify) 6	

HC7.
IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS?
 	
If 'In the house', probe: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?
	In the house
	     In a separate room used as kitchen.........................1
	     Elsewhere in the house...2
	In a separate building..3
	Outdoors 4
	
	Other (specify)..6	

HC8. DOES YOUR HOUSEHOLD HAVE: [A] ELECTRICITY? [B] A RADIO? [C] A BLACK AND WHITE TELEVISION? [C1] A COLOUR TELEVISION? [D] LAND/FIXED TELEPHONE? [E] A REFRIGERATOR/FREEZER? [F] WASHING MACHINE? [G] A LAPTOP COMPUTER? [H] A DESKTOP COMPUTER? [I] A VIDEO DECK? [J] A DVD/VCD PLAYER? [K] A SEWING MACHINE?	Yes No A. Electricity...1 2 B. Radio..1 2 C. Black and white television..................................1 2 C1. Colour Television...1 2 D. Land/Fixed Telephone.......................................1 2 E. Refrigerator/freezer...1 2 F. Washing Machine ....1 2 G. Laptop Computer..1 2 H. Desktop Computer..1 2 I. Video Deck..1 2 J. DVD/VCD Player...1 2 K. Sewing Machine...1 2	
HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN: [A] A WATCH? [B] A MOBILE TELEPHONE? [C] A BICYCLE? [D] A MOTORCYCLE OR SCOOTER? [E] AN ANIMAL-DRAWN CART? [F] A CAR OR TRUCK? [G] A CANOE/BOAT WITH A MOTOR? [H] A CANOE/BOAT WITHOUT A MOTOR?	Yes No A. A watch...1 2 B. Mobile Telephone...1 2 C. Bicycle ....1 2 D. Motorcycle or Scooter..1 2 E. Animal drawn-cart...1 2 F. Car / Truck...1 2 G. Canoe/Boat with motor......................................1 2 H. Canoe/Boat without a motor..............................1 2	
HC10. WHAT IS THE OCCUPANCY STATUS OF YOUR HOUSEHOLD IN THIS DWELLING?	Own...11 Rent..12 Squatting...13 Caretaker...14 Mortgaged...15 Family House (without rent)..16 Other (specify) 96	
HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY PIECE OF LAND THAT CAN BE USED FOR AGRICULTURE?	Yes...1 No..2	2⏵HC12A

HC12.
HOW MANY (HECTARES POLES/ACRES/ PLOT) OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN?
 	
If less than 1, record "00". If 95 or more, record '95'. If unknown, circle '8' for unit
	Unit Size
	Hectares..1 __ __
	  Poles...2 __ __
	  Acres ....3 __ __
	  Plot...4 __ __
	
	  Other ....6 __ __
	  DK 8	

HC12A. OTHER THAN THE PLOT DESCRIBED IN HC11 ABOVE, DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY PIECE OF LAND THAT CAN BE USED FOR RESIDENTIAL AND/OR COMMERCIAL PURPOSES?	Yes..1 No...2	2▸HC13

HC12B.
HOW MANY (HECTARES POLES/ ACRES/PLOT) RESIDENTIAL AND/OR COMMERCIAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN?
 	
If less than 1, record "00". If 95 or more, record '95'. If unknown, circle '8' for unit
	Unit Size
	Hectares...1 __ __
	   Poles…...2 __ __
	   Acres …...3 __ __
	   Plot..4 __ __
	
	   Other …..6 __ __
	   DK …….. 8	

HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?	Yes..…...…..1 No...………......2	2▸HC15
HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE? [A] CATTLE, MILK COWS, OR BULLS? [B] HORSES, DONKEYS, OR MULES? [C] GOATS? [D] SHEEP? [E] CHICKENS? [F] PIGS? [G] RABBITS? [H] DUCKS? *If none, record '00'. If 95 or more, record '95'. If unknown, record '98'.*	Cattle, milk cows, or bulls…………….……………......___ ___ Horses, donkeys, or mules………….…..........................___ ___ Goats……………….………………………………….….___ ___ Sheep………………….……………….…………….........___ ___ Chickens/Roosters……………………………………......___ ___ Pigs……………….…………………….……………..___ ___ Rabbits………………….……………………………........___ ___ Ducks……………….……………….…………….…...___ ___	
HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?	Yes…………………………………………………………1 No………………………………………………………….2	
HC16. OVER THE PAST 12 MONTHS, HAS ANY MEMBER OF THIS HOUSEHOLD RECEIVED ANY IN-TRANSFERS (KIND OR CASH) FROM NON- HOUSEHOLD RESIDENT RELATIVES?	Yes………………………………………………………........1 No…………………………………………………………….2 Don't Know………………………………………………...…..8	
HC17. OVER THE PAST 12 MONTHS, HAS ANY MEMBER OF THIS HOUSEHOLD RECEIVED ANY FORM OF SUPPORT (KIND OR CASH) FROM GOVERNMENT OR OTHER ORGANIZATION?	Yes………………………………………………………….1 No………………………………………………………….......2 Don't Know……………………………………………….........8	2▸HC19 8▸HC19
HC18. FROM WHICH SOURCE DID THE MEMBER(S) RECEIVE THIS FORM OF SUPPORT? *CIRCLE ALL THAT APPLY*	LEAP………………………………………………………......A District Assembly………………………………………….……..B NGO………………………………………………........…………C Religious/Social group……………………………………..………D Other (specify) ………………………………………...…............X DK……………………………………………………........…....Z	
HC19 OVER THE PAST 12 MONTHS, HAS ANY MEMBER OF THIS HOUSEHOLD SENT ANY OUT-TRANSFERS (KIND OR CASH) TO NON- HOUSEHOLD RESIDENT RELATIVES?	Yes………………………………………………………........1 No………………………………………………………………2 Don't Know………….………………………………………….8	

INSECTICIDE TREATED NETS			TN

TN1. DOES YOUR HOUSEHOLD HAVE ANY MOSQUITO NETS THAT CAN BE USED WHILE SLEEPING?	Yes...1 No..2	2▶HC13

TN2. HOW MANY MOSQUITO NETS DOES YOUR HOUSEHOLD HAVE?	Number of nets..___ ___	

TN3. Ask the respondent to show you the nets in the household. If more than 3 nets, use additional questionnaire(s).

	1st Net	2nd Net	3rd Net
TN4. *Mosquito net observed?*	Observed1 Not observed 2	Observed1 Not observed 2	Observed1 Not observed 2

TN5. *Observe or ask the brand/ type of mosquito net*
 	
If brand is unknown and you cannot observe the net, show pictures of typical net types/ brands to respondent.
	Long-lasting treated nets
	      Olyset...........................11
	      Permanet.....................12
	      Interceptor...................13
	      Netprotect...................14
	      Duranet.......................15
	      Icon Life.......................17
	      Other *(specify)*_____16
	      DK brand.....................18
	Pre-treated nets
	      Dawa............................21
	      Dawa Plus....................22
	      MOH treated net.........23
	      Other (specify).............26
	      DK brand.....................28
	Other net
	      Calico net.....................31
	      Locally Sewn net..........32
	      Net from second hand
	      Clothing.......................33
	      Other (specify)_____36
	DK brand / type..............98
		Long-lasting treated nets
		      Olyset...........................11
		      Permanet.....................12
		      Interceptor...................13
		      Netprotect...................14
		      Duranet.......................15
		      Icon Life.......................17
		      Other *(specify)*_____16
		      DK brand.....................18
		Pre-treated nets
		      Dawa............................21
		      Dawa Plus....................22
		      MOH treated net.........23
		      Other (specify).............26
		      DK brand.....................28
		Other net
		      Calico net.....................31
		      Locally Sewn net..........32
		      Net from second hand
		      Clothing.......................33
		      Other (specify)_____36
		DK brand / type..............98
			Long-lasting treated nets
			      Olyset...........................11
			      Permanet.....................12
			      Interceptor...................13
			      Netprotect...................14
			      Duranet.......................15
			      Icon Life.......................17
			      Other *(specify)*_____16
			      DK brand.....................18
			Pre-treated nets
			      Dawa............................21
			      Dawa Plus....................22
			      MOH treated net.........23
			      Other (specify).............26
			      DK brand.....................28
			Other net
			      Calico net.....................31
			      Locally Sewn net..........32
			      Net from second hand
			      Clothing.......................33
			      Other (specify)_____36
			DK brand / type..............98

TN5A. WHERE DID YOU GET THIS NET?	**Public Sector** Govt. Hospital/Clinic.…......11 Govt. Health Centre...…......12 Govt. Health Post/CHPS...13 Fieldworker/Outreach /Peer Education……......…14 Campaign…………………...15 Other public……………......16 **Private Medical Sector** Private Hosp/Clinic……......21 Pharmacy/Chemical/ Drug store/shop……….......22 Other private medical…......26 **Other Source** NGO……………………….…31 Shop/Market……………...…32 Street Vendor……………..…33 Other Institution……….……34 Other………………………....36 Don't know………………..…98	**Public Sector** Govt. Hospital/Clinic.…......11 Govt. Health Centre...…......12 Govt. Health Post/CHPS...13 Fieldworker/Outreach /Peer Education……......…14 Campaign…………………...15 Other public……………......16 **Private Medical Sector** Private Hosp/Clinic……......21 Pharmacy/Chemical/ Drug store/shop……….......22 Other private medical…......26 **Other Source** NGO……………………….…31 Shop/Market……………...…32 Street Vendor……………..…33 Other Institution……….……34 Other………………………....36 Don't know………………..…98	**Public Sector** Govt. Hospital/Clinic.…......11 Govt. Health Centre...…......12 Govt. Health Post/CHPS...13 Fieldworker/Outreach /Peer Education……......…14 Campaign…………………...15 Other public……………......16 **Private Medical Sector** Private Hosp/Clinic……......21 Pharmacy/Chemical/ Drug store/shop……….......22 Other private medical…......26 **Other Source** NGO……………………….…31 Shop/Market……………...…32 Street Vendor……………..…33 Other Institution……….……34 Other………………………....36 Don't know………………..…98
TN6. HOW MANY MONTHS AGO DID YOUR HOUSEHOLD GET THIS NET? *If less than one month, record "00"*	Months ago ___ ___ More than 36 mo. ago......95 DK / Not sure.....................98	Months ago ___ ___ More than 36 mo. ago......95 DK / Not sure.....................98	Months ago ___ ___ More than 36 mo. ago......95 DK / Not sure.....................98

TN6A. How much did it cost you to acquire this net (GH¢) *If received free of charge, record "00.0"*	__ __ . __ Cedis p DK ………99.8	__ __ . __ Cedis p DK ………99.8	__ __ . __ Cedis p DK ………99.8
TN7. *Check TN5 for type of net*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (21-28)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*
TN8. When you got the net, was it already treated with an insecticide to kill or repel mosquitoes?	Yes.................................. 1 No .... 2 DK / Not sure 8	Yes.................................. 1 No .... 2 DK / Not sure 8	Yes.................................. 1 No .... 2 DK / Not sure 8
TN9. Since you got the net, has it ever been soaked or dipped in a liquid to kill or repel mosquitoes?	Yes.................................. 1 No .... 2 ……………⇨ TN11 DK / Not sure .... 8 ……………⇨ TN11	Yes.................................. 1 No .... 2 ……………⇨ TN11 DK / Not sure .... 8 ……………⇨ TN11	Yes.................................. 1 No .... 2 ……………⇨ TN11 DK / Not sure .... 8 ……………⇨ TN11
TN10. How many months ago was the net last soaked or dipped? If less than one month, record "00"	Months ago .... ___ ___ More than 24 mo. ago... 95 DK / Not sure 98	Months ago .... ___ ___ More than 24 mo. ago... 95 DK / Not sure 98	Months ago .... ___ ___ More than 24 mo. ago... 95 DK / Not sure 98
TN11. Did anyone sleep under this mosquito net last night?	Yes.................................. 1 No .... 2 .... ⇨ TN13 DK / Not sure .... 8 .... ⇨ TN13	Yes.................................. 1 No .... 2 .... ⇨ TN13 DK / Not sure .... 8 .... ⇨ TN13	Yes.................................. 1 No .... 2 .... ⇨ TN13 DK / Not sure .... 8 .... ⇨ TN13
TN12. Who slept under this mosquito net last night? Record the person's line number from the household listing form If someone not in the household list slept under the mosquito net, record "00"	Name .... Line number .... ___ ___ Name .... Line number .... ___ ___ Name .... Line number .... ___ ___ Name .... Line number .... ___ ___	Name .... Line number .... ___ ___ Name .... Line number .... ___ ___ Name .... Line number .... ___ ___ Name .... Line number .... ___ ___	Name .... Line number .... ___ ___ Name .... Line number .... ___ ___ Name .... Line number .... ___ ___ Name .... Line number .... ___ ___
TN13.	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 in first column of a new questionnaire for next net. If no more nets, go to next module*

Tick here if additional questionnaire used   ☐

INDOOR RESIDUAL SPRAYING		IR
IR1. 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 DK...8	2⏩Next Module 8⏩Next Module
IR2. WHO SPRAYED THE INTERIOR WALLS OF YOUR DWELLING? *Circle all that apply.*	Government worker / program..A Private company..B Non-governmental organization...C Other (specify)...X DK...Z	

CHILD LABOUR

*To be administered for children in the household age **5-14** years. For household members below age 5 or above age 14, leave rows blank.*
NOW I WOULD LIKE TO ASK ABOUT ANY WORK CHILDREN IN THIS HOUSEHOLD MAY DO.

CL1. Line number	CL2. Name and Age — *Copy from Household Listing Form, HL2 and HL6*		CL3. DURING THE PAST WEEK, DID (name) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? If yes: FOR PAY IN CASH OR KIND? 1 Yes, for pay (cash or kind) 2 Yes, unpaid 3 No ⇨CL5			CL4. SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? If more than one job, include all hours at all jobs. — Number of hours	CL5. DURING THE PAST WEEK, DID (name) FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE? 1 Yes 2 No ⇨ CL7		CL6. SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE? — Number of hours	CL7. DURING THE PAST WEEK, DID (name) DO ANY PAID OR UNPAID WORK ON A FAMILY FARM OR IN A FAMILY BUSINESS OR SELLING GOODS IN THE STREET? Include work for a business run by the child, alone or with one or more partners. 1 Yes 2 No ⇨ CL9		CL8. SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR HIS/HER FAMILY OR HIMSELF/HERSELF? — Number of hours	CL9. DURING THE PAST WEEK, DID (name) HELP WITH HOUSEHOLD CHORES SUCH AS SHOPPING, CLEANING, WASHING CLOTHES, COOKING; OR CARING FOR CHILDREN, OLD OR SICK PEOPLE? 1 Yes 2 No ⇨ Next Line		CL10. SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE SPEND DOING THESE CHORES? — Number of hours
Line	Name	Age	Yes Paid	Unpaid	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours
01		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
02		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
03		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
04		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
05		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
06		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
07		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
08		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
09		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
10		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
11		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
12		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
13		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
14		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __
15		__ __	1	2	3	__ __	1	2	__ __	1	2	__ __	1	2	__ __

TABLE 1: CHILDREN AGED 2-14 YEARS ELIGIBLE FOR CHILD DISCIPLINE QUESTIONS

o *List each of the children aged 2-14 years below in the order they appear in the Household Listing Form. Do not include other household members outside of the age range 2-14 years.*
o *Record the line number, name, sex, and age for each child.*
o *Then record the total number of children aged 2-14 in the box provided (CD6).*

CD1. Rank number	CD2. Line number from HL1	CD3. Name from HL2	CD4. Sex from HL4		CD5. Age from HL6
Rank	Line	Name	M	F	Age
1	__ __		1	2	___ ___
2	__ __		1	2	___ ___
3	__ __		1	2	___ ___
4	__ __		1	2	___ ___
5	__ __		1	2	___ ___
6	__ __		1	2	___ ___
7	__ __		1	2	___ ___
8	__ __		1	2	___ ___
CD6.	Total children age 2-14 years				___ ___

o *If there is only one child age 2-14 years in the household, then skip table 2 and go to CD8; write down '1' and continue with CD9*

TABLE 2: SELECTION OF RANDOM CHILD FOR CHILD DISCIPLINE QUESTIONS

o *Use Table 2 to select one child between the ages of 2 and 14 years, if there is more than one child in that age range in the household.*
o *Check the last digit of the household number (HH2) from the cover page. This is the number of the row you should go to in the table below.*
o *Check the total number of eligible children (2-14) in CD6 above. This is the number of the column you should go to.*
o *Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number of the child (CD1) about whom the questions will be asked.*

CD7. Last digit of household number (HH2)	Total Number of Eligible Children in the Household (CD6)							
	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

CD8. *Record the rank number of the selected child* .... ___

CD9. *Write the name and line number of the child selected for the module from CD3 and CD2, based on the rank number in CD8.*	Name _____ Line number ....__ __	
CD10. ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED AND I WANT YOU TO TELL ME IF <u>YOU OR ANYONE ELSE IN YOUR HOUSEHOLD</u> HAS USED THIS METHOD WITH *(name)* <u>IN THE PAST MONTH</u>. CD11. TOOK AWAY PRIVILEGES, FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE.	Yes ....1 No...2	
CD11A. IGNORED/REFUSED TO COMMUNICATE TO (*name*).	Yes ....1 No...2	
CD12. EXPLAINED WHY (*name*)'S BEHAVIOR WAS WRONG.	Yes ....1 No...2	
CD13. SHOOK HIM/HER.	Yes ....1 No...2	
CD14. SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.	Yes ....1 No...2	
CD15. GAVE HIM/HER SOMETHING ELSE TO DO.	Yes ....1 No...2	
CD16. SPANKED, HIT, PUSHED OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.	Yes ....1 No...2	
CD17. HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, COMB, HAIRBRUSH, CAIN, STICK OR OTHER HARD OBJECT.	Yes ....1 No...2	
CD18. CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.	Yes ....1 No...2	
CD19. HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.	Yes ....1 No...2	
CD20. HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.	Yes ....1 No...2	
CD21. BEAT HIM/HER UP, THAT IS HIT HIM/HER OVER AND OVER AS HARD AS ONE COULD.	Yes ....1 No...2	
CD22. DO YOU BELIEVE THAT IN ORDER TO BRING UP, RAISE, OR EDUCATE A CHILD PROPERLY, THE CHILD NEEDS TO BE PHYSICALLY PUNISHED?	Yes ....1 No...2 Don't know / No opinion 8	

HANDWASHING		HW

HW1. PLEASE SHOW ME WHERE MEMBERS OF YOUR HOUSEHOLD MOST OFTEN WASH THEIR HANDS.	Observed 1
	
	Not observed
	    Not in dwelling / plot / yard 2
	    No permission to see 3
	    Other reason 6
		2 ⇨HW4
		3 ⇨HW4
		6 ⇨HW4

HW2. *Observe presence of water at the specific place for handwashing.* *Verify by checking the tap/pump, or basin, bucket, water container or similar objects for presence of water.*	Water is available .... 1 Water is not available 2	
HW3. *Record if soap or detergent is present at the specific place for handwashing.* *Circle all that apply.* *Skip to Next Module if any soap or detergent code (A, B, C or D) is circled. If "None" (Y) is circled, continue with HW4.*	Washing Soap (e.g. Key soap)...................A Toilet Soap (e.g. Lux) ....B Detergent (Powder / Liquid / Paste) ....C Ash / Mud / Sand ....D None .... Y	A⇨Next Module B⇨ Next Module C⇨ Next Module D⇨ Next Module
HW4. DO YOU HAVE ANY SOAP OR DETERGENT IN YOUR HOUSEHOLD FOR WASHING HANDS?	Yes .... 1 No... 2	2⇨ Next Module
HW5. CAN YOU PLEASE SHOW IT TO ME? *Record observation. Circle all that apply.*	Washing Soap (eg. Key soap).....................A Toilet Soap (eg. Lux) ....B Detergent (Powder / Liquid / Paste) ....C Ash / Mud / Sand ....D Not able / Does not want to show...............Y	

SALT IODIZATION · SI

SI1. WE 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? *Once you have tested the salt, circle number that corresponds to test outcome.*	Not iodized 0 PPM .... 1 More than 0 PPM & less than 15 PPM .... 2 15 PPM or more .... 3 No salt in the house.................................... 6 Salt not tested.. 7

HH19. *Record the time.*	Hour and minutes .... __ __ : __ __	

HH20. *Does any eligible woman age 15-49 reside in the household?*

Check Household Listing Form, column HL7 for any eligible woman.
You should have a questionnaire with the Information Panel filled in for each eligible woman.

☐ *Yes* ⇨ *Go to QUESTIONNAIRE FOR INDIVIDUAL WOMEN*
         to administer the questionnaire to the first eligible woman.

☐ *No* ⇨ *Continue.*

HH21. *Does any child under the age of 5 reside in the household?*

Check Household Listing Form, column HL9 for any eligible child under age 5.
You should have a questionnaire with the Information Panel filled in for each eligible child.

☐ *Yes* ⇨ *Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE*
         to administer the questionnaire to mother or caretaker of the first eligible child.

☐ *No* ⇨ *Continue.*

HH22. [IF THIS HOUSEHOLD WAS SELECTED FOR THE MALE QUESTIONNAIRE] *Does any eligible man age 15-59 reside in the household?*

Check Household Listing Form, column HL7A for any eligible man.
You should have a questionnaire with the Information Panel filled in for each eligible man.

☐ *Yes* ⇨ *Go to QUESTIONNAIRE FOR INDIVIDUAL MEN*
         to administer the questionnaire to the first eligible man.

☐ *No* ⇨ *End the interview by thanking the respondent for his/her cooperation.*
         Gather together all questionnaires for this household and complete HH8 TO HH15B on
         the cover page.

■▪■ MICS

QUESTIONNAIRE FOR INDIVIDUAL WOMEN
ACCRA – 2010

WOMAN'S INFORMATION PANEL	WM

This questionnaire is to be administered to all women age 15 through 49 (see Household Listing Form, column HL7). A separate questionnaire should be used for each eligible woman.

WM1. Cluster number: ___ ___ ___	WM2. Household number: ___ ___
WM3. Woman's name: Name_____	WM4. Woman's line number: ___ ___
WM5. Interviewer name and number: Name_____ ___ ___	WM6. Day / Month / Year of interview: ___ ___ / ___ ___ / 2010

Repeat greeting if not already read to this woman:

WE ARE FROM THE INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH (ISSER) AT THE UNIVERSITY OF GHANA, LEGON. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 45 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

THIS SURVEY IS TO ASSIST POLICY MAKERS AND PRACTITIONERS AND PROVIDE KNOWLEDGE ON HEALTH AND HOUSEHOLD WELL-BEING

If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 45 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

   ☐ *Yes, permission is given* ⇨ *Go to WM10 to record the time and then begin the interview.*

   ☐ *No, permission is not given* ⇨ *Complete WM7. Discuss this result with your supervisor.*

WM7. Result of woman's interview	Completed .... 01 Not at home .... 02 Refused .... 03 Partly completed .... 04 Incapacitated .... 05 Other (*specify*)_____96

WM8. Field edited by (Name and number): Name_____ ___ ___	WM9. Data entry clerk (Name and number): Name_____ ___ ___

WM10. *Record the time.*	Hour and minutes .... __ __ : __ __	

WOMAN'S BACKGROUND		WB

WB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth
	    Month... __ __
	    DK month... 98
	
	    Year .... __ __ __ __
	    DK year... 9998	

WB2. HOW OLD ARE YOU? *Probe:* HOW OLD WERE YOU AT YOUR LAST BIRTHDAY? *Compare and correct WB1 and/or WB2 if inconsistent*	Age (in completed years)...................... __ __	
WB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes .... 1 No 2	2⇨WB7
WB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool... 0 Primary .... 1 Middle/JSS/JHS.. 2 Secondary/SSS/SHS/TECH/VOC .... 3 Higher.. 4 Islamic Education (Makaranta)................... 5	0⇨WB7 5⇨WB6
WB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? *If less than 1 grade, enter "00"*	Grade.. __ __	
WB6. *Check WB4:* ☐ *Secondary or Higher (WB4=3 or WB4=4) ⇨ Go to WB8* ☐ *Primary /Middle/JSS/JHS/Islamic Education (WB4=1 or WB4=2 or WB4=5) ⇨ Continue with WB7*		

WB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME.
 	
Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:
 	
CAN YOU READ PART OF THE SENTENCE TO ME?
	Cannot read at all 1
	Able to read only parts of sentence............. 2
	Able to read whole sentence 3
	
	No sentence in
	    required language _____ 4
	                                     (specify language)
	
	Blind / mute, visually / speech impaired 5	

WB8. HAVE YOU DONE ANY WORK IN THE LAST 12 MONTHS ASIDE FROM YOUR OWN HOUSEWORK	Yes .... 1 No 2	2⇨NEXT MODULE

WB9. WHAT KIND OF WORK DID YOU MAINLY DO?	Professional/Technical/Managerial……….01 Administrative/Clerical……..……….……02 Sales/Vending..………………………….…03 Service…………..………………………….04 Agricultural…………..………………..……05 Production…………..……………………… .06 Other (Specify)_____96	
WB10. DO YOU DO THIS WORK FOR A MEMBER OF YOUR FAMILY, FOR SOMEONE ELSE, OR ARE YOU SELF-EMPLOYED?	For a family member................................... 1 For someone else....................................... 2 Self-employed... 3	
WB11. DO YOU USUALLY WORK THROUGHOUT THE YEAR, OR DO YOU WORK SEASONALLY, OR ONLY ONCE IN A WHILE?	Throughout the year .... 1 Seasonally .... 2 Once a while.. 3	
WB12. DO YOU EARN/ARE YOU PAID IN CASH OR KIND FOR THIS WORK OR YOU ARE NOT PAID AT ALL?	Cash only.. 1 Cash and kind... 2 Kind only... 3 Not paid 4	4⇨NEXT MODULE
WB13. ON AVERAGE, HOW MUCH DO YOU EARN FROM DOING THIS WORK IN A TYPICAL MONTH (GH¢)?	Less than 100... 1 Between 100 and 300.................................. 2 Between 300 and 500.................................. 3 500 or more .... 4 Don't know/Cannot Quantify....................... 8	

ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY   MT

MT1. *Check WB7:*		
☐ *Question left blank (Respondent has Secondary or Higher education)* ⇨ *Continue with MT2* ☐ *Able to read or no sentence in required language (codes 2, 3 or 4)* ⇨ *Continue with MT2* ☐ *Cannot read at all or blind (codes 1 or 5)* ⇨ *Go to MT3*		
MT2. HOW OFTEN DO YOU READ A NEWSPAPER OR MAGAZINE? 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	
MT3. DO YOU LISTEN TO THE RADIO 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	
MT4. HOW OFTEN DO YOU WATCH TELEVISION? WOULD YOU SAY THAT YOU WATCH 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	
MT5. *Check WB2: Age of respondent between 15 and 24?* ☐ *Age 25-49* ⇨ *Go to Next Module* ☐ *Age 15-24* ⇨ *Continue with MT6*		
MT6. HAVE YOU EVER USED A COMPUTER?	Yes .... 1 No 2	2⇨MT9
MT7. HAVE YOU USED A COMPUTER FROM ANY LOCATION IN THE LAST 12 MONTHS?	Yes .... 1 No 2	2⇨MT9
MT8. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE A COMPUTER? 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	
MT9. HAVE YOU EVER USED THE INTERNET?	Yes .... 1 No 2	2⇨Next Module
MT10. 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	2⇨ Next Module
MT11. 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	

CHILD MORTALITY		CM
All questions refer only to LIVE births.		
CM1. Now I would like to ask about all the births you have had during your life. Have you ever given birth?	Yes.. 1 No 2	2⇨CM8

CM2. What was the date of your first birth?
 	
I mean the very first time you gave birth, even if the child is no longer living, or whose father is not your current partner.
 	
Skip to CM4 only if year of first birth is given. Otherwise, continue with CM3.
	Date of first birth
	  Day .... __ __
	  DK day 98
	
	  Month... __ __
	  DK month... 98
	
	  Year .... __ __ __ __
	  DK year.. 9998
		⇨CM4

CM3. How many years ago did you have your first birth?	Completed years since first birth .... __ __	
CM4. Do you have any sons or daughters to whom you have given birth who are now living with you?	Yes.. 1 No 2	2⇨CM6
CM5. How many sons live with you? How many daughters live with you? *If none, record '00'.*	Sons at home....................................... __ __ Daughters at home .... __ __	
CM6. Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	Yes.. 1 No 2	2⇨CM8
CM7. How many sons are alive but do not live with you? How many daughters are alive but do not live with you? *If none, record '00'.*	Sons elsewhere .... __ __ Daughters elsewhere............................ __ __	
CM8. Have you ever given birth to a boy or girl who was born alive but later died? *If "No" probe by asking:* I mean, to a child who ever breathed or cried or showed other signs of life – even if he or she lived only a few minutes or hours?	Yes.. 1 No 2	2⇨CM10
CM9. How many boys have died? How many girls have died? *If none, record '00'.*	Boys dead.. __ __ Girls dead .... __ __	
CM10. Sum answers to CM5, CM7, and CM9.	Sum .... __ __	

CM11. Just to make sure that I have this right, you have had in total (*total number in CM10*) live births during your life. Is this correct?

☐ *Yes. Check below:*

☐ *No live births* ⇨ *Go to ILLNESS SYMPTOMS Module (Page 17 of 34)*

☐ *One or more live births* ⇨ *Continue with CM12*

☐ *No* ⇨ *Check responses to CM1-CM10 and make corrections as necessary before proceeding to CM12*

| CM12. Of these (*total number in CM10*) births you have had, when did you deliver the last one (even if he or she has died)?

Month and year must be recorded. | Date of last birth
  Day .... __ __
  DK day 98

  Month.. __ __

  Year .... __ __ __ __ | |

CM13. *Check CM12: Last birth occurred within the last 2 years, that is, since (day and month of interview) in* **2008**

☐ *No live birth in last 2 years.* ⇨ *Go to ILLNESS SYMPTOMS Module (Page 17 of 34).*

☐ *One or more live births in last 2 years.* ⇨ *Ask for the name of the child*

Name of child_____

If child has died, take special care when referring to this child by name in the following modules.

Continue with the DESIRE FOR LAST BIRTH module.

DESIRE FOR LAST BIRTH   DB

This module is to be administered to all women with a live birth in the 2 years preceding date of interview.
Check child mortality module CM13 and record name of last-born child here _____.
Use this child's name in the following questions, where indicated.

DB1. WHEN YOU GOT PREGNANT WITH (*name*), DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes .... 1 No 2	1⇨Next Module
DB2. DID YOU WANT TO HAVE A BABY LATER ON, OR DID YOU NOT WANT ANY (MORE) CHILDREN?	Later .... 1 No more.. 2	2⇨Next Module
DB3. HOW MUCH LONGER DID YOU WANT TO WAIT?	Months... 1 __ __ Years .... 2 __ __ DK 998	

MATERNAL AND NEWBORN HEALTH		MN

This module is to be administered to all women with a live birth in the 2 years preceding date of interview.
Check child mortality module CM13 and record name of last-born child here _____.
Use this child's name in the following questions, where indicated.

MN1. DID YOU SEE ANYONE FOR ANTENATAL CARE DURING YOUR PREGNANCY WITH (*name*)?	Yes .... 1 No 2	2⇨MN5

MN2. WHOM DID YOU SEE?
 	
Probe:
ANYONE ELSE?
 	
Probe for the type of person seen and circle all answers given.
	Health professional:
	    Doctor .... A
	    Nurse / Midwife .... B
	    Auxiliary midwife C
	Other person
	    Traditional birth attendant .... F
	    Community health worker .... G
	
	Other (*specify*) _____ X	

MN3. HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING THIS PREGNANCY?	Number of times .... __ __ DK 98	
MN4. AS PART OF YOUR ANTENATAL CARE DURING THIS PREGNANCY, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE: [A] WAS YOUR BLOOD PRESSURE MEASURED? [B] DID YOU GIVE A URINE SAMPLE? [C] DID YOU GIVE A BLOOD SAMPLE?	Yes No Blood pressure .... 1 2 Urine sample .... 1 2 Blood sample 1 2	
MN5. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? MAY I SEE IT PLEASE? *If a card is presented, use it to assist with answers to the following questions.*	Yes (card seen) .... 1 Yes (card not seen) .... 2 No .... 3 DK 8	
MN6. WHEN YOU WERE PREGNANT WITH (*name*), DID YOU RECEIVE ANY INJECTION IN THE ARM OR SHOULDER TO PREVENT THE BABY FROM GETTING TETANUS, THAT IS CONVULSIONS AFTER BIRTH?	Yes .... 1 No .... 2 DK 8	 2⇨MN9 8⇨MN9
MN7. HOW MANY TIMES DID YOU RECEIVE THIS TETANUS INJECTION DURING YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times .... __ DK 8	 8⇨MN9

MN8. *How many tetanus injections during last pregnancy were reported in MN7?*

    ☐ *At least two tetanus injections during last pregnancy.* ⇨ *Go to MN12*

    ☐ *Fewer than two tetanus injections during last pregnancy.* ⇨ *Continue with MN9*

MN9. DID YOU RECEIVE ANY TETANUS INJECTION AT ANY TIME BEFORE YOUR PREGNANCY WITH (*name*), EITHER TO PROTECT YOURSELF OR ANOTHER BABY?	Yes .... 1 No .... 2 DK 8	 2⇨MN12 8⇨MN12
MN10. HOW MANY TIMES DID YOU RECEIVE A TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times .... __ DK 8	 8⇨MN12
MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)?	Years ago .... __ __	
MN12. *Check MN1 for presence of antenatal care during this pregnancy:* ☐ *Yes, antenatal care received.* ⇨ *Continue with MN13* ☐ *No antenatal care received* ⇨ *Go to MN17*		
MN13. DURING ANY OF THESE ANTENATAL VISITS FOR THE PREGNANCY, DID YOU TAKE ANY MEDICINE IN ORDER TO <u>PREVENT</u> YOU FROM GETTING MALARIA?	Yes .... 1 No .... 2 DK.. 8	 2⇨MN17 8⇨MN17
MN14. WHICH MEDICINES DID YOU TAKE TO PREVENT MALARIA? *Circle all medicines taken. If type of medicine is not determined, show typical anti-malarial to respondent.*	SP / Fansidar..A Chloroquine ....B Other (*specify*) _____ X DK.. Z	
MN15. *Check MN14 for medicine taken:* ☐ *SP / Fansidar taken.* ⇨ *Continue with MN16* ☐ *SP / Fansidar not taken.* ⇨ *Go to MN17*		
MN16. DURING THIS PREGNANCY, HOW MANY TIMES DID YOU TAKE SP/ FANSIDAR?	Number of times .... __ __ DK.. 98	

MN17. WHO ASSISTED WITH THE DELIVERY OF (*name*)?
 	
Probe:
ANYONE ELSE?
 	
Probe for the type of person assisting and circle all answers given.
 	
If respondent says no one assisted, probe to determine whether any adults were present at the delivery.
	Health professional:
	   Doctor ....A
	   Nurse / Midwife..B
	   Auxiliary midwife......................................C
	Other person
	   Traditional birth attendant....................... F
	   Community health worker.......................G
	   Relative / Friend ....H
	
	Other (*specify*) _____ X
	No one .... Y	

MN18. WHERE DID YOU GIVE BIRTH TO (*name*)?
 	
Probe to identify the type of source.
 	
If unable to determine whether public or private, write the name of the place.
 	
_____
(Name of place)
	Home
	    Your home 11
	    Other home... 12
	
	Public sector
	    Govt. hospital/Polyclinic......................... 21
	    Govt. clinic / health centre 22
	    Govt. health post 23
	    Other public (*specify*)_____ 26
	
	Private Medical Sector
	    Private hospital...................................... 31
	    Private clinic 32
	    Private maternity home......................... 33
	    Other private
	        medical (*specify*)_____ 36
	
	Other (*specify*) _____ 96
		11⇨MN20
		12⇨MN20
		
		96⇨MN20

MN19. WAS (*name*) DELIVERED BY CAESAREAN SECTION? THAT IS, DID THEY CUT YOUR BELLY OPEN TO TAKE THE BABY OUT?	Yes .... 1 No.. 2	
MN20. WHEN (*name*) WAS BORN, WAS HE/SHE 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 DK 8	
MN21. WAS (*name*) WEIGHED AT BIRTH?	Yes .... 1 No.. 2 DK 8	 2⇨MN23 8⇨MN23
MN22. HOW MUCH DID (*name*) WEIGH? *Record weight from health card, if available.*	From card .... 1 (kg) __ . __ .__ __ From recall .... 2 (kg) __ . __ .__ __ DK 99.98	
MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF (*name*)?	Yes .... 1 No.. 2	
MN24. DID YOU EVER BREASTFEED (*name*)?	Yes .... 1 No.. 2	 2⇨Next Module
MN25. 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 __ __ Don't know / remember 998	

MN26. IN THE FIRST THREE DAYS AFTER DELIVERY, WAS (*name*) GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK?	Yes .... 1 No 2	2⇨Next Module
MN27. WHAT WAS (*name*) GIVEN TO DRINK? *Probe:* ANYTHING ELSE?	Milk (other than breast milk) .... A Plain water.. B Sugar or glucose water .... C Gripe water... D Sugar-salt-water solution............................. E Fruit juice .... F Infant formula ....G Tea / Infusions...H Honey .... I Other (*specify*) _____ X	

POST-NATAL HEALTH CHECKS   PN

This module is to be administered to all women with a live birth in the 2 years preceding the date of interview.
Check child mortality module CM13 and record name of last-born child here _____.
Use this child's name in the following questions, where indicated.

PN1. *Check MN18: Was the child delivered in a health facility?*

    ☐ *Yes, the child was delivered in a health facility (MN18=21-26 or 31-36)* ⇨ *Continue with PN2*

    ☐ *No, the child was not delivered in a health facility (MN18=11-12 or 96)* ⇨ *Go to PN6*

PN2. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT WHAT HAPPENED IN THE HOURS AND DAYS AFTER THE BIRTH OF (*name*). YOU HAVE SAID THAT YOU GAVE BIRTH IN (*name or type of facility in MN18*). HOW LONG DID YOU STAY THERE AFTER THE DELIVERY? *If less than one hour, record '00' for Hours* *If less than one day, record hours.* *If less than one week, record days.* *Otherwise, record weeks.*	Hours...1 __ __ Days ....2 __ __ Weeks ....3 __ __ Don't know / remember 998	
PN3. I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (*name*)'S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (*name*), CHECKING THE CORD, OR SEEING IF (*name*) IS OK. BEFORE YOU LEFT THE (*name or type of facility in MN18*), DID ANYONE CHECK ON (*name*)'S HEALTH?	Yes ....1 No 2	
PN4. AND WHAT ABOUT CHECKS ON <u>YOUR</u> HEALTH – HE MEAN, SOMEONE ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU. DID ANYONE CHECK ON <u>YOUR</u> HEALTH BEFORE YOU LEFT (*name or type or facility in MN18*)?	Yes ....1 No 2	
PN5. NOW I WOULD LIKE TO TALK TO YOU ABOUT WHAT HAPPENED AFTER YOU LEFT (*name or type of facility in MN18*). DID ANYONE CHECK ON (*name*)'S HEALTH AFTER YOU LEFT (*name or type of facility in MN18*)?	Yes ....1 No 2	1⇨PN11 2⇨PN16

PN6. *Check MN17: Did a health professional, traditional birth attendant, or community health worker assist with the delivery?* ☐ *Yes, delivery assisted by a health professional or other health worker (MN17=A-G)* ⇨ *Continue with PN7* ☐ *No, delivery not assisted by a health professional or other health worker (A-G not circled in MN17)* ⇨ *Go to PN10*		
PN7. YOU HAVE ALREADY SAID THAT (*person or persons in MN17*) ASSISTED WITH THE BIRTH. NOW I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (*name*)'S HEALTH AFTER DELIVERY, FOR EXAMPLE EXAMINING (*name*), CHECKING THE CORD, OR SEEING IF (*name*) IS OK. AFTER THE DELIVERY WAS OVER AND BEFORE (*person or persons in MN17*) LEFT YOU, DID (*person or persons in MN17*) CHECK ON (*name*)'S HEALTH?	Yes ....1 No..2	
PN8. AND DID (*person or persons in MN17*) CHECK ON <u>YOUR</u> HEALTH BEFORE LEAVING? BY CHECK ON YOUR HEALTH, I MEAN ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.	Yes ....1 No..2	
PN9. AFTER THE (*person or persons in MN17*) LEFT YOU, DID ANYONE CHECK ON THE HEALTH OF (*name*)?	Yes ....1 No..2	1⇨PN11 2⇨PN18
PN10. I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (*name*)'S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (*name*), CHECKING THE CORD, OR SEEING IF THE BABY IS OK. AFTER (*name*) WAS DELIVERED, DID ANYONE CHECK ON HIS/HER HEALTH?	Yes ....1 No..2	2⇨PN19
PN11. DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?	Once...1 More than once 2	1⇨PN12A 2⇨PN12B

PN12A. How long after delivery did that check happen? PN12B. How long after delivery did the first of these checks happen? *If less than one hour, record '00' for Hours* *If less than one day, record hours.* *If less than one week, record days.* *Otherwise, record weeks.*	Hours...1 __ __ Days ....2 __ __ Weeks ....3 __ __ Don't know / remember 998	

PN13. Who checked on (*name*)'s health at that time?	Health professional
	    Doctor.. A
	    Nurse / Midwife.. B
	    Auxiliary midwife...................................... C
	Other person
	    Traditional birth attendant....................... F
	    Community health worker........................G
	    Relative / Friend .... H
	
	Other (*specify*) _____ X	

PN14. Where did this check take place?
 	
Probe to identify the type of source.
 	
If unable to determine whether public or private, write the name of the place.
 	
_____
(Name of place)
	Home
	    Your home..11
	    Other home 12
	
	Public sector
	    Govt. hospital/Polyclinic 21
	    Govt. clinic / health centre.....................22
	    Govt. health post 23
	    Other public (*specify*) _____ 26
	
	Private medical sector
	    Private hospital......................................31
	    Private clinic 32
	    Private maternity home 33
	    Other private
	        medical (*specify*) _____ 36
	
	Other (*specify*) _____ 96	

PN15. *Check MN18: Was the child delivered in a health facility?*
☐ *Yes, the child was delivered in a health facility (MN18=21-26 or 31-36) ⇨ Continue with PN16* ☐ *No, the child was not delivered in a health facility (MN18=11-12 or 96) ⇨ Go to PN17*

PN16. After you left (*name or type of facility in MN18*), did anyone check on <u>your</u> health?	Yes ....1 No..2	1⇨PN20 2⇨Next Module

PN17. *Check MN17: Did a health professional, traditional birth attendant, or community health worker assist with the delivery?*
☐ *Yes, delivery assisted by a health professional or other health worker (MN17=A-G)* ⇨ *Continue with PN18*
☐ *No, delivery not assisted by a health professional or other health worker (A-G not circled in MN17)* ⇨ *Go to PN19*

PN18. AFTER THE DELIVERY WAS OVER AND (*person or persons in MN17*) LEFT, DID ANYONE CHECK ON YOUR HEALTH?	Yes ....1 No...2	1⇨PN20 2⇨Next Module
PN19. AFTER THE BIRTH OF (*name*), DID ANYONE CHECK ON YOUR HEALTH? I MEAN SOMEONE ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.	Yes ....1 No...2	2⇨Next Module
PN20. DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?	Once...1 More than once 2	1⇨PN21A 2⇨PN21B
PN21A. HOW LONG AFTER DELIVERY DID THAT CHECK HAPPEN? PN21B. HOW LONG AFTER DELIVERY DID THE FIRST OF THESE CHECKS HAPPEN? *If less than one hour, record '00' for Hours If less than one day, record hours. If less than one week, record days. Otherwise, record weeks.*	Hours..1 __ __ Days ....2 __ __ Weeks ....3 __ __ Don't know / remember 998	

PN22. WHO CHECKED ON YOUR HEALTH AT THAT TIME?	Health professional
	     Doctor.. A
	     Nurse / Midwife... B
	     Auxiliary midwife....................................... C
	Other person
	     Traditional birth attendant....................... F
	     Community health worker........................G
	     Relative / Friend .... H
	
	Other (*specify*) _____ X	

PN23. WHERE DID THIS CHECK TAKE PLACE?	Home	
	Your home..11	
Probe to identify the type of source.	Other home 12	
If unable to determine whether public or private, write the name of the place.	Public sector	
	Govt. hospital/Polyclinic 21	
	Govt. clinic / health centre.....................22	
	Govt. health post 23	
_____	Other public (*specify*) _____ 26	
(Name of place)		
	Private medical sector	
	Private hospital.....................................31	
	Private clinic 32	
	Private maternity home 33	
	Other private	
	medical (*specify*) _____ 36	
	Other (*specify*) _____ 96	

ILLNESS SYMPTOMS IS

IS1. *Check Household Listing, column HL9*

Is the respondent the mother or caretaker of any child under age 5?

◻ Yes ⇨ Continue with IS2.

◻ No ⇨ Go to Next Module.

| IS2. SOMETIMES CHILDREN HAVE SEVERE ILLNESSES AND SHOULD BE TAKEN IMMEDIATELY TO A HEALTH FACILITY. WHAT TYPES OF SYMPTOMS WOULD CAUSE YOU TO TAKE YOUR CHILD TO A HEALTH FACILITY RIGHT AWAY?

 Probe: ANY OTHER SYMPTOMS?

 Keep asking for more signs or symptoms until the mother/caretaker cannot recall any additional symptoms.

 Circle all symptoms mentioned, but do NOT prompt with any suggestions | Child not able to drink or breastfeed .... A
 Child becomes sicker .... B
 Child develops a fever C
 Child has fast breathing .... D
 Child has difficult breathing .... E
 Child has blood in stool .... F
 Child is drinking poorly .... G
 Child has diarrhoea .... H
 Child incessant crying for no reason I

 Other (*specify*) _____ X

 Other (*specify*) _____ Y

 Other (*specify*) _____ Z | |

CONTRACEPTION		CP
CP1. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING. FARE YOU PREGNANT NOW?	Yes, currently pregnant .... 1 No .... 2 Unsure or DK 8	1⇨Next Module
CP2. COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?	Yes .... 1 No 2	2⇨Next Module
CP3. WHAT ARE YOU DOING TO DELAY OR AVOID A PREGNANCY? Do not prompt. If more than one method is mentioned, circle each one.	Female sterilization .... A Male sterilization .... B IUD .... C Injectables .... D Implants .... E Pill .... F Male condom .... G Female condom .... H Diaphragm .... I Foam / Jelly .... J Lactational amenorrhoea method (LAM) .... K Periodic abstinence / Rhythm .... L Withdrawal .... M Not Sexually Active .... N Other (*specify*) _____ X	

UN1. *Check CP1. Currently pregnant?*

    ☐ Yes, currently pregnant ⇨ Continue with UN2

    ☐ No, unsure or DK ⇨ Go to UN5

UN2. NOW I WOULD LIKE TO TALK TO YOU ABOUT YOUR CURRENT PREGNANCY. WHEN YOU GOT PREGNANT, DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes .... 1 No 2	1⇨UN4
UN3. DID YOU WANT TO HAVE A BABY LATER ON OR DID YOU NOT WANT ANY (MORE) CHILDREN?	Later .... 1 No more 2	
UN4. NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. AFTER THE CHILD YOU ARE NOW EXPECTING, WOULD YOU LIKE TO HAVE ANOTHER CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY MORE CHILDREN?	Have another child .... 1 No more / None .... 2 Undecided / Don't know 8	1⇨UN7 2⇨UN13 8⇨UN13

UN5. *Check CP3. Currently using "Female sterilization"?*

    ☐ Yes ⇨ Go to UN13

    ☐ No ⇨ Continue with UN6

UN6. NOW I WOULD LIKE TO ASK YOU 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 cannot get pregnant .... 3 Undecided / Don't know 8	 2⇨UN9 3⇨UN11 8⇨UN9
UN7. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD?	Months .... 1 __ __ Years .... 2 __ __ Soon / Now .... 993 Says she cannot get pregnant .... 994 After marriage .... 995 Other .... 996 Don't know 998	 994⇨UN11

UN8. *Check CP1. Currently pregnant?*

    ☐ Yes, currently pregnant ⇨ Go to UN13

    ☐ No, unsure or DK ⇨ Continue with UN9

UN9. *Check CP2. Currently using a method?*		
☐ Yes ⇨ Go to UN13 ☐ No ⇨ Continue with UN10		
UN10. DO YOU THINK YOU ARE PHYSICALLY ABLE TO GET PREGNANT AT THIS TIME?	Yes .... 1 No .... 2 DK 8	1 ⇨UN13 8 ⇨UN13

UN11. WHY DO YOU THINK YOU ARE NOT PHYSICALLY ABLE TO GET PREGNANT?	Infrequent sex / No sex .... A
	 Menopausal .... B
	 Never menstruated C
	 Hysterectomy (surgical removal
	     of uterus)... D
	 Has been trying to get pregnant
	     for 2 years or more without result........... E
	 Postpartum amenorrheic.............................F
	 Breastfeeding...G
	 Too old .... H
	 Fatalistic...I
	
	 Other (*specify*)_____ X
	
	 Don't know ....Z	

UN12. *Check UN11. "Never menstruated" mentioned?*		
☐ Mentioned ⇨ Go to Next Module ☐ Not mentioned ⇨ Continue with UN13		
UN13. WHEN DID YOUR LAST MENSTRUAL PERIOD START?	Days ago...1 __ __ Weeks ago ....2 __ __ Months ago ....3 __ __ Years ago..4 __ __ In menopause / Has had hysterectomy ....994 Before last birth.......................................995 Never menstruated 996	

FEMALE GENITAL MUTILATION/CUTTING		FG
FG1. Have you ever heard of female circumcision?	Yes... 1 No 2	1⇨FG3
FG2. In some countries, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice?	Yes... 1 No 2	2⇨Next Module
FG3. Have you yourself ever been circumcised?	Yes... 1 No 2	2⇨FG9
FG4. Now I would like to ask you what was done to you at that time. Was any flesh removed from the genital area?	Yes... 1 No .... 2 DK... 8	1⇨FG6
FG5. Was the genital area just nicked without removing any flesh?	Yes... 1 No .... 2 DK... 8	
FG6. Was the genital area sewn closed? If necessary, probe: Was it sealed?	Yes... 1 No .... 2 DK... 8	
FG7. How old were you when you were circumcised? If the respondent does not know the exact age, probe to get an estimate	Age at circumcision.............................. __ __ DK / Don't remember / Not sure................ 98	
FG8. Who performed the circumcision?	Health professional Doctor .... 11 Nurse/Midwife .... 12 Other health professional (specify)_____ 16 Traditional persons Traditional 'circumciser' .... 21 Traditional birth attendant .... 22 Other traditional (specify) _____ 26 DK... 98	
FG9. Check CM5 for Number of daughters at home and CM7 for Number of daughters elsewhere, and sum the answers here	Total number of living daughters......___ ___	
FG10. Just to make sure that I have this right, you have (total number in FG9) living daughters. Is this correct? ☐ Yes ☐ One or more living daughters ⇨ Continue with FG11 ☐ Does not have any living daughters ⇨ Go to FG22 ☐ No ⇨ Check responses to CM1 – CM10 and make corrections as necessary, until FG10 = Yes		

FG11. *Ask the respondent to tell you the name(s) of her daughter(s), beginning with the youngest daughter (if more than one daughter). Write down the name of each daughter in FG12. Then, ask questions FG13 to FG20 for each daughter at a time.*

The total number of daughters in FG12 should be equal to the number in FG9

If more than 4 daughters, use additional questionnaires

	Daughter #1	Daughter #2	Daughter #3	Daughter #4
FG12. *Name of daughter*	_____	_____	_____	_____
FG13. HOW OLD IS (*name*)?	Age .... ___ ___	Age.......... ___ ___	Age.......... ___ ___	Age .... ___ ___
FG14. *Is (name) younger than 15 years of age?*	Yes ....1 No ....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes .... 1 No.......................2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes..................... 1 No .... 2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes ....1 No ....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*
FG15. IS (*name*) CIRCUMCISED?	Yes ....1 No ....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes .... 1 No.......................2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes..................... 1 No .... 2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes ....1 No ....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*
FG16. HOW OLD WAS (*name*) WHEN THIS OCCURRED? *If the respondent does not know the age, probe to get an estimate.*	Age ....___ ___ DK.....................98	Age.......... ___ ___ DK 98	Age.......... ___ ___ DK 98	Age ....___ ___ DK.....................98
FG17. NOW I WOULD LIKE TO ASK YOU WHAT WAS DONE TO (*name*) AT THAT TIME. WAS ANY FLESH REMOVED FROM THE GENITAL AREA?	Yes ....1 ⇨FG19 No ....2 DK.......................8	Yes .... 1 ⇨FG19 No.......................2 DK 8	Yes..................... 1 ⇨FG19 No .... 2 DK 8	Yes ....1 ⇨FG19 No ....2 DK.......................8
FG18. WAS HER GENITAL AREA JUST NICKED WITHOUT REMOVING ANY FLESH?	Yes ....1 No ....2 DK.......................8	Yes .... 1 No.......................2 DK 8	Yes..................... 1 No .... 2 DK 8	Yes ....1 No ....2 DK.......................8

FG19. WAS HER GENITAL AREA SEWN CLOSED? *If necessary, probe*: WAS IT SEALED?	Yes ....1 No ....2 DK.......................8	Yes ....1 No.......................2 DK 8	Yes.....................1 No ....2 DK 8	Yes ....1 No ....2 DK.......................8

FG20. WHO PERFORMED THE CIRCUMCISION?	Health professional
	  Doctor 11
	  Nurse/midwife.12
	  Other health
	    professional
	    (*specify*) _____ 16
	
	Traditional persons
	  Traditional
	    'circumciser'...21
	  Traditional birth
	    attendant........22
	  Other traditional
	    (*specify*) _____ 26
	
	DK.....................98
		Health professional
		  Doctor 11
		  Nurse/midwife 12
		  Other health
		    professional
		    (*specify*) _____16
		
		Traditional persons
		  Traditional
		    'circumciser' .. 21
		  Traditional birth
		    attendant 22
		  Other traditional
		    (*specify*)_____26
		
		DK 98
			Health professional
			  Doctor 11
			  Nurse/midwife 12
			  Other health
			    professional
			    (*specify*)_____ 16
			
			Traditional persons
			  Traditional
			    'circumciser' .. 21
			  Traditional birth
			    attendant 22
			  Other traditional
			    (*specify*) _____ 26
			
			DK 98
				Health professional
				  Doctor 11
				  Nurse/midwife.12
				  Other health
				    professional
				    (*specify*) _____ 16
				
				Traditional persons
				  Traditional
				    'circumciser'...21
				  Traditional birth
				    attendant........22
				  Other traditional
				    (*specify*) _____ 26
				
				DK.....................98

FG21.	*Go back to FG13 for next daughter. If no more daughters, go to FG22*	*Go back to FG13 for next daughter. If no more daughters, go to FG22*	*Go back to FG13 for next daughter. If no more daughters, go to FG22*	*Go back to FG13 in first column of additional questionnaire for next daughter. If no more daughters, go to FG22* *Tick here if additional questionnaire used* ☐

FG22. DO YOU THINK THIS PRACTICE SHOULD BE CONTINUED OR SHOULD IT BE DISCONTINUED?	Continued... 1 Discontinued .... 2 Depends... 3 DK 8	

ATTITUDES TOWARD DOMESTIC VIOLENCE   DV

DV1. SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES. IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS:		Yes	No	DK	
[A] IF SHE GOES OUT WITHOUT TELLING HIM?	Goes out without telling	1	2	8	
[B] IF SHE NEGLECTS THE CHILDREN?	Neglects children	1	2	8	
[C] IF SHE ARGUES WITH HIM?	Argues with him	1	2	8	
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?	Refuses sex	1	2	8	
[E] IF SHE BURNS THE FOOD?	Burns food	1	2	8	

MARRIAGE/UNION		MA
MA1. 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	3⇨MA5
MA2. HOW OLD IS YOUR HUSBAND/PARTNER? *Probe*: HOW OLD WAS YOUR HUSBAND/PARTNER ON HIS LAST BIRTHDAY?	Age in years.. __ __ DK... 98	
MA3. BESIDES YOURSELF, DOES YOUR HUSBAND/PARTNER HAVE ANY OTHER WIVES OR PARTNERS OR DOES HE LIVE WITH OTHER WOMEN AS IF MARRIED?	Yes .... 1 No 2	2⇨MA7
MA4. HOW MANY OTHER WIVES OR PARTNERS DOES HE HAVE?	Number... __ __ DK... 98	⇨MA7 98⇨MA7
MA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN AS IF MARRIED?	Yes, formerly married .... 1 Yes, formerly lived with a man.................... 2 No 3	3 ⇨Next Module
MA6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed.. 1 Divorced .... 2 Separated 3	
MA7. HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once .... 1 More than once... 2	

MA8. IN WHAT MONTH AND YEAR DID YOU <u>FIRST</u> MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Date of first marriage
	    Month... __ __
	    DK month... 98
	
	    Year .... __ __ __ __
	
	    DK year... 9998
		⇨Next
		Module

MA9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?	Age in years.. __ __	

SEXUAL BEHAVIOUR		SB

Check for the presence of others. Before continuing, ensure privacy.

SB1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME IMPORTANT LIFE ISSUES. THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL. HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?	Never had intercourse.............................. 00 Age in years .... __ __ First time when started living with (first) husband/partner..................................... 95	⇨SB2 ⇨SB2
SB1A. DO YOU INTEND TO WAIT UNTIL YOU GET MARRIED TO HAVE SEXUAL INTERCOURSE FOR THE FIRST TIME?	Yes.. 1 No .... 2 Not Sure.. 3	1⇨SB16 2⇨SB16 3⇨SB16
SB2. THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes.. 1 No .... 2 DK / Don't remember 8	
SB3. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE? *Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more the answer must be recorded in years.*	Days ago... 1 __ __ Weeks ago.. 2 __ __ Months ago .... 3 __ __ Years ago.. 4 __ __	4⇨SB15
SB4. THE LAST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes.. 1 No 2	
SB5. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE? *Probe to ensure that the response refers to the relationship at the time of sexual intercourse* *If 'boyfriend', then ask:* WERE YOU LIVING TOGETHER AS IF MARRIED? *If 'yes', circle '2'. If 'no', circle '3'.*	Husband... 1 Cohabiting partner .... 2 Boyfriend... 3 Ex-Boyfriend .... 4 Casual acquaintance .... 5 Other (*specify*)_____ 6	3⇨SB7 4⇨SB7 5⇨SB7 6⇨SB7
SB6. *Check MA1:* ☐ *Currently married or living with a man (MA1 = 1 or 2) ⇨ Go to SB8* ☐ *Not married / Not in union (MA1 = 3) ⇨ Continue with SB7*		
SB7. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner............................ __ __ DK.. 98	
SB8. HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes.. 1 No 2	2⇨SB15
SB9. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH THIS OTHER PERSON, WAS A CONDOM USED?	Yes.. 1 No 2	

SB10. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON? *Probe to ensure that the response refers to the relationship at the time of sexual intercourse* *If 'boyfriend' then ask:* WERE YOU LIVING TOGETHER AS IF MARRIED? *If 'yes', circle '2'. If 'no', circle' 3'.*	Husband.. 1 Cohabiting partner .... 2 Boyfriend... 3 Ex-Boyfriend .... 4 Casual acquaintance .... 5 Other (*specify*)_____ 6	 3⇨SB12 4⇨SB12 5⇨SB12 6⇨SB12

SB11. *Check MA1 and MA7:*
 	
☐ Currently married or living with a man (MA1 = 1 or 2)
   AND
   Married only once or lived with a man only once (MA7 = 1) ⇨ Go to SB13
 	
☐ Else ⇨ Continue with SB12		

SB12. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner............................ __ __ DK... 98	
SB13. OTHER THAN THESE TWO PERSONS, HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes... 1 No 2	 2⇨SB15
SB14. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN THE LAST 12 MONTHS?	Number of partners .... __ __	
SB15. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN YOUR LIFETIME? *If a non-numeric answer is given, probe to get an estimate.* *If number of partners is 95 or more, write '95'.*	Number of lifetime partners.................. __ __ DK... 98	
SB16. DO YOU KNOW OF A PLACE WHERE A PERSON CAN GET MALE CONDOMS?	Yes... 1 No 2	 ⇨NEXT MODULE

SB17. Where is that?	Public sector	
	GOVT. HOSPITAL/POLYCLINIC…………………..A	
	GOVT. HEALTH CENTER………………………..B	
	GOVT. HEALTH POST/CHPS……………………C	
	FAMILY PLANNING CLINIC………………………D	
	MOBILE CLINIC………………………………….E	
	FIELD WORKER/OUTREACH/PEER EDUCATOR…F	
	OTHER PUBLIC (SPECIFY)._____G	
	Private medical sector	
	PRIVATE HOSPITAL/CLINIC……………………..H	
	PRIVATE DOCTOR………………………………I	
	PHARMACY……………………………………..J	
	CHEMICAL/DRUG STORE………….………….K	
	FP/PPAG CLINIC……………………………….L	
	MATERNITY HOME……………………………..M	
	OTHER PRIVATE MEDICAL _____N	
	Other source	
	SHOP/MARKET…………………………………O	
	CHURCH……………………………………….P	
	COMMUNITY VOLUNTEER……………………. Q	
	FRIEND/RELATIVE……………………………..R	
	Other (specify)_____X	
SB18. If you wanted to, could you yourself get a condom?	Yes………………………………………………. 1 No ………………………………………………. 2 Don't know/Unsure………………………………. 8	

NATIONAL HEALTH INSURANCE		WH
WH0. *Check WB2* ☐ *Respondent Less than 18 years ⇨ Go to Next Module.* ☐ *Respondent 18 years or older ⇨ Go to WH1.*		
WH1. DO YOU HAVE ANY HEALTH INSURANCE OR ARE YOU A MEMBER OF A MUTUAL HEALTH ORGANIZATION	Yes.. 1 No 2	2⇨WH10
WH2. WHAT TYPE OF HEALTH INSURANCE DO YOU HAVE? *RECORD ALL MENTIONED*	National/District Health Insurance (NHIS) ..A Health Insurance through Employer ....B Mutual Health Organization/ Community Based Health Insurance ....C Other privately purchased commercial Health Insurance...D Other (specify)_____ X	
WH3. *Check WH2:* ☐ *NHIS **NOT** CHECKED. ⇨ Go to WH10.*		
WH4. HOW WAS YOUR MEMBERSHIP OF THE NHIS ACHIEVED?	Paid premium myself .... 1 Premium paid by a relative or friend .... 2 Premium paid by employers/SSNIT............ 3 Exempt as indigent .... 4 Other (specify) _____6	
WH5. DO YOU HOLD A VALID NATIONAL HEALTH INSURANCE SCHEME (NHIS) CARD? *If person has valid insurance card, request to see it. Check to make sure it is valid for this year*	Yes, card seen .... 1 Yes, card not seen .... 2 No 3	1⇨WH9 2⇨WH9
WH6. WHY DO YOU NOT HAVE A VALID NHIS CARD?	Registered, but not fully paid Yes............... 1 Registered/Renewed, card not received..... 2 Registered, in waiting period Yes .... 3 Not renewed registration .... 4 Lost NHIS card .... 5 Other (specify)_____6	1⇨WH9 2⇨WH9 3⇨WH9 5⇨WH9 6⇨WH9
WH7. DO YOU PLAN TO RENEW THE NHIS REGISTRATION?	Yes.. 1 No .... 2 Don't know/ Not sure 8	1⇨ WH9 8⇨ WH9

WH8. WHY DO YOU NOT WANT TO RENEW THE NHIS REGISTRATION?	Have not been sick ....A Premium too Expensive ....B Still pay out of pocket...................................C Worse quality care with card ....D Waiting time for card too long......................E Desired services not covered ....F Use clinics/ traditional services not covered .... G Other _____X	
WH9. IN YOUR OPINION, DO NHIS CARD HOLDERS GET BETTER/SAME/WORSE SERVICES WHEN THEY ATTEND HEALTH CARE FACILITIES	Better .... 1 Same .... 2 Worse .... 3 Never used .... 4 Don't know.. 8	FOR ALL RESPONSES: ⇨NEXT MODULE
WH10. WHY HAVE YOU NOT REGISTERED OR RENEWED REGISTRATION WITH THE NHIS?	Not heard of NHIS ....A Premium too Expensive ....B Do not trust NHIS..C Do not know where to register....................D Registration office too far............................E Do not need health insurance.....................F NHIS does not cover the services I need .. G NHIS does not cover the facilities I use......H Other _____X	

HIV/AIDS		HA
HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	Yes .... 1 No 2	 2⇨WM11
HA2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?	Yes .... 1 No .... 2 DK 8	
HA3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes .... 1 No .... 2 DK 8	
HA4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes .... 1 No .... 2 DK 8	
HA5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes .... 1 No .... 2 DK 8	
HA6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS THE AIDS VIRUS?	Yes .... 1 No .... 2 DK 8	
HA7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes .... 1 No .... 2 DK 8	
HA8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY: [A] DURING PREGNANCY? [B] DURING DELIVERY? [C] BY BREASTFEEDING?	Yes No DK During pregnancy .... 1 2 8 During delivery .... 1 2 8 By breastfeeding 1 2 8	
HA9. IN YOUR OPINION, IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes .... 1 No .... 2 DK / Not sure / Depends 8	
HA10. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes .... 1 No .... 2 DK / Not sure / Depends 8	
HA11. IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes .... 1 No .... 2 DK / Not sure / Depends 8	
HA12. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?	Yes .... 1 No .... 2 DK / Not sure / Depends 8	

HA13. *Check CM13: Any live birth in last 2 years?*

☐ *No live birth in last 2 years ⇨ Go to HA24*

☐ *One or more live births in last 2 years ⇨ Continue with HA14*

HA14. *Check MN1: Received antenatal care?*

☐ *Received antenatal care ⇨ Continue with HA15*

☐ *Did not receive antenatal care ⇨ Go to HA24*

HA15. DURING ANY OF THE ANTENATAL VISITS FOR YOUR PREGNANCY WITH (*name*), WERE YOU GIVEN ANY INFORMATION ABOUT:					
		Y	N	DK	
[A] BABIES GETTING THE AIDS VIRUS FROM THEIR MOTHER?	AIDS from mother.......................	1	2	8	
[B] THINGS THAT YOU CAN DO TO PREVENT GETTING THE AIDS VIRUS?	Things to do................................	1	2	8	
[C] GETTING TESTED FOR THE AIDS VIRUS?	Tested for AIDS	1	2	8	
WERE YOU: [D] OFFERED A TEST FOR THE AIDS VIRUS?	Offered a test..............................	1	2	8	

HA16. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS AS PART OF YOUR ANTENATAL CARE?	Yes 1	
	No 2	2⇨HA19
	DK.. 8	8⇨HA19

HA17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes 1	
	No 2	2⇨HA22
	DK.. 8	8⇨HA22

HA18. REGARDLESS OF THE RESULT, ALL WOMEN WHO ARE TESTED ARE SUPPOSED TO RECEIVE COUNSELING AFTER GETTING THE RESULT.	Yes 1	1⇨HA22
	No 2	2⇨HA22
AFTER YOU WERE TESTED, DID YOU RECEIVE COUNSELLING?	DK.. 8	8⇨HA22

HA19. *Check MN17: Birth delivered by health professional (A, B or C)?*

☐ *Yes, birth delivered by health professional ⇨ Continue with HA20*

☐ *No, birth not delivered by health professional ⇨ Go to HA24*

HA20. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS BETWEEN THE TIME YOU WENT FOR DELIVERY BUT BEFORE THE BABY WAS BORN?	Yes 1	
	No 2	2⇨HA24

HA21. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes 1	
	No 2	

HA22. HAVE YOU BEEN TESTED FOR THE AIDS VIRUS SINCE THAT TIME YOU WERE TESTED DURING YOUR PREGNANCY?	Yes 1	1⇨HA25
	No 2	

HA23. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED FOR THE AIDS VIRUS?	Less than 12 months ago .... 1 12-23 months ago....................................... 2 2 or more years ago 3	1⇨WM11 2⇨WM11 3⇨WM11
HA24. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes .... 1 No... 2	2⇨HA27
HA25. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?	Less than 12 months ago .... 1 12-23 months ago .... 2 2 or more years ago 3	
HA26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes .... 1 No... 2 DK 8	1⇨WM11 2⇨WM11 8⇨WM11
HA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes .... 1 No... 2	

WM11. *Record the time*.	Hour and minutes .... __ __ : __ __	

WM12. *Check Household Listing Form, column HL9.*
Is the respondent the mother or caretaker of any child age 0-4 living in this household?

☐ *Yes ⇨ Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with this respondent.*

☐ *No ⇨ End the interview with this respondent by thanking her for her cooperation.*
Check for the presence of any other eligible woman, men or children under-5 in the household. IF none, check for the presence of any eligible male 15-59 year in the household.

■■■MICS

MAN'S INFORMATION PANEL	**MM**

This questionnaire is to be administered to all men age 15 through 59 (see column HL7A of Household Listing Form).Fill in one form for each eligible man.

MM1. Cluster number: ___ ___ ___	MM2. Household number: ___ ___
MM3. Man's name: Name_____	MM4. Man's line number: ___ ___
MM5. Interviewer name and number: Name_____ ___ ___	MM6. Day / Month / Year of interview: ___ ___ / ___ ___ / 2010

Repeat greeting if not already read to this man:

WE ARE FROM THE INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH (ISSER) AT THE UNIVERSITY OF GHANA, LEGON. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire has already been read to this man, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 30 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

THIS SURVEY IS TO ASSIST POLICY MAKERS AND PRACTITIONERS AND PROVIDE KNOWLEDGE ON HEALTH AND HOUSEHOLD WELL-BEING

MAY I START NOW?

☐ *Yes, permission is given* ⇨ *Go to MM10 to record the time and then begin the interview.*

☐ *No, permission is not given* ⇨ *Complete MM7.Discuss this result with your supervisor.*

MM7. Result of man's interview	Completed .... 01 Not at home .... 02 Refused .... 03 Partly completed .... 04 Incapacitated .... 05 Other (*specify*) _____ 96

MM8. Field edited by (Name and number): Name _____ ___ ___	MM9. Data entry clerk (Name and number): Name _____ ___ ___
MM10. *Record the time.*	Hour and minutes .... __ __ : __ __	

MAN'S BACKGROUND		MB
MB1. In what month and year were you born?	Date of birth Month .... __ __ DK month .... 98 Year .... __ __ __ __ DK year 9998	
MB2. How old are you? *Probe:* How old were you at your last birthday? *Compare and correct MB1 and/or MB2 if inconsistent*	Age (in completed years) .... __ __	
MB3. Have you ever attended school or preschool?	Yes .... 1 No 2	2⇨MB7
MB4. What is the highest level of school you attended?	Preschool .... 0 Primary .... 1 Middle/JSS/JHS .... 2 Secondary/SSS/SHS/TECH/VOC .... 3 Higher .... 4 Islamic Education (Makaranta) 5	0⇨MB7 5⇨MB6
MB5. What is the highest grade you completed at that level? *If less than 1 grade, enter "00"*	Grade .... __ __	
MB6. *Check MB4:* ☐ *Secondary or Higher (MB4=3 or MB4=4)* ⇨ *Go to MB8* ☐ *Primary /Middle/JSS/JHS/Islamic Education (MB4=1 or MB4=2 or MB4=5)* ⇨ *Continue with WB7*		

MB7. Now I would like you to read this sentence to me.
 	
Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:
 	
Can you read part of the sentence to me?
	Cannot read at all 1
	Able to read only parts of sentence 2
	Able to read whole sentence 3
	
	No sentence in
	    required language_____ 4
	                    (specify language)
	
	Blind/mute, visually/speech impaired 5	

MB8. WHAT IS YOUR RELIGION?	Catholic …………………………………………..11 Protestant……………………………………….12 Pentecostal/Charismatic……………………..13 Deeper Life……………………………..............14 Jehovah Witness …………………………….15 SDA ……………………………………………16 Moslem…………………………………………21 Traditional……………………………………31 Spiritualist…………………………………….32 No Religion…………………………………..33 Other (*specify*) _____ 96	
MB9. TO WHAT ETHNIC GROUP DO YOU BELONG?	Akan……………………………………..11 Ga/Dangme…………………………....12 Ewe……………………………………...13 Guan…………………………………..14 Grum ……………………………………15 Mole Dagbani ……………………… .21 Grusi…………………………………….22 Mande…………………………………...23 Non-Ghanaian………………………..24 Other ethnic group (*specify*)_____ 96	

ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY		AC
AC1. *Check MB7:* ☐ *Question left blank (Respondent has Secondary or Higher education) ⇨ Continue with AC2* ☐ *Able to read or no sentence in required language (codes 2, 3 or 4) ⇨ Continue with AC2* ☐ *Cannot read at all or blind (codes 1 or 5) ⇨ Go to AC3*		
AC2. HOW OFTEN DO YOU READ A NEWSPAPER OR MAGAZINE? 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	
AC3. DO YOU LISTEN TO THE RADIO 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	
AC4. HOW OFTEN DO YOU WATCH TELEVISION? WOULD YOU SAY THAT YOU WATCH 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	
AC5. *Check WB2: Age of respondent between 15 and 24?* ☐ *Age 25-59 ⇨ Go to Next Module* ☐ *Age 15-24 ⇨ Continue with AC6*		
AC6. HAVE YOU EVER USED A COMPUTER?	Yes ....1 No..2	2⇨AC9
AC7. HAVE YOU USED A COMPUTER FROM ANY LOCATION IN THE LAST 12 MONTHS?	Yes ....1 No..2	2⇨AC9
AC8. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE A COMPUTER? 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	
AC9. HAVE YOU EVER USED THE INTERNET?	Yes ....1 No..2	2⇨Next Module
AC10. 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	2⇨ Next Module
AC11. 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	

MARRIAGE/UNION		MU
MU1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A WOMAN AS IF MARRIED?	Yes, currently married................................. 1 Yes, cohabiting with a woman .... 2 No, not in union.. 3	2⇨MU2 3⇨MU4
MU1A. WHAT TYPE OF MARRIAGE?	Consensual union .... 01 Customary marriage only.......................... 02 Customary and religious .... 03 Civil marriage only .... 04 Customary and civil.................................. 05 Customary, religious and civil ....06 Betrothed (incl. customary not completed).07 Other (specify)_____96 DK.. 98	
MU2. WITH HOW MANY WOMEN DO YOU CURRENTLY LIVE (MARRIED OR AS MARRIED)?	Number of women .... __ __	
IF only one wife MU3. HOW OLD IS YOUR WIFE/PARTNER? *Probe*: HOW OLD WAS YOUR WIFE/PARTNER ON HER LAST BIRTHDAY? *I f has more than one wife* MU3A. HOW OLD IS YOUR YOUNGEST WIFE/PARTNER? *Probe*: HOW OLD WAS YOUR YOUNGEST WIFE/PARTNER ON HER LAST BIRTHDAY?	Age in years.. __ __ DK.. 98	⇨MU7 ⇨MU7
MU4. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A WOMAN AS IF MARRIED?	Yes, formerly married.................................. 1 Yes, formerly lived with a woman ....2 No ……………………………………………….3	3⇨Next Module
MU5. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowhood .... 1 Divorcee.. 2 Separation... 3	
MU6. HAVE YOU BEEN MARRIED OR LIVED WITH A WOMAN ONLY ONCE OR MORE THAN ONCE?	Only once.. 1 More than once... 2	
MU7. IN WHAT MONTH AND YEAR DID YOU <u>FIRST</u> MARRY OR START LIVING WITH A WOMAN AS IF MARRIED?	Date of first marriage Month... __ __ DK month... 98 Year .... __ __ __ __ DK year.. 9998	
MU8. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST WIFE/PARTNER?	Age in years.. __ __	

ATTITUDES TOWARDS CONTRACEPTION		MR
MR1. COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU OR (ANY OF) YOUR WIFE(S)/PARTNER(S) CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID HER GETTING PREGNANT?	Yes ....1 No...2 DK 8	 2⇨MR2 8⇨MR2
MR1A. WHAT ARE YOU / ANY OF YOUR WIFE(S)/PARTNER(S) DOING TO DELAY OR AVOID A PREGNANCY? Do not prompt. If more than one method is mentioned, circle each one.	Female sterilization......................................A Male sterilization..B IUD ....C Injectables ....D Implants ....E Pill...F Male condom ....G Female condom..H Diaphragm .... I Foam / Jelly ....J Lactational amenorrhoea method (LAM)...K Periodic abstinence / Rhythm...................... L Withdrawal... M Other (*specify*) _____X	NEXT MODULE
MR2. WOULD YOU YOURSELF USE OR WOULD YOU ALLOW (ANY OF) YOUR WIFE(S)/PARTNER(S) TO USE ANY SUCH METHODS?	Yes ....1 No...2 DK / not sure / depends 8	1⇨NEXT MODULE 8⇨NEXT MODULE
MR3. WHY NOT? ANY OTHER REASON? *Record all reasons mentioned.*	Religious beliefs... A Partner refuses... B Can't afford / expensive .... C Side effects .... D Not sexually active .... E Do not wish to avoid pregnancy ....F Encourages promiscuity..............................G Other (*specify*) _____ X	

ATTITUDES TOWARDS DOMESTIC VIOLENCE   MD

MD1. SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES. IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS:		Yes	No	DK	
[A] IF SHE GOES OUT WITHOUT TELLING HIM?	Goes out without telling	1	2	8	
[B] IF SHE NEGLECTS THE CHILDREN?	Neglects children	1	2	8	
[C] IF SHE ARGUES WITH HIM?	Argues	1	2	8	
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?	Refuses sex..............................	1	2	8	
[E] IF SHE BURNS THE FOOD?	Burns food	1	2	8	

SEXUAL BEHAVIOUR		MS

Check for the presence of others. Before continuing, ensure privacy.

MS1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME IMPORTANT LIFE ISSUES. THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL. HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?	Never had intercourse................................ 00 Age in years .... __ __ First time when started living with (first) wife/partner .... 95 DK……………………………………………98	00⇨Next Module
MS2. THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes... 1 No .... 2 DK / Don't remember 8	2⇨MS3 8⇨MS3
MS2A. WHAT WAS THE MAIN REASON WHY YOU USED THE CONDOM	To prevent STD/HIV..................................... 1 To prevent pregnancy .... 2 To prevent both STD/HIV and pregnancy... 3 Partner requested/insisted .... 4 Other (specify)... 6	
MS3. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE? *Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more the answer must be recorded in years.*	Days ago... 1 __ __ Weeks ago .... 2 __ __ Months ago .... 3 __ __ Years ago... 4 __ __	4⇨MS15
MS4. THE LAST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes... 1 No 2	2⇨MS5
MS4A. WHAT WAS THE MAIN REASON WHY YOU USED THE CONDOM	To prevent STD/HIV..................................... 1 To prevent pregnancy .... 2 To prevent both STD/HIV and pregnancy... 3 Partner requested/insisted .... 4 Other (specify)... 5	
MS5. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE? *Probe to ensure that the response refers to the relationship at the time of sexual intercourse* *If 'girlfriend', then ask:* WERE YOU LIVING TOGETHER AS IF MARRIED? *If 'yes', circle '02'. If 'no', circle '03'.*	Spouse.. 01 Cohabiting partner/concubine .... 02 Girlfriend/fiancée....................................... 03 Ex-girlfriend/fiancée .... 04 Casual acquaintance .... 05 Commercial sex worker .... 06 Other (specify)_____ 96	

MS6. *Check MU1:*

☐ *Currently married or living with a woman (MU1 = 1 or 2) ⇨ Go to MS8*

☐ *Not married / Not in union (MU1 = 3) ⇨ Continue with MS7*

MS7. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner........................... __ __ DK 98	
MS8. HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes .... 1 No 2	2⇨MS15
MS9. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH THIS OTHER PERSON, WAS A CONDOM USED?	Yes .... 1 No 2	
MS10. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON? IF PERSON IS 'GIRLFRIEND' OR 'FIANCÉE', ASK: WERE YOU LIVING TOGETHER AS IF MARRIED? IF "YES", CIRCLE '02', IF "NO" CIRCLE '03'	Spouse .... 01 Cohabiting partner/concubine .... 02 Girlfriend/fiancée .... 03 Ex-Girlfriend/fiancée .... 04 Casual Acquaintance .... 05 Commercial Sex Worker .... 06 Other (*Specify*) 96	

MS11. *Check MU1 and MU10:*
 	
    ☐ *Currently married or living with a woman (MU1 = 1 or 2)*
           AND
        Married only once or lived with a woman only once (MA10 = 1) ⇨ *Go to MS13*
 	
    ☐ *Else ⇨ Continue with MS12*	

MS12. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner........................... __ __ DK 98	
MS13. OTHER THAN THESE TWO PERSONS, HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes .... 1 No 2	
MS14. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN THE LAST 12 MONTHS?	Number of partners .... __ __	
MS14A. WAS A CONDOM USED EVERY TIME YOU HAD SEXUAL INTERCOURSE IN THE LAST 12 MONTHS?	Yes .... 1 No 2	
MS14B. HAVE YOU EVER HAD SEX WITH A COMMERCIAL SEX WORKER?	Yes .... 1 No 2	2⇨MS15
MS14C. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH A COMMERCIAL SEX WORKER? *Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more the answer must be recorded in years.*	Days ago .... 1 __ __ Weeks ago .... 2 __ __ Months ago .... 3 __ __ Years ago .... 4 __ __	

MS15. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN YOUR LIFETIME? *If a non-numeric answer is given, probe to get an estimate.* *If number of partners is 95 or more, write '95'.*	Number of lifetime partners................. __ __ DK 98	

NATIONAL HEALTH INSURANCE		NH
NH0. *Check MB2* ☐ *Respondent Less than 18 years* ⇨ *Go to Next Module.* ☐ *Respondent 18 years or older* ⇨ *Go to NH1.*		
NH1. DO YOU HAVE ANY HEALTH INSURANCE OR ARE YOU A MEMBER OF A MUTUAL HEALTH ORGANIZATION	Yes ....1 No...2	2⇨NH10
NH2. WHAT TYPE OF HEALTH INSURANCE DO YOU HAVE? *RECORD ALL MENTIONED*	National/District Health Insurance (NHIS).. A Health Insurance through Employer .... B Mutual Health Organization/ Community Based Health Insurance ....C Other privately purchased commercial Health Insurance ....D Other (specify)_____ X	
NH3. *Check NH2:* ☐ *NHIS **NOT** CHECKED.* ⇨ *Go to NH10.*		
NH4. HOW WAS YOUR MEMBERSHIP OF THE NHIS ACHIEVED?	Paid premium myself ....1 Premium paid by a relative or friend ....2 Premium paid by employers/SSNIT ....3 Exempt as indigent ....4 Other (specify) _____ 6	
NH5. DO YOU HOLD A VALID NATIONAL HEALTH INSURANCE SCHEME (NHIS) CARD? *If person has valid insurance card, request to see it. Check to make sure it is valid for this year*	Yes, card seen ....1 Yes, card not seen ....2 No 3	1⇨NH9 2⇨NH9
NH6. WHY DO YOU NOT HAVE A VALID NHIS CARD?	Registered, but not fully paid Yes................1 Registered/Renewed, card not received .....2 Registered, in waiting period Yes................3 Not renewed registration ....4 Lost NHIS card ....5 Other (specify)_____ 6	1⇨NH9 2⇨NH9 3⇨NH9 5⇨NH9 6⇨NH9
NH7. DO YOU PLAN TO RENEW THE NHIS REGISTRATION?	Yes ....1 No...2 Don't know/ Not sure 8	1⇨ NH9 8⇨ NH9

NH8. WHY DO YOU NOT WANT TO RENEW THE NHIS REGISTRATION?	Have not been sick .... A Premium too Expensive .... B Still pay out of pocket .... C Worse quality care with card .... D Waiting time for card too long...................... E Desired services not covered .... F Use clinics/ traditional services not covered .... G Other _____ X	
NH9. IN YOUR OPINION, DO NHIS CARD HOLDERS GET BETTER/SAME/WORSE SERVICES WHEN THEY ATTEND HEALTH CARE FACILITIES	Better .... 1 Same .... 2 Worse .... 3 Never used .... 4 Don't know.. 8	FOR ALL RESPONSES: ⇨ NEXT MODULE
NH10. WHY HAVE YOU NOT REGISTERED OR RENEWED REGISTRATION WITH THE NHIS?	Not heard of NHIS .... A Premium too Expensive .... B Do not trust NHIS .... C Do not know where to register.................... D Registration office too far .... E Do not need health insurance .... F NHIS does not cover the services I need ... G NHIS does not cover the facilities I use...... H Other _____ X	

HIV/AIDS		MH
MH1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	Yes .... 1 No 2	2⇨MM11
MH2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?	Yes .... 1 No .... 2 DK 8	
MH3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes .... 1 No .... 2 DK 8	
MH4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes .... 1 No .... 2 DK 8	
MH5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes .... 1 No .... 2 DK 8	
MH6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS AIDS?	Yes .... 1 No .... 2 DK 8	
MH7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes .... 1 No .... 2 DK 8	
MH8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY: [A] DURING PREGNANCY? [B] DURING DELIVERY? [C] BY BREASTFEEDING?	Yes No DK During pregnancy .... 1 2 8 During delivery .... 1 2 8 By breastfeeding 1 2 8	
MH9. IN YOUR OPINION, IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes .... 1 No .... 2 DK/Not sure/Depends 8	
MH10. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes .... 1 No .... 2 DK/Not sure/Depends 8	
MH11. IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT OTHER PEOPLE TO KNOW ABOUT IT?	Yes .... 1 No .... 2 DK/Not sure/Depends 8	
MH12. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?	Yes .... 1 No .... 2 DK/Not sure/Depends 8	

MH12A. IN YOUR OPINION, CAN THE HIV VIRUS BE TRANSMITTED THROUGH ORAL SEX?	Yes .... 1 No .... 2 DK/Not sure/Depends 8	
MH12B. IN YOUR OPINION, CAN THE HIV VIRUS BE TRANSMITTED THROUGH ANAL SEX?	Yes .... 1 No .... 2 DK/Not sure/Depends 8	
MH12C. IN YOUR OPINION, CAN HIV/AIDS BE CURED?	Yes .... 1 No .... 2 DK 8	2⇨MH13 8⇨MH13
MH12D. IN YOUR OPINION, CAN A MAN INFECTED WITH HIV/AIDS BE CURED BY HAVING SEX WITH A VIRGIN WOMAN?	Yes .... 1 No .... 2 DK 8	
MH13. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes .... 1 No 2	2⇨MH18
MH14. I DON'T WANT TO KNOW THE RESULTS BUT, WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?	Less than 12 months ago .... 1 12-23 months ago .... 2 2 or more years ago 3	
MH15. DID YOU, YOURSELF, ASK FOR THE TEST, WAS IT OFFERED AND YOU ACCEPTED, OR WAS IT REQUIRED?	Asked for the test .... 1 Offered and accepted .... 2 Required 3	

MH16. WHERE DID YOU GO FOR THE TEST?
 	
Probe to identify the type of source.
 	
If unable to determine whether public or private, write the name of the place.
 	
_____
(NAME OF PLACE)
	Public sector
	    Govt. hospital... 11
	    Govt. health centre 12
	    Govt. clinic/PHU 13
	    Govt. VCT Centre 14
	    Other public (*specify*)_____ 16
	
	Private Medical Sector
	    Private hospital 21
	    Private clinic 22
	    Other private
	        medical (*specify*)_____ 26
	
	Other sources
	    NGO VCT Centre 31
	    Mission hospital 32
	
	Other (*specify*) _____ 96
	
	DK 98	

MH17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes .... 1 No .... 2 DK 8	⎫ ⎬MM11 ⎭
MH18. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes .... 1 No 2	

MM11. *Record the time.*	Hour and minutes.....................__ __ : __ __	

MM12. *End the interview with this respondent by thanking him for his cooperation.* *Check for the presence of any other eligible man in the household.*

▪▪▪▪ MICS

QUESTIONNAIRE FOR CHILDREN UNDER FIVE
ACCRA - 2010

UNDER-FIVE CHILD INFORMATION PANEL	UF

This questionnaire is to be administered to all mothers or caretakers (see Household Listing Form, column HL9) who care for a child that lives with them and is under the age of 5 years (see Household Listing Form, column HL6). A separate questionnaire should be used for each eligible child.

UF1. Cluster number: ___ ___ ___	UF2. Household number: ___ ___
UF3. Child's name: Name_____	UF4. Child's line number: ___ ___
UF5. Mother's / Caretaker's name: Name_____	UF6. Mother's / Caretaker's line number: ___ ___
UF7. Interviewer name and number: Name_____ ___ ___	UF8. Day / Month / Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___

Repeat greeting if not already read to this respondent:

WE ARE FROM INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH AT THE UNIVERSITY OF GHANA, LEGON. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT (*name*)'S HEALTH AND WELL-BEING. THE INTERVIEW WILL TAKE ABOUT 45 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (***child's name from UF3***)'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 20 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

☐ *Yes, permission is given* ⇨ *Go to UF12 to record the time and then begin the interview.*
☐ *No, permission is not given* ⇨ *Complete UF9. Discuss this result with your supervisor*

UF9. Result of interview for children under 5 Codes refer to mother/caretaker.	Completed .... 01 Not at home .... 02 Refused .... 03 Partly completed... 04 Incapacitated .... 05 Other (*specify*) _____ 96

UF10. Field edited by (Name and number): Name _____ ___ ___	UF11. Data entry clerk (Name and number): Name_____ ___ ___

UF12. *Record the time.*	Hour and minutes......................__ __ : __ __	

AGE		AG
AG1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF (*name*). IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe:* WHAT IS HIS / HER BIRTHDAY? If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day Month and year must be recorded.	Date of birth Day ....__ __ DK day..98 Month ....__ __ Year...__ __ __ __	
AG2. HOW OLD IS (*name*)? *Probe*: HOW OLD WAS (*name*) AT HIS / HER LAST BIRTHDAY? Record age in completed years. Record '0' if less than 1 year. Compare and correct AG1 and/or AG2 if inconsistent.	Age (in completed years) ....__	

BIRTH REGISTRATION		BR
BR0 Has (name's) birth been registered with the births and deaths registry?	Yes 1	
	No 2	2⇨BR2B
	DK.. 8	8⇨BR3
BR1. Does (name) have a birth certificate? May I see it?	Yes, seen.. 1 Yes, not seen... 2 No 3	
	DK.. 8	
BR2A. Was (name's) birth registered within the first year of birth?	Yes .... 1 No 2	1⇨BR4 2⇨BR4 8⇨BR4
	DK.. 8	
BR2B. What is the main reason why (name's) birth is not registered?	Costs too much... 1 Must travel too far... 2 Did not know it should be registered .... 3 Did not want to pay fine .... 4 Do not know where to register.................... 5	5⇨BR4
	Other (specify) _____ 6 DK.. 8	
BR3. Do you know where to register your child's birth?	Yes .... 1 No 2	
BR4. How much did it cost you, or how much do you think it would cost to register your child with the birth and death registry if the child is under 1 year old?	Free 1	
	Less than GH¢5 2	
	Between GH¢5 and GH¢10........................ 3	
	More than GH¢10 4	
	DK.. 8	

EARLY CHILDHOOD DEVELOPMENT   EC

EC1. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR (*name*)?	None...00 Number of children's books....................0 __ Ten or more books 10	
EC2. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT (*name*) PLAYS WITH WHEN HE/SHE IS AT HOME. DOES HE/SHE PLAY WITH: [A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)? [B] TOYS FROM A SHOP OR MANUFACTURED TOYS? [C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS OR LEAVES)? If the respondent says "YES" to the categories above, then probe to learn specifically what the child plays with to ascertain the response	Y N DK Homemade toys ....1 2 8 Toys from a shop............................1 2 8 Household objects or outside objects 1 2 8	
EC3. SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN. ON HOW MANY DAYS IN THE PAST WEEK WAS (*name*): [A] LEFT ALONE FOR MORE THAN AN HOUR? [B] LEFT IN THE CARE OF ANOTHER CHILD, THAT IS, SOMEONE LESS THAN 10 YEARS OLD, FOR MORE THAN AN HOUR? If 'none' enter' 0'. If 'don't know' enter '8'	Number of days left alone for more than an hour.......................................__ Number of days left with other child for more than an hour ....__	

EC4. *Check AG2: Age of child*
 	
    ☐ *Child age 3 or 4 ⇨ Continue with EC5*
 	
    ☐ *Child age 0, 1 or 2 ⇨ Go to Next Module*		

EC5. DOES (*name*) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION	Yes 1	

PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	No...2 DK 8	2⇨EC7 8⇨EC7
EC6. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (*name*) ATTEND?	Number of hours....................................__ __	

EC7. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER OVER 15 YEARS OF AGE ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (*name*): *If yes, ask:* WHO ENGAGED IN THIS ACTIVITY WITH (*name*)? *Circle all that apply.*		Mother	Father	Other	No one	
[A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (*name*)?	Read books	A	B	X	Y	
[B] TOLD STORIES TO (*name*)?	Told stories	A	B	X	Y	
[C] SANG SONGS TO (*name*) OR WITH (*name*), INCLUDING LULLABIES?	Sang songs	A	B	X	Y	
[D] TOOK (*name*) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	Took outside	A	B	X	Y	
[E] PLAYED WITH (*name*)?	Played with	A	B	X	Y	
[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH (*name*)?	Named/counted	A	B	X	Y	

EC8. I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH AND DEVELOPMENT OF YOUR CHILD. CHILDREN DO NOT ALL DEVELOP AND LEARN AT THE SAME RATE. FOR EXAMPLE, SOME WALK EARLIER THAN OTHERS. THESE QUESTIONS ARE RELATED TO SEVERAL ASPECTS OF YOUR CHILD'S DEVELOPMENT. CAN (*name*) IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?	Yes ....1 No..2 DK 8	
EC9. CAN (*name*) READ AT LEAST FOUR SIMPLE, POPULAR WORDS?	Yes ....1 No..2 DK 8	
EC10. DOES (*name*) KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?	Yes ....1 No..2 DK 8	
EC11. CAN (*name*) PICK UP A SMALL OBJECT WITH TWO FINGERS, LIKE A STICK OR A ROCK FROM THE GROUND?	Yes ....1 No..2 DK 8	

EC12. IS (*name*) SOMETIMES TOO SICK TO PLAY?	Yes ....1 No..2 DK 8
EC13. DOES (*name*) FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY?	Yes ....1 No..2 DK 8
EC14. WHEN GIVEN SOMETHING TO DO, IS (*name*) ABLE TO DO IT INDEPENDENTLY?	Yes ....1 No..2 DK 8
EC15. DOES (*name*) GET ALONG WELL WITH OTHER CHILDREN?	Yes ....1 No..2 DK 8
EC16. DOES (*name*) KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?	Yes ....1 No..2 DK 8
EC17. DOES (*name*) GET DISTRACTED EASILY?	Yes ....1 No..2 DK 8

BREASTFEEDING		BF
BF1. HAS (NAME) EVER BEEN BREASTFED?	Yes ....1 No...2	2⇨BF3
BF2. IS (NAME) STILL BEING BREASTFED?	Yes ....1 No...2	
BF3. I WOULD LIKE TO ASK YOU ABOUT LIQUIDS THAT (*name*) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED IN WHETHER (*name*) HAD THE ITEM EVEN IF IT WAS COMBINED WITH OTHER FOODS. DID (*name*) <u>DRINK PLAIN WATER</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No...2 DK 8	
BF4. DID (*name*) <u>DRINK INFANT FORMULA</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No...2 DK 8	2⇨BF6 8⇨BF6
BF5. HOW MANY TIMES DID (*name*) DRINK INFANT FORMULA?	Number of times...................................__ __	
BF6. DID (*name*) <u>DRINK MILK, SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No...2 DK 8	2⇨BF8 8⇨BF8
BF7. HOW MANY TIMES DID (*name*) DRINK TINNED, POWDERED OR FRESH ANIMAL MILK?	Number of times...................................__ __	
BF8. DID (*name*) <u>DRINK JUICE OR JUICE DRINKS</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No...2 DK 8	
BF9. DID (*name*) DRINK ANY LIGHT SOUP YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No...2 DK 8	
BF10. DID (*name*) <u>DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No...2 DK 8	
BF11. DID (*name*) DRINK <u>ORS (ORAL REHYDRATION SOLUTION)</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No...2 DK 8	

BF12. DID (*name*) <u>DRINK ANY OTHER LIQUIDS</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No..2 DK 8	
BF13. DID (*name*) <u>DRINK OR EAT YOGURT</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No..2 DK 8	2⇨BF15 8⇨BF15
BF14. HOW MANY TIMES DID (*name*) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Number of times ....__ __	
BF15. DID (*name*) <u>EAT THIN PORRIDGE</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No..2 DK 8	
BF16. DID (*name*) <u>EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD</u> YESTERDAY, DURING THE DAY OR NIGHT?	Yes ....1 No..2 DK 8	2⇨BF18 8⇨BF18
BF17. HOW MANY TIMES DID (*name*) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?	Number of times ....__ __	
BF18. YESTERDAY, DURING THE DAY OR NIGHT, DID (*name*) <u>DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE</u>?	Yes ....1 No..2 DK 8	

CARE OF ILLNESS		CA
CA1. IN THE LAST TWO WEEKS, HAS (*name*) HAD DIARRHOEA?	Yes ....1 No..2 DK 8	2⇨CA7 8⇨CA7
CA2. I WOULD LIKE TO KNOW HOW MUCH (*name*) WAS GIVEN TO DRINK DURING THE DIARRHOEA (INCLUDING BREASTMILK). DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO DRINK, ABOUT THE SAME AMOUNT, OR MORE THAN USUAL? *If less, probe*: WAS HE/SHE 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 DK 8	
CA3. DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO EAT, ABOUT THE SAME AMOUNT, MORE THAN USUAL, OR NOTHING TO EAT? If "less", probe: WAS HE/SHE 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 DK 8	
CA4. DURING THE EPISODE OF DIARRHOEA, WAS (*name*) GIVEN TO DRINK ANY OF THE FOLLOWING: Read each item aloud and record response before proceeding to the next item. [A] A FLUID MADE FROM A SACHET ORS? [B] A PRE-PACKAGED ORS FLUID FOR DIARRHOEA? [C] COCONUT WATER? [D] RICE WATER? [E] MASHED KENKEY?	Y N DK Fluid from ORS sachet......................1 2 8 Pre-packaged ORS fluid ....1 2 8 Coconut Water ....1 2 8 Rice Water ....1 2 8 Mashed Kenkey 1 2 8	
CA5. WAS ANYTHING (ELSE) GIVEN TO TREAT THE DIARRHOEA?	Yes ....1 No..2 DK 8	2⇨CA7 8⇨CA7

CA6. WHAT (ELSE) WAS GIVEN TO TREAT THE DIARRHOEA?
 	
Probe:
ANYTHING ELSE?
 	
Record all treatments given. Write brand name(s) of all medicines mentioned.
 	
_____
(Name)
	Pill or Syrup
	    Antibiotic... A
	    Antimotility .... B
	    Zinc.. C
	    Other (Not antibiotic, antimotility or zinc) G
	    Unknown pill or syrup .... H
	Injection
	    Antibiotic..L
	    Non-antibiotic ....M
	    Unknown injection .... N
	
	Intravenous ....O
	Home remedy / Herbal medicine...............Q
	
	Other (*specify*) _____ X	

CA7. AT ANY TIME IN THE LAST TWO WEEKS, HAS (*name*) HAD AN ILLNESS WITH A COUGH?	Yes ....1 No...2 DK 8	2⇨CA14 8⇨CA14
CA8. WHEN (*name*) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, RAPID BREATHS OR HAVE DIFFICULTY BREATHING?	Yes ....1 No...2 DK 8	2⇨CA14 8⇨CA14
CA9. WAS THE FAST OR DIFFICULT BREATHING DUE TO A PROBLEM IN THE CHEST OR A BLOCKED OR RUNNY NOSE?	Problem in chest only..................................1 Blocked or runny nose only ....2 Both ....3 Other (*specify*) _____ 6 DK 8	2⇨CA14 6⇨CA14
CA10. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes ....1 No...2 DK 8	2⇨CA12 8⇨CA12

CA11. FROM WHERE DID YOU SEEK ADVICE OR TREATMENT?
 	
Probe:
ANYWHERE ELSE?
 	
Circle all providers mentioned, but do NOT prompt with any suggestions.
 	
Probe to identify each type of source.
 	
If unable to determine if public or private sector, write the name of the place.
 	
_____
(Name of place)
	Public sector
	    Govt. hospital/Polyclinic .... A
	    Govt. health centre................................. B
	    Govt. health post C
	    Community health worker........................ D
	    Mobile / Outreach clinic .... E
	    Other public (*specify*) _____ H
	Private medical sector
	    Private hospital / clinic..............................I
	    Private physician ....J
	    Private pharmacy/Chemical shop .... K
	    Mobile clinic L
	    Herbal Centre/Clinic ....M
	    Other private medical (*specify*)_____O
	Other source
	    Relative / Friend .... P
	    Shop ....Q
	    Traditional practitioner .... R
	    Drug peddler .... S
	
	Other (*specify*) _____ X	

CA12. Was (*name*) given any medicine to treat this illness?	Yes ....1 No...2 DK 8	2⇨CA14 8⇨CA14

CA13. What medicine was (*name*) given?
 	
Probe:
Any other medicine?
 	
Circle all medicines given. Write brand name(s) of all medicines mentioned.
 	
_____
(Names of medicines)
	Antibiotic
	   Pill / Syrup .... A
	   Injection .... B
	
	Anti-malarials ....M
	
	Paracetamol / Panadol / Acetaminophen... P
	Aspirin ....Q
	Ibuprofen ....R
	
	Other (*specify*) _____ X
	DK .... Z	

CA14. Check AG2: Child aged under 3?
 	
   ☐ Yes ⇨ Continue with CA15
 	
   ☐ *No ⇨ Go to Next Module*		

CA15. The last time (*name*) passed stools, what was done to dispose off the stools?	Child used toilet / latrine............................01 Put / Rinsed into toilet or latrine ....02 Put / Rinsed into drain or ditch ....03 Thrown into garbage (solid waste)............04 Buried ....05 Left in the open ....06 Other (*specify*) _____ 96 DK 98	

MALARIA		ML
ML1. IN THE LAST TWO WEEKS, HAS (*name*) BEEN ILL WITH A FEVER AT ANY TIME?	Yes ....1 No..2 DK 8	2⇨Next Module 8⇨Next Module
ML2. AT ANY TIME DURING THE ILLNESS, DID (*name*) HAVE BLOOD TAKEN FROM HIS/HER FINGER OR HEEL FOR TESTING?	Yes ....1 No..2 DK 8	
ML3. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes ....1 No..2 DK 8	2⇨ML8 8⇨ML8
ML4. WAS (*name*) TAKEN TO A HEALTH FACILITY DURING THIS ILLNESS?	Yes ....1 No..2 DK 8	2⇨ML8 8⇨ML8
ML5. WAS (*name*) GIVEN ANY MEDICINE FOR FEVER OR MALARIA AT THE HEALTH FACILITY?	Yes ....1 No..2 DK 8	2⇨ML7 8⇨ML7

ML6. WHAT MEDICINE WAS (*name*) GIVEN?
 	
Probe:
ANY OTHER MEDICINE?
 	
Circle all medicines mentioned. Write brand name(s) of all medicines, if given.
 	
_____
(Name)
	Anti-malarials:
	    SP / Fansidar.. A
	    Chloroquine .... B
	    Amodiaquine C
	    Quinine.. D
	    Combination with Artemisinin .... E
	    Efpac Junior .... F
	    Camoquine ....G
	
	    Other anti-malarial
	        (*specify*) _____ H
	
	Antibiotic drugs
	    Pill / Syrup I
	    Injection ....J
	
	Other medications:
	    Paracetamol/ Panadol /Acetaminophen . P
	    Aspirin ....Q
	    Ibuprofen ....R
	
	Other (*specify*) _____ X
	DK .... Z	

ML7. WAS (*name*) GIVEN ANY MEDICINE FOR THE FEVER OR MALARIA BEFORE BEING TAKEN TO THE HEALTH FACILITY?	Yes ....1 No..2 DK 8	1⇨ML9 2⇨ML10 8⇨ML10
ML8. WAS (*name*) GIVEN ANY MEDICINE FOR FEVER OR MALARIA DURING THIS ILLNESS?	Yes ....1 No..2 DK 8	2⇨ML10 8⇨ML10

ML9. WHAT MEDICINE WAS (*name*) GIVEN?
 	
Probe:
ANY OTHER MEDICINE?
 	
Circle all medicines mentioned. Write brand name(s) of all medicines, if given.
 	
_____
(Name)
.
	Anti-malarials:
	  SP / Fansidar... A
	  Chloroquine .... B
	  Amodiaquine C
	  Quinine.. D
	  Combination with Artemisinin .... E
	  Efpac Junior .... F
	  Camoquine...G
	
	  Other anti-malarial
	    (*specify*) _____H
	
	Antibiotic drugs
	  Pill / Syrup I
	  Injection ....J
	
	Other medications:
	  Paracetamol/ Panadol /Acetaminophen . P
	  Aspirin ....Q
	  Ibuprofen .... R
	
	Other (*specify*) _____ X
	DK .... Z	

ML10. *Check ML6 and ML9: Anti-malarial mentioned (codes A - H)?*
 	
    ☐ *Yes ⇨ Continue with ML11*
 	
    ☐ *No ⇨ Go to Next Module*		

ML11. HOW LONG AFTER THE FEVER STARTED DID (*name*) FIRST TAKE (*name of anti-malarial from ML6 or ML9*)? *If multiple anti-malarials mentioned in ML6 or ML9, name all anti-malarial medicines mentioned.*	Same day ....0 Next day ....1 2 days after the fever ....2 3 days after the fever ....3 4 or more days after the fever ....4 DK 8	

IMMUNIZATION		IM

If an immunization card is available, copy the dates in IM3 for each type of immunization recorded on the card. IM6-IM17 are for registering vaccinations that are not recorded on the card. IM6-IM17 will only be asked when a card is not available.

IM1. DO YOU HAVE A CARD WHERE (*name*)'S VACCINATIONS ARE WRITTEN DOWN? (*If yes*) MAY I SEE IT PLEASE?	Yes, seen ....1 Yes, not seen ....2 No card...3	1⇨IM3 2⇨IM6
IM2. DID YOU EVER HAVE A VACCINATION CARD FOR (*name*)?	Yes ....1 No..2	1⇨IM6 2⇨IM6

IM3. (a) Copy dates for each vaccination from the card. (b) Write '44' in day column if card shows that vaccination was given but no date recorded.	Date of Immunization				
	Day	Month	Year		

BCG	BCG							
POLIO AT BIRTH	OPV0							
POLIO 1	OPV1							
POLIO 2	OPV2							
POLIO 3	OPV3							
DPT/HEP. B/INFL1	DPTH1							
DPT/HEP. B/INFL2	DPTH2							
DPT/HEP. B/INFL3	DPTH3							
MEASLES	MEASLES							
YELLOW FEVER	YF							
VITAMIN A (1) (MOST RECENT)	VITA1							
VITAMIN A (2) (2ND MOST RECENT)	VITA2							

IM4. *Check IM3. Are all vaccines (BCG to Vitamin A) recorded?*
  ☐ *Yes*⇨ *Go to IM19*
  ☐ *No* ⇨ *Continue with IM5*

IM5. IN ADDITION TO WHAT IS RECORDED ON THIS CARD, DID (*name*) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS? Record 'Yes' only if respondent mentions vaccines shown in the table above.	Yes ....1 (Probe for vaccinations and write '66' in the corresponding day column for each vaccine mentioned. Then skip to IM18) No..2 DK 8	2⇨IM19 8⇨IM19
IM6. HAS (*name*) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY?	Yes ....1 No..2 DK 8	2⇨IM19 8⇨IM19
IM7. 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 DK 8	
IM8. HAS (*name*) EVER RECEIVED ANY "VACCINATION DROPS IN THE MOUTH" TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO?	Yes ....1 No..2 DK 8	2⇨IM11 8⇨IM11
IM9. WAS THE FIRST POLIO VACCINE RECEIVED IN THE FIRST TWO WEEKS AFTER BIRTH OR LATER?	First two weeks ....1 Later 2	
IM10. HOW MANY TIMES WAS THE POLIO VACCINE RECEIVED?	Number of times..__	
IM11. HAS (*name*) EVER RECEIVED A DPT/HEP. B VACCINATION – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, OR DIPHTHERIA? *Probe by indicating that DPT vaccination is sometimes given at the same time as Polio*	Yes ....1 No..2 DK 8	2⇨IM16 8⇨IM16
IM12. HOW MANY TIMES WAS A DPT VACCINE RECEIVED?	Number of times..__	
IM16. HAS (*name*) EVER RECEIVED A MEASLES INJECTION – THAT IS, A SHOT IN THE ARM AT THE AGE OF 9 MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?	Yes ....1 No..2 DK 8	
IM17. HAS (*name*) EVER RECEIVED THE YELLOW FEVER VACCINATION – THAT IS, A SHOT IN THE ARM AT THE AGE OF 9 MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING YELLOW FEVER? *Probe by indicating that the yellow fever vaccine is sometimes given at the same time as the measles vaccine*	Yes ....1 No..2 DK 8	
IM18. HAS (*name*) RECEIVED A VITAMIN A DOSE LIKE (THIS/ANY OF THESE) WITHIN THE LAST 6	Yes 1	

MONTHS? *Show common types of ampules / capsules / syrups*	No...2 DK 8	
IM19. Please tell me if (*name*) has participated in any of the following campaigns over the course of the year: [A] POLIO IMMUNIZATION PHASE I (MARCH 2010) [B] POLIO IMMUNIZATION PHASE II (APRIL 2010) [C]MEASLES VACCINATION (NOV. 3-6)	Y N DK POLIO IMMUNIZATION PHASE I.....1 2 8 POLIO IMMUNIZATION PHASE II....1 2 8 MEASLES VACCINATION (Nov 3-6).1 2 8	

UF13. *Record the time.*	Hour and minutes......................__ __ : __ __	

UF14. *Is the respondent the mother or caretaker of another child age 0-4 living in this household?*

☐ *Yes ⇨ Indicate to the respondent that you will need to measure the weight and height of the child later. Go to the next QUESTIONNAIRE FOR CHILDREN UNDER FIVE to be administered to the same respondent*

☐ *No ⇨ End the interview with this respondent by thanking him/her for his/her cooperation and tell her/him that you will need to measure the weight and height of the child*

Check to see if there are other woman's, or under-5 questionnaires to be administered in this household. Move to another woman's or under-5 questionnaire, or start making arrangements for anthropometric measurements of all eligible children in the household.

ANTHROPOMETRY   AN

After questionnaires for all children are complete, the measurer weighs and measures each child. Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child. Check the child's name and line number on the household listing before recording measurements.

AN1. *Measurer's name and number:*	Name_____ ___ ___	
AN2. *Result of height / length and weight measurement*	Either or both measured...............................1	
	Child not present 2	2⇨AN6
	Child or caretaker refused 3	3⇨AN6
	Other (*specify*) _____ 6	6⇨AN6
AN3. *Child's weight*	Kilograms (kg) ....__ __ . __	
	Weight not measured 99.9	

AN4. *Child's length or height*
 	
Check age of child in AG2:
 	
☐ Child under 2 years old. ⇨ Measure length (lying down).
 	
☐ Child age 2 or more years. ⇨ Measure height (standing up).
	Length (cm)
	  Lying down ....1 __ __ __ . __
	
	Height (cm)
	  Standing up ....2 __ __ __ . __
	
	Length / Height not measured..............999.9	

AN6. Is there another child in the household who is eligible for measurement?

☐ Yes ⇨ Record measurements for next child.

☐ No ⇨ End the interview with this household by thanking all participants for their cooperation.

Gather together all questionnaires for this household and check that all identification numbers are inserted on each page. Tally on the Household Information Panel the number of interviews completed.

Ghana-Accra

Multiple Indicator Cluster Survey in 5 High Densely Populated Localities

2010-2011