

SOMALIA 2006

# SOMALIA

Monitoring the situation of children and women

Multiple Indicator Cluster Survey  
2006

Multiple Indicator Cluster Survey



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SOMALIA  
Multiple Indicator Cluster Survey  
2006



MICS

## Summary Table of Findings

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Somalia, 2006

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	
<b>CHILD MORTALITY</b>					
Child mortality	1	13	Under-five mortality rate	135	per thousand
	2	14	Infant mortality rate	86	per thousand
<b>NUTRITION</b>					
Nutritional status	6	4	Underweight prevalence	36	Percent
	7		Stunting prevalence	38	Percent
	8		Wasting prevalence	11	Percent
Breastfeeding	45		Timely initiation of breastfeeding	26	Percent
	15		Exclusive breastfeeding rate	13	Percent
	16		Continued breastfeeding rate at 12-15 months	50	Percent
				at 20-23 months	35
	17		Timely complementary feeding rate	15	Percent
	18		Frequency of complementary feeding	12	Percent
19		Adequately fed infants	11	Percent	
Salt iodization	41		Iodized salt consumption	1.2	Percent
Vitamin A	42		Vitamin A supplementation (under-fives)	24	Percent
	43		Vitamin A supplementation (post-partum mothers)	9	Percent
Low birth weight	10		Infants weighed at birth	5	Percent
<b>CHILD HEALTH</b>					
Immunization	25		Tuberculosis immunization coverage	26	Percent
	26		Polio immunization coverage	35	Percent
	27		DPT immunization coverage	12	Percent
	28	15	Measles immunization coverage	19	Percent
	31		Fully immunized children	5	Percent
Tetanus toxoid	32		Neonatal tetanus protection	26	Percent
Care of illness	33		Use of oral rehydration therapy (ORT)	21	Percent
	34		Home management of diarrhoea	2	Percent
	35		Received ORT or increased fluids, and continued feeding	7	Percent
	23		Care seeking for suspected pneumonia	13	Percent
	22		Antibiotic treatment of suspected pneumonia	32	Percent
Solid fuel use	24	29	Solid fuels	100	Percent
Malaria	36		Household availability of insecticide-treated nets (ITNs)	12	Percent
	37	22	Under-fives sleeping under insecticide-treated nets	11	Percent
	38		Under-fives sleeping under mosquito nets	18	Percent
	39	22	Antimalarial treatment (under-fives)	3	Percent
	40		Intermittent preventive malaria treatment (pregnant women)	1	Percent
<b>ENVIRONMENT</b>					
Water and Sanitation	11	30	Use of improved drinking water sources	29	percent
	13		Water treatment	22	percent
	12	31	Use of improved sanitation facilities	37	percent
	14		Disposal of child's faeces	35	percent
<b>REPRODUCTIVE HEALTH</b>					
Contraception and unmet need	21	19c	Contraceptive prevalence	15	percent

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value
Maternal and newborn health	20		Antenatal care	26 percent
	44		Content of antenatal care:	
			Blood test taken	14 percent
			Blood pressure measured	21 percent
			Urine Specimen taken	9 percent
			Weight measured	22 percent
	4	17	Skilled attendant at delivery	33 Percent
	5		Institutional deliveries	9 percent
Maternal mortality	3	16	Maternal mortality ratio	1044 per 100,000
Fertility			Total Fertility Rate	6.7 rate
<b>CHILD DEVELOPMENT</b>				
Child development	46		Support for learning	65 percent
	47		Father's support for learning	39 percent
<b>EDUCATION</b>				
Education	52		Pre-school attendance	2 percent
	54		Net intake rate in primary education	9 percent
	55	6	Net primary school attendance rate	23 percent
	56		Net secondary school attendance rate	7 percent
	57	7	Children reaching grade five	92 percent
	59	7b	Primary completion rate	4 percent
	61	9	Gender parity index: primary school	0.8 ratio
		secondary school	0.5 ratio	
Literacy	60	8	Adult literacy rate	25 percent
<b>CHILD PROTECTION</b>				
Birth registration	62		Birth registration	3 percent
Child labour	71		Child labour	49 percent
	72		Labourer students	44 percent
	73		Student labourers	44 percent
Early marriage and polygyny	67		Marriage before age 15	8 percent
			Marriage before age 18	46 percent
	68		Young women aged 15-19 currently married/in union	25 percent
	70		Polygyny	23 percent
	69		Spousal age difference (10 years)	
			Women age 15-19	31 percent
		Women age 20-24	30 percent	
Female genital mutilation/cutting	66		Approval for FGM/C	65 percent
	63		Prevalence of female genital mutilation/cutting (FGM/C)	98 percent
	64		Prevalence of extreme form of FGM/C	77 percent
	65		FGM/C prevalence among daughters	46 percent
Domestic violence	100		Attitudes towards domestic violence	76 percent
Orphaned children	75		Prevalence of orphans	10 percent
	78		Children's living arrangements	9 percent
	77	20	School attendance of orphans versus non-orphans	0.9 ratio
	79		Malnutrition among children orphaned and made vulnerable by HIV/AIDS	1.1 ratio
<b>HIV/AIDS</b>				
HIV/AIDS knowledge and attitudes	82	19b	Comprehensive knowledge about HIV prevention among young people	4 percent
	89		Knowledge of mother- to-child transmission of HIV	38 percent
	86		Attitude towards people with HIV/AIDS	5 percent
	87		Women who know where to be tested for HIV	16 percent
	88		Women who have been tested for HIV	3 percent

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## List of Abbreviations

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AIDS.....	Acquired Immune Deficiency Syndrome
BCG .....	Bacillus-Cereus-Geuerin (Tuberculosis)
DPT.....	Diphtheria Pertussis Tetanus
EPI .....	Expanded Programme on Immunization
HIV .....	Human Immunodeficiency Virus
IDD .....	Iodine Deficiency Disorders
ITN .....	Insecticide Treated Net
IUD .....	Intrauterine Device
LAM .....	Lactational Amenorrhea Method
MDG.....	Millennium Development Goals
MICS .....	Multiple Indicator Cluster Survey
MoH .....	Ministry of Health
NAR .....	Net Attendance Rate
ppm .....	Parts Per Million
PAPFAM.....	Pan Arab Project for Family Health
SPSS.....	Statistical Package for Social Sciences
TFR .....	Total fertility Rate
UNAIDS .....	United Nations Programme on HIV/ AIDS
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

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  - Samawada Rehabilitation and Development Organisation (Lower Shabelle)
  - Community Care Centre (Bay Region)
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## Disclaimer

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This Somali 2006 MICS covers all regions of Somalia. For the purposes of this survey, the analysis refers to the North West Zone, the North East Zone and Central South Zone according to prewar boundaries for Somaliland and Puntland and does not imply any recognition of administrative boundaries by the United Nations or the League of Arab States. This will allow some comparison with the previous MICS surveys, and is consistent with the common approach adopted by the UN Country Team Statistics Working Group.

# Executive Summary

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The 2006 Multiple Indicator Cluster Survey (MICS) is a nationally representative survey of 5969 households, 6764 women age 15-49 and 6305 mother's and caretakers of children age less than five. The primary purpose of the MICS is to provide policy makers and planners with reliable and detailed information needed to monitor the situation of women and children. Information on child mortality, nutrition, child health, child protection, water and sanitation, education, reproductive health, knowledge of HIV/AIDS and fertility is included.

## Child Mortality

- At current mortality levels, one in every twelve Somali children dies before reaching age one, while one in every 7 does not survive to the fifth birthday.
- The highest levels of mortality are found in the Central South Zone.
- Male children experience higher mortality than female children and the sex difference is especially pronounced for infant mortality.

## Immunisation

- Twelve percent of children age 12 -23 months had been fully vaccinated at the time of the survey.
- Five percent received all their vaccinations before the age of one year.
- Thirty percent of children age 12-23 months have received the BCG vaccination, and 29 percent have been vaccinated against measles.
- Just under a quarter of children age 12-23 months have received the DPT1 vaccination; only 14 percent however then go on to receive the third dose of DPT.
- Polio coverage is higher than DPT because of the efforts of the national immunisation campaigns during which polio vaccinations are administered on a wide scale. Thirty-nine percent have received polio 3; nevertheless the dropout between the first and subsequent doses of polio is high.
- Thirty-six percent of children age 12-23 months, have not received any of the basic vaccinations.

## Diarrhea

- Nationally 21 percent of children under age five had diarrhea at some time in the two weeks before the survey.
- Around one in five children who had diarrhea were treated with some kind of oral rehydration therapy (ORT): 9 percent were treated with ORS (solution prepared from ORS packets); 9 percent were given recommended home fluids (RHF) prepared at home; and 7 percent were given pre-packaged ORS fluid.
- Just under 80 percent of children with diarrhea did not receive any type of treatment at all.

## Acute respiratory Infection (ARI)

- Fifteen percent of children under age five showed symptoms of ARI in the two weeks before the survey.
- Use of a health facility for the treatment of symptoms of ARI is low, with only 13 percent of children taken to an appropriate health facility or provider.
- Thirty-two percent of children under age five who showed symptoms of ARI in the two weeks before the survey received antibiotics.
- Just fifteen percent of mothers and caretakers identified that fast and difficult breathing would be cause for taking their children immediately to a health facility.

- The risk of acute respiratory illness is increased by the near universal use of solid fuels used for cooking in Somali households. Almost 100 percent of Somali households use solid fuels for cooking and just one in ten households have a hood or chimney above their open fire or stove.

#### Mosquito nets

- One in five Somali households own at least one mosquito net, with 11 percent of households owning a long lasting insecticide treated net (ITN).
- Eighteen percent of children under age 5 slept under a bed-net during the night prior to the interview; with 11 percent of children sleeping under an ITN.

#### Nutrition

- The level of malnutrition is significant with at least one in three (36 percent) Somali children under five years of age that are underweight, 38 percent stunted (short for their age) and 11 percent wasted (thin for their height).
- In general rural children and children of uneducated mothers are more likely to be underweight, stunted or wasted than other children.

#### Breastfeeding

- Three out of five children are breastfed within one day of being born.
- Among children age 12-15 months just half are still breastfed, this falls to 35 percent among children age 20-23 months.
- Exclusive breastfeeding levels are very low, contrary to UNICEF/WHO recommendations, only 9 percent of Somali children age 0-6 months are exclusively breastfed.
- Complementary foods are not introduced in a timely fashion for many children. At 6-11 months, just 12 percent of children are receiving the recommended number of complementary feedings.
- Among children age 0-11 months, only one in ten children are considered appropriately fed.

#### Water

- Twenty-nine percent of the Somali population has access to an improved source of drinking water.
- A quarter of those living in the North East and Central South Zone have access to improved sources, however access to improved water sources is above the national average in the North West Zone.
- One fifth of the Somali population uses an appropriate method to treat their water in the household.
- People from households in urban areas and where the household head has had some form of formal education are more likely to use an appropriate water treatment method than others.
- On average it takes one hour and twelve minutes to go to the source of drinking water, get the water and then return. The time it takes to collect water is significantly longer for households in rural areas and households in the Central South Zone.
- In two thirds of households an adult women bears the responsibility for collecting water.

#### Sanitation

- Half of the Somali population is living without any type of toilet facilities.
- Thirty-seven percent are using a facility with a sanitary means of excreta disposal.
- Just over three quarters of Somalis living in urban areas are using a sanitary means of excreta disposal compared to 13 percent of people living in rural areas.
- When it comes to disposing of child's faeces, over a third of children age 0-2 months (35 percent) have their stools disposed of in a safe way.

- One fifth of the Somali population is using both an improved source of drinking water and a sanitary means of excreta disposal. Zonal differences are small but the difference between those living in urban and rural households is substantial.

#### Fertility

- The total fertility rate is 6.7 births per woman.
- There are no substantial differences in fertility by zone or urban/rural residence; rural women have on average just one more child than urban women by the end of their childbearing years.

#### Contraception

- Fifteen percent of married women age 15-49 are using a method of family planning.
- One percent of women using a method of family planning are using a modern method. The most commonly used modern method is the pill, although usage is extremely low.
- The most popular non modern method is the lactational amenorrhea method (LAM).

#### Antenatal care

- Twenty-six percent of mothers who had a live birth in the two years preceding the survey received antenatal care from a doctor, nurse or trained midwife.
- Among women who received antenatal care: 14 percent had a blood test taken, 21 percent had their blood pressure measured, 9 percent had a urine specimen and 22 percent had their weight measured.
- On average women receiving antenatal care would have 2 checkups.
- Approximately seven in ten mothers did not receive any antenatal care; half of the women not receiving antenatal care reported that they did not feel the need to see anyone.

#### Assistance at delivery of births

- Nine percent of births in the two years prior to the survey were delivered in a health facility.
- A third of the births were delivered at home with the assistance of skilled health personnel, that is, a doctor, nurse or midwife.
- Fifty-one percent of births are attended by a traditional birth attendant (TBA).
- Three percent of births were delivered without any type of assistance at all.

#### Maternal Mortality

- The maternal mortality ratio, which measures the obstetric risk associated with each live birth is 1044 deaths per 100,000 live births.

#### Education

- Early childhood education is rare in Somalia and is attended by just 2 percent of Somali children age 3-5.
- Nine percent of children age 6, which is the primary school entry age, are currently attending the first grade.
- Of all children of primary school age (6-13 years old), approximately 23 percent are attending primary school.
- Seven percent of secondary school age children (14-18 years old) are attending secondary or higher education.
- Just under one fifth (19 percent) of secondary school age children are still attending primary school.
- Data show that the primary school completion rate stands at just 4 percent.
- For every 10 boys who attend primary school, there are 8 girls. The gender parity index falls even more for secondary school education, with 5 girls attending for every 10 boys.

### Literacy

- A quarter of Somali women age 15-24 are literate.
- Women living in urban areas are four and a half times more likely to be able to read than women living in urban areas.

### Birth Registration

- Three percent of children under 5 years old had their birth registered. Registration is highest in the North West Zone.

### Orphans

- Around 10 percent of Somali children have lost either a mother or father.
- One percent of Somali children have lost both parents.

### Child Labour

- Almost half of all Somali children (49 percent) are involved in child labour activities. The majority of child labour is centered around working for the family business or spending more than 28 hours a week on household chores.
- Forty-four percent of those children engaged in child labour are also attending school.

### Marriage

- Eight percent of women age 15-49 years were married by the time they were 15, the proportion increases to 46 percent by the time women are 18.
- A quarter of Somali women age 15-19 are currently married. In thirty-one percent of these marriages the husband is ten years older than the woman.
- Twenty-three percent of currently married women are married to men who are in a polygamous union.
- Older women and women with no education are more likely to be in a polygamous union than other woman.

### FGM/C

- Almost all (98 percent) of women age 15-49 have been circumcised.
- Seventy-seven percent of women reported that they had experienced an extreme form of FGM/C where their vagina had been sewn closed or flesh had been removed.
- Just less than half (46 percent) of women with at least one living daughter, have a daughter who has experienced FGM/C.
- Sixty percent of daughters who have been circumcised have had the extreme form.
- The majority of girls are circumcised between the ages of 5 and 9 years (79 percent).

### Attitudes towards domestic violence

- Overall three quarters of ever married women age 15-49 believe that there are at least some situations in which a husband is justified in beating his wife.
- Sixty-four percent of ever married women agree that a husband is justified in beating his wife if his wife refuses to have sex with him.

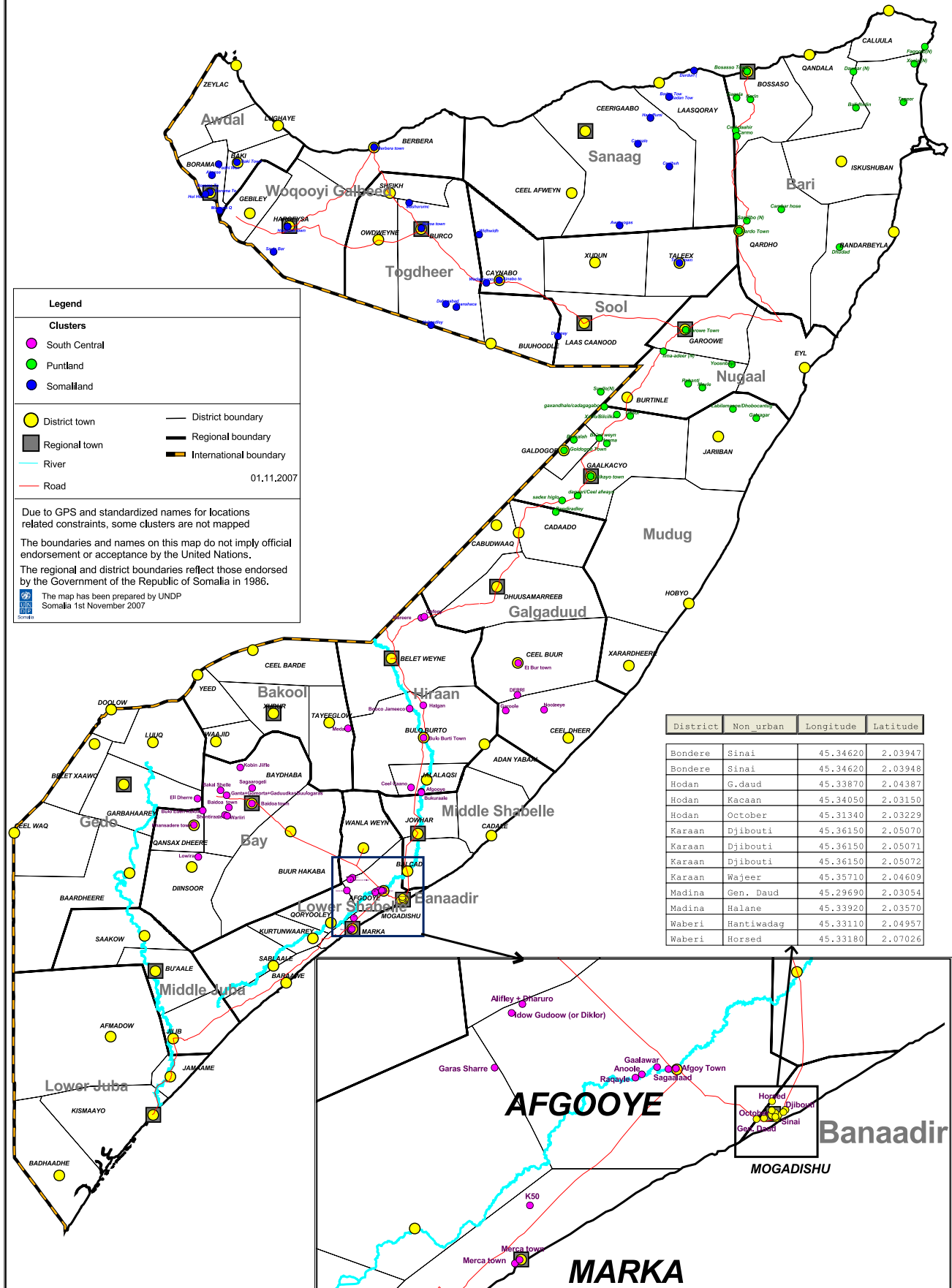
### HIV/AIDS

- Sixty-five percent of women age 15-49 have heard of AIDS.
- Women are most aware that the chances of getting the AIDS virus can be reduced by limiting sex to one uninfected partner (36 percent).
- Knowledge of condoms and the role they can play in preventing the transmission of HIV is low at 15 percent.
- Thirty-four percent of women know that a healthy-looking person can have the AIDS virus.

- Many women erroneously believe that AIDS can be transmitted by supernatural means, mosquito bites and by sharing food.
- A minority of women (4 percent) have comprehensive knowledge of HIV/AIDS transmission, that is, they know that both condom use and limiting sex partners to one uninfected partner are HIV prevention methods; that a healthy-looking person can have HIV; and reject the two most common local misconceptions about HIV/AIDS - that AIDS can be transmitted by supernatural means and by mosquito bites.
- Half of women know that HIV can be transmitted by breastfeeding.
- Approximately two fifths of women (38 percent) could identify all three ways of mother to child transmission. Women living in rural areas were more than twice as likely to know all three ways compared to women living in rural areas.
- Almost all women age 15-49 (95 percent) agreed with at least one discriminatory statement towards people living with HIV/AIDS.
- Seventy-three percent of women said they would not buy food from a person living with HIV/AIDS.
- Over half of the women (58 percent) said that they would care for a family member who was sick with AIDS.
- Among the female population age 15-49, 16 percent know of a place to get tested for HIV.
- Three percent of women reported that they had been tested for HIV at some time, and 73 percent of these women had received the results of their test.



### MICs Study Clusters in Somalia, 2006.



# I. Introduction

## Background

This report is based on the Somali Multiple Indicator Cluster Survey, conducted in 2005 by UNICEF as part of the global UNICEF MICS programme, with technical assistance from the PAFAM project of the League of Arab States. The survey was conducted with the support and endorsement of:

- Ministry of Planning and International Cooperation, Transitional Federal Government, Somalia
- Ministry of National Planning and Coordination, Hargeisa, Somaliland
- Ministry of Planning and International Cooperation, Garowe, Puntland

The survey provides valuable information on the situation of children and women in Somalia and was based, in large part, on the need to monitor 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.

### 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.”

This is in addition to the decisions issued by the League of Arab States and other related institutions and organizations with regard to the Arab framework for Arab child rights, the Cairo declaration towards an “Arab World Fit for Children”, and the second Arab plan for childhood (2004-2015) adopted by the Arab summits.

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 below).

The Somali MICS (2006) follows the first Multiple Indicator Cluster Survey (MICS1) in 1995<sup>1</sup> and the second Multiple Indicator Cluster Survey (MICS2) in 1999 and was designed to provide a credible dataset at the national level in order to assess the situation of children and women in Somalia at the Mid-Decade. The survey was also designed to be able to produce data at the level of zones; the North West Zone (Somaliland), the North East Zone (Puntland) and the Central South Zone of Somalia. The MICS findings will also provide data for monitoring progress (or establishing a baseline) for Somali specific goals (Reconstruction and Development Plan, UN Programmes, GFATM Malaria Programme, Five-Year Development Plans/ Poverty Reduction Strategies).

The third Somali MICS includes many of the same questions and indicators as the 1999 MICS. However, since 1999, the survey methodology and in particular the sample design has undergone many improvements with more involvement from experts in this field. The sample size is also significantly larger. Therefore whilst the MICS should be used as a monitoring tool to identify national changes over time, this is difficult to do when there are wide divergences in sampling methodology between surveys. Therefore making direct comparisons between the 1999 and 2006 MICS has not been encouraged in this report.

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

## Survey Objectives

The 2006 Somali MICS has as its primary objectives:

- To provide up-to-date information for assessing the situation of children and women in Somalia.
- To furnish data needed for monitoring progress toward goals established by the Millennium Development Goals, the goals of A World Fit For Children (WFFC), and other internationally agreed upon goals, as a basis for future action;
- To contribute to the improvement of data and monitoring systems in Somalia and to strengthen technical expertise in the design, implementation, and analysis of such systems.

<sup>1</sup> Survey covered Somaliland only.

## II. Sample and Survey Methodology

### Sample Design

The sample for the Somali Multiple Indicator Cluster Survey and Pan Arab Project for Family Health (MICS/PAPFAM) was designed to provide estimates on a large number of indicators on the situation of children and women at the national level, for urban and rural areas, and for the three zones: North West Zone, North East Zone and Central South Zone. Zones were identified as the main sampling domains and the sample was selected in four stages. Unlike most countries Somalia does not have well developed survey programmes through a national office of statistics or otherwise and has not had a census for more than 20 years. Thus with no predefined census enumeration areas, it was considered necessary to design a new sample frame using the most up-to-date sources of data available.

The target sample size for the Somali MICS was calculated as 6000 households. Within each zone a predetermined number of clusters were selected. In the North East and North West Zones 60 clusters were selected in each<sup>2</sup>. In the Central South Zone 130 clusters were selected making a total of 250 clusters with 24 households in each cluster. Within each region of each zone districts were selected using probability proportional to size (pps); in total 57 districts, out of 114 districts in Somalia were selected. The number of clusters in each district was also allocated according to estimated population size of district. The proportion of urban to non-urban clusters was determined according to the estimated populations falling within each category within each district. The non-urban population includes both the settled population in rural areas as well as the nomadic population.

Within the selected districts permanent and temporary settlements were randomly selected also using probability proportional to size sampling<sup>3</sup>. In order to ensure that nomads were included in the sample, efforts were made to include temporary settlements near to known water points where nomads would most likely to be found.

The third stage of sampling then involved the selection of the cluster(s) within the settlements. For settlements over the estimated size of 150 households some form of segmentation was necessary. Sketch maps were prepared to divide the settlements into roughly equal sizes of estimated households. Each segment was considered as an enumeration area making it possible to randomly select the required number of clusters.

Once the final clusters had been identified, households were selected randomly using a modified expanded programme for immunisation (EPI) method. The sample was stratified by urban and non-urban and is not self-weighting. For reporting national level results, sample weights are used. A more detailed description of the sample design can be found in Appendix A.

<sup>2</sup> It should be noted that the decision to allocate an equal number of clusters to the two northern zones of the country was to avoid political disputes over population figures. The data was then reweighted to reflect population estimates during data analyses.

<sup>3</sup> Lists of settlements were provided from the UNDP Settlement Survey (draft based on fieldwork 2005) and the most recent WHO Polio vaccination data (2006).

## Questionnaires

Three sets of questionnaires were used in the survey: 1) a household questionnaire which was used to collect information on all de jure household members, the household, and the dwelling; 2) a women's questionnaire administered in each household to all women aged 15-49 years; and 3) an under-5 questionnaire normally administered to mothers of under-5 children; in cases when the mother was not listed in the household roster, a primary caretaker for the child was identified and interviewed. Each questionnaire comprised several modules:

The Household Questionnaire included the following:

- Household listing
- Education
- Water and Sanitation
- Household characteristics
- Child Labour
- Insecticide Treated Nets
- Maternal Mortality
- Salt Iodization

The Questionnaire for Individual Women included the following:

- Child Mortality
- Birth History
- Tetanus Toxoid
- Maternal and Newborn Health
- Marriage/Union
- Contraception
- Female Genital Mutilation
- HIV/AIDS

The Questionnaire for Children Under Five included the following:

- Birth Registration and Early Learning
- Vitamin A
- Breastfeeding
- Care of Illness
- Malaria
- Immunization
- Anthropometry

The questionnaires are based on the MICS model questionnaire<sup>4</sup> with some additional questions included to reflect PAPFAM's interests as well as some country specific questions. From the MICS English version, the questionnaires were translated into Somali and were pre-tested in urban and rural areas in each zone during June and July 2006, efforts were made to ensure that nomadic households were included in the pre-testing. Based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires. A copy of the Somali MICS questionnaires is provided in Appendix F.

<sup>4</sup> The model MICS questionnaire can be found at [www.childinfo.org](http://www.childinfo.org), or in UNICEF, 2006.

In addition to the administration of questionnaires, fieldwork teams tested the salt used for cooking in the households for iodine content, 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.

## Training and Fieldwork

Training for the fieldwork was conducted for 16 days in July 2006. Training included lectures on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in asking questions. Towards the end of the training period, trainees spent 2 days practicing the interviews in towns and villages near the training locations (Hargeisa, Garowe, Merca and Wajid).

The data were collected by 20 teams; each team comprised 10 people which included 8 interviewers, one editor/measurer and a supervisor. Fieldwork began in August 2006 and concluded in September 2006.

In order to ensure that teams would have access to all clusters UNICEF worked through local partners who had established reputations in the different regions and had experience of conducting surveys. The partners did not choose the interviewers until the final clusters had been selected, in this way partners were able to use personnel who resided in or had their origins from the different settlements and towns where clusters would occur.

## Climatic and Security Consideration

The survey was conducted during the recovery period of an acute drought which had affected regions in the Central South Zone in 2005/2006. The data collection also occurred at a time of relative security allowing access to all selected districts. All but one of the selected clusters was accessed by the field teams. In Middle Juba it was not possible to access one cluster due to perceived insecurity just prior to visiting the cluster. Therefore another cluster with the same characteristics in the same district was randomly selected as an alternative.

Data collection was conducted in the dry season (August/September) which gave the advantage of having access to nomadic communities which settle near known water points. The disadvantage of conducting fieldwork at this time however was that many women and children in the populated northern cities of the North West and North East Zones had travelled south to stay with relatives in cooler climates. Therefore fewer women and children than expected were found in these areas.

## Data Processing

Data were entered using the CSPro software. In order to ensure quality control, all questionnaires were double entered and internal consistency checks were performed. Procedures and standard programmes developed under the global MICS project and adapted to the Somali questionnaire were used throughout. Data processing began simultaneously with data collection in September 2006 and was completed in October 2006. Data were analysed using the Statistical Package for Social Sciences (SPSS) software program, Version 14, and the model syntax and tabulation plans developed by UNICEF for this purpose. PAPFAM also assisted in developing the syntax and tabulation for data relating to reproductive health.



### III. Sample Coverage and the Characteristics of Households and Respondents

#### Sample Coverage

Of the 6000 households selected for the sample 5969 were successfully interviewed for a household response rate of 99.5 percent. In the interviewed households, 7277 women (age 15-49) were identified. Of these, 6764 were successfully interviewed, yielding a response rate of 93 percent. In addition, 6373 children under age five were listed in the household questionnaire. Of these, questionnaires were completed for 6305 which corresponds to a response rate of 98.9 percent. Overall response rates of 92.5 percent and 98.4 are calculated for the women's and under-5's interviews respectively (Table HH.1).

Household response rates for the Somali MICS are almost 100 percent due to the method of the household selection. Without a recent census or a household listing performed prior to data collection, household selection had to be performed around the same time that the interview would take place and quite often this occurred on the same day. Many households in Somalia are also temporary structures and therefore if the structure is present it would be unusual for it to be uninhabited. When response rates by zone are compared it appears that the response rate for women in the North West Zone was much lower (82.4 percent) than the national average. Survey teams reported that women, particularly in rural areas were too busy performing their daily chores to be interviewed for long periods.

#### Characteristics of Households

The age and sex distribution of the survey population is provided in Table HH.2. The distribution is also used to produce the population pyramid in Figure HH.1. In the 5,969 households successfully interviewed in the survey, 33,959 household members were listed. Of these, 16,988 were males, and 16,965 were females.

The age structure of the household population is typical of a society with a very young population. The population pyramid has a wide base due to the large number of children less than 15 years of age. Children under 15 years of age comprise 49 percent of the population which is characteristic of a population with high fertility levels. Over half of the population (55 percent) is between the ages of 0 and 17. Forty seven percent of the population is in the age group 15 - 64 and about 3 percent are over 65 years of age.

Collecting accurate information on age presents a particular challenge for Somalia. Very few people have birth certificates or any form of identification and many people do not know the exact year they were born. Therefore some irregularities and data quality issues related to age are to be expected. Table DQ.1 in Appendix D presents ages in single year categories; the table shows high level of digit preference for ages ending in zero. In only 1 percent of cases was age unreported.



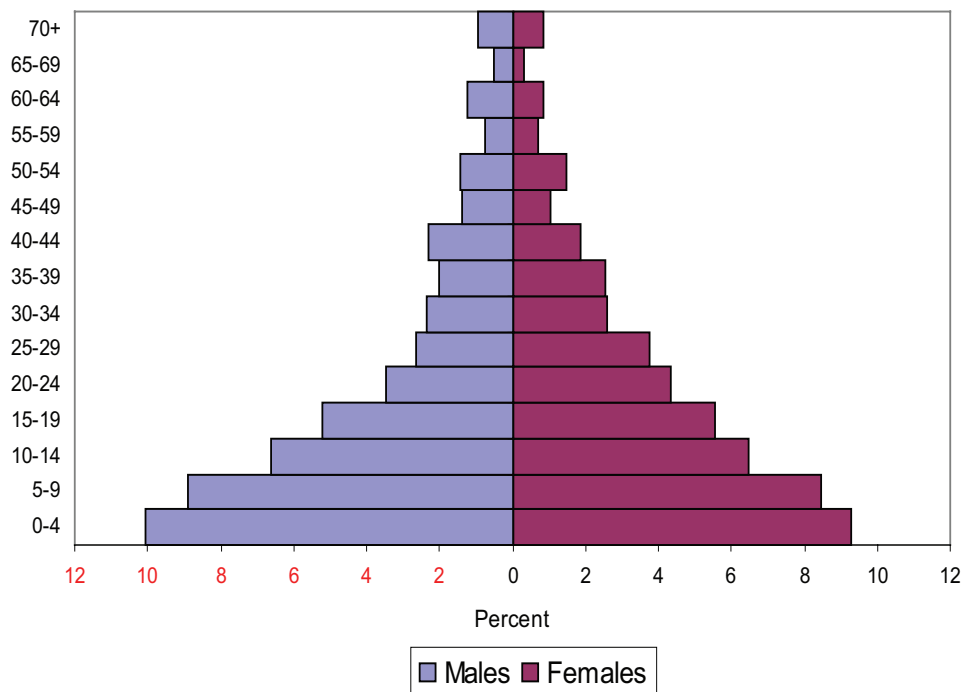
**Figure HH.1: Age and sex distribution of household population, Somalia, 2006**

Table HH.3 provides basic background information on the households. Within households, the sex of the household head, zone, urban/rural status and number of household members are shown in the table. These background characteristics are also used in 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 numbers of households are equal, since sample weights were normalized (see Appendix A). The weighted number of households in the North East Zone is significantly lower than then unweighted observations due to over sampling in this zone.

Households in Somalia are predominantly male headed with just under one in five households being headed by a female. Somali households are typically quite large; the average household size observed in the survey is 5.7 persons. Eight percent of households have 10 or more members. Ninety-one percent of households have at least one child aged less than 18 years of age and 66 percent have at least one child aged less than 5 years. The majority of households (91 percent) have at least one woman of reproductive age.

## Characteristics of Respondents

Tables HH.4 and HH.5 provide information on the background characteristics of female respondents 15-49 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 and children, the tables are also intended to show the numbers of observations in each background category. 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. The table includes information on the distribution of women according to zone, urban-rural areas, age, marital status, motherhood status, education<sup>5</sup> and wealth index quintiles<sup>6</sup>.

The weighted number of women in the North East region is significantly lower than then unweighted observations due to over sampling in this zone. More women reside in rural areas compared to urban areas (60 percent versus 40 percent)

Due to high fertility and rapid population growth, the proportion of women in each 5 year age group declines as age increases with one in four surveyed women between the age of 15 -19. The majority of the surveyed women (65 percent) are married, a quarter of the women have never been married and 9 percent of women reported being widowed or divorced. Of the women who are married or had been formerly married, 91 percent had given birth.

Generally it appears that educational attainment among the surveyed women is very low. The majority of women had never received any kind of education (58 percent). Approximately the same number of women had received koranic education compared to primary education (16 percent versus 15 percent). Just under five percent of women had attended secondary or higher education and just under 4 percent had attended some form of non-standard curriculum.

Table HH.5 presents some background characteristics of children under 5. These include distribution of children by several attributes: sex, zone and area of residence, age in months, mother's or caretaker's education and wealth.

Just over half of the children in the survey were male (52 percent male versus 48 percent female). As with the surveyed women, the weighted number of children in the North East region is significantly lower than then unweighted observations and most of the children reside in rural areas compared to urban areas (64 percent versus 36 percent). The proportion of children in each yearly age group is approximately equal at around 20 percent in each year. Slightly fewer children however were observed in the age group 12-23 months.

The educational attainment of the mothers and caretakers is generally very low. The majority of mothers and caretakers had not attended any form of education (62 percent). Mothers and caretakers are slightly more likely to have attended koranic school than any formal education (18 percent versus 16 percent).

<sup>5</sup> Unless otherwise stated, "education" refers to highest educational level attended by the respondent throughout this report when it is used as a background variable.

<sup>6</sup> Principal components analysis was performed by using information on the ownership of household goods and amenities (assets) to assign weights to each household asset, and obtain wealth scores for each household in the sample (The assets used in these calculations were as follows: main source of drinking water, toilet facility, electricity, bed, radio, TV, mobile telephone, non mobile telephone, refrigerator, VCD/DVD, fan, satellite dish, watch, bicycle, animal cart, car/truck, clock, sewing machine, hectares of land and farm animals ). Each household was then weighted by the number of household members, and the household population was divided into five groups of equal size, from the poorest quintile to the richest quintile, based on the wealth scores of households they were living in. 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, and 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 Rutstein and Johnson, 2004, and Filmer and Pritchett, 2001.



## IV. Child Mortality

One of the overarching goals of the Millennium Development Goals (MDGs) and the World Fit for Children (WFFC) is to reduce infant and under-five mortality. Specifically, the MDGs call for the reduction of under-five mortality by two-thirds between 1990 and 2015. Monitoring progress towards this goal is an important but difficult objective.

The mortality rates presented in this chapter are computed from information gathered from the birth history of the Women's Questionnaire. Women in the age-group 15-49 were asked whether they had ever given birth, and if they had, they were asked to report the number of sons and daughters who live with them, the number who live elsewhere, and the number who have died. In addition, they were asked to provide a detailed birth history of their children in chronological order starting with the first child. Women were asked whether a birth was single or multiple; the sex of the child; the date of birth (month and year); survival status; age of the child on the date of the interview if alive; and if not alive; the age at death of each live birth. Since the primary causes of childhood mortality change as children age, mostly biological factors to environmental factors, childhood mortality rates are expressed by age categories and are customarily defined as follows;

- Neonatal mortality (NN): the probability of dying within the first month of life
- Postneonatal mortality (PNN): the difference between infant and neonatal mortality
- Infant mortality ( ${}_1q_0$ ): the probability of dying between birth and the first birthday
- Child mortality ( ${}_4q_0$ ): the probability of dying between exact ages one and five
- Under-five mortality ( ${}_5q_0$ ): the probability of dying between birth and the fifth birthday

The rates of childhood mortality are expressed as deaths per 1,000 live births, except in the case of child mortality, which is expressed as deaths per 1,000 children surviving to age one.

### Levels and Trends in Infant and Child Mortality

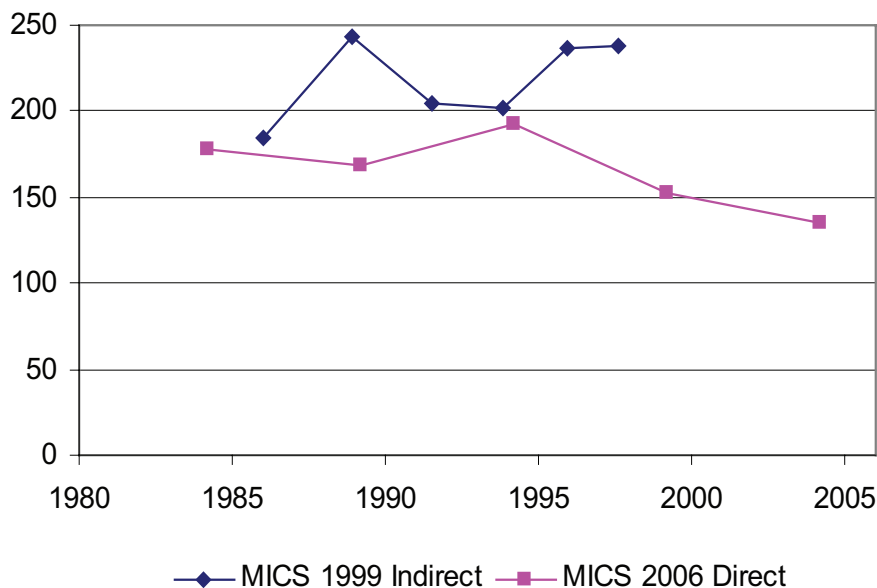
Table CM.1 presents neonatal, post neonatal, infant, child and under-five mortality rates for the three recent five year periods before the survey. Neonatal mortality in the most recent period is 41 per 1000 live births. This rate is similar to post neonatal deaths (45 per 1000 live births) during the same period; that is, the risk of dying for any Somali child who survived the first month of life is similar as in the remaining 11 months of the first year of life. Thus just under 50 percent of infant deaths in Somalia occur during the first month of life.

The infant mortality rate in the five years preceding the survey is 86 per 1,000 live births and under-five mortality is 135 deaths per 1,000 live births for the same period. This means that one in every 12 Somali children dies before reaching age one, while one in every 7 does not survive to the fifth birthday.

Mortality trends can be examined in two ways: by comparing mortality rates for five year periods preceding a single survey and by comparing mortality estimates obtained from various surveys. However, these comparisons should be interpreted with caution because quality of data, time references and sample coverage varies. In particular, sampling errors associated with mortality estimates are large and should be taken into account when examining trends between surveys.

Although not strictly comparable, the data from the 1999 MICS, using indirect measures of mortality<sup>7</sup>, reported infant mortality to be 134 per 1,000 live births and under five mortality as 224 per 1,000 live births in the same period. Figure CM.1 compares the trends in under five mortality rates from the two surveys. The most recent under five mortality estimate is about 40 percent lower than the estimate from 1999. However as can be seen from the graph, trend data from the 2006 survey for the same period show much lower mortality. Therefore, before it can be concluded that the most recent results indicate a significant reduction in mortality during the last 5 years, further qualification for any apparent decline, the extent of the decline as well as the determinants should be taken up in a more detailed and separate analysis.

**Figure CM.1: Trend in under-5 mortality rates, Somalia, 2006**



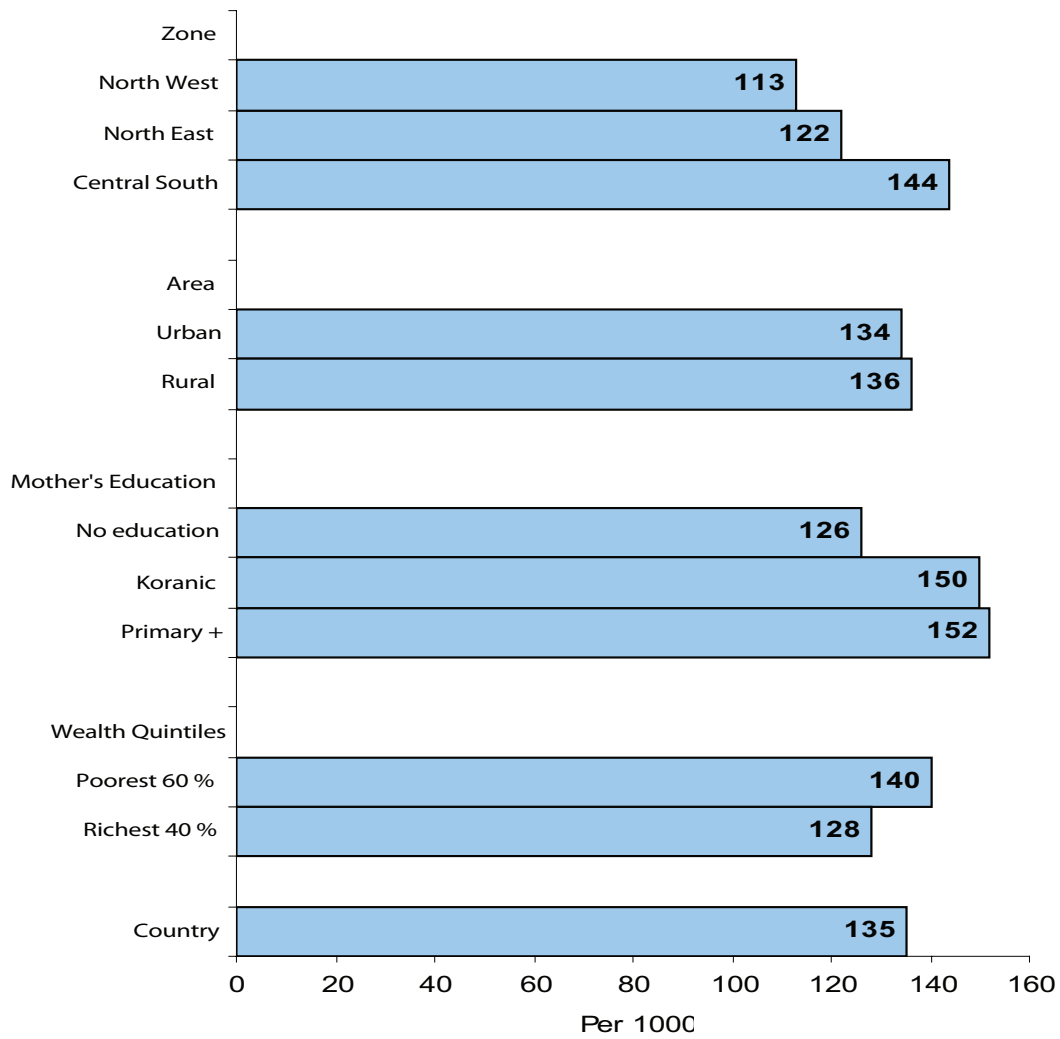
## Differentials in Childhood Mortality

Table CM.2 provides estimates of child mortality by sex, zone, urban rural residence, mother's education and wealth for the five years preceding the survey. As to be expected male children experience higher mortality than female children. Under-5 mortality rates are highest in the Central South Zone; in the North West Zones under 5 mortality is estimated at 113 per 1,000, rising to 122 per 1,000 in the North East and to 144 per 1,000 live births in the Central South Zone (figure CM.2). There appears to be very little difference with the risk of mortality between urban and rural residence.

With respect to mother's education and mortality the relationship is not consistent and the data shows an unexpected pattern suggesting that children born to mothers with no education, have a lower mortality risk than children born to mothers with any level of formal education. From table CM.2 it is apparent that infant and child survival is associated with wealth; infant mortality is consistently lower among children born to mothers in the richest 40 percent of households than those born to mothers in the poorest households.

<sup>7</sup> The 1999 MICS did not include a birth history so mortality rates are based on an indirect estimation technique known as the Brass method.

**Figure CM.2 Under-5 mortality rates for the 5 year period preceding the survey by background characteristics, Somalia, 2006**





## V. Nutrition

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### 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 children deaths worldwide. Undernourished children are more likely to die from common childhood ailments, and 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. The World Fit for Children goal is to reduce the prevalence of malnutrition among children under five years of age by at least one-third (between 2000 and 2010), with special attention to children under 2 years of age. A reduction in the prevalence of malnutrition will 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 the WHO/CDC/NCHS reference, which was recommended for use by UNICEF and the World Health Organization at the time the survey was implemented. 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 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 MICS, weights and heights of all children under 5 years of age were measured using anthropometric equipment recommended by UNICEF (UNICEF, 2006). Findings in this section are based on the results of these measurements. Children who were not weighed and measured (approximately 7 percent of children) and those whose measurements are outside a plausible range are excluded from the analyses. In addition, a small number of children whose birth dates are not known are excluded.

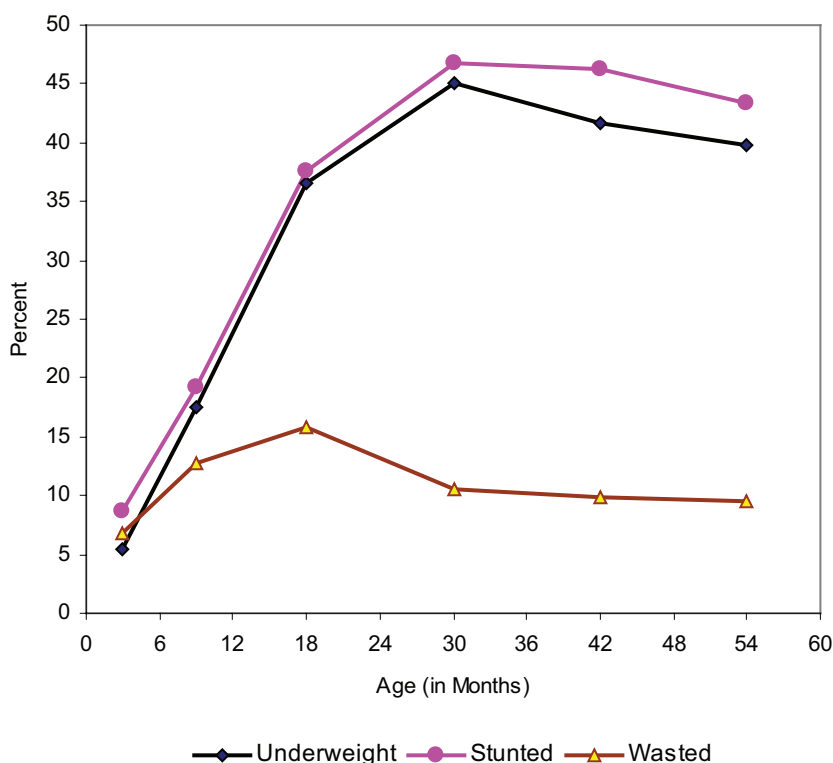


Table NU.1 shows percentages of children classified into each of these categories, based on the anthropometric measurements that were taken during fieldwork. Additionally, the table includes the percentage of children who are overweight, which takes into account those children whose weight for height is above 2 standard deviations from the median of the reference population. During the data analyses stage the Somali nutrition data underwent some additional data quality checks using the Nutrisurvey software.<sup>8</sup> The data quality checks highlighted certain problems such as a higher than normal level of rounding on height. While at the national level findings appear quite consistent, at the level of zones the results appear to show some unexpected patterns that require more understanding and analyses. Therefore table NU.1 is presented without the zonal estimates. At the time of publication UNICEF has made plans to conduct substantial further analyses on the MICS nutrition data as well as on other sources of nutrition data collected in Somalia.

Thirty-six percent of Somali children under the age of five are moderately underweight and 12 percent are classified as severely underweight (Table NU.1). Thirty eight percent of children are stunted or too short for their age and 11 percent are wasted or too thin for their height.

Children living in rural areas are almost twice as likely to be moderately underweight than those living in urban areas (23 percent versus 43 percent). Those children whose mothers have primary or secondary education are less likely to be underweight and stunted compared to children of mothers with no education or koranic education. The age pattern shows that a higher percentage of children aged 12-23 months are wasted in comparison to children who are younger and older. This pattern is expected and is related to the age at which many children cease to be breastfed and are exposed to contamination in water, food, and environment.

**Figure NU.1: Percentage of children under-5 who are undernourished, Somalia, 2006**



<sup>8</sup> For more information on nutrisurvey software go to <http://www.nutrisurvey.de/> (accessed on 20.07.07)

## Breastfeeding

Breastfeeding for 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. The World Fit for Children goal states that children should be exclusively breastfed for 6 months and continue to be breastfed with safe, appropriate and adequate complementary feeding for up to 2 years of age and beyond.

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

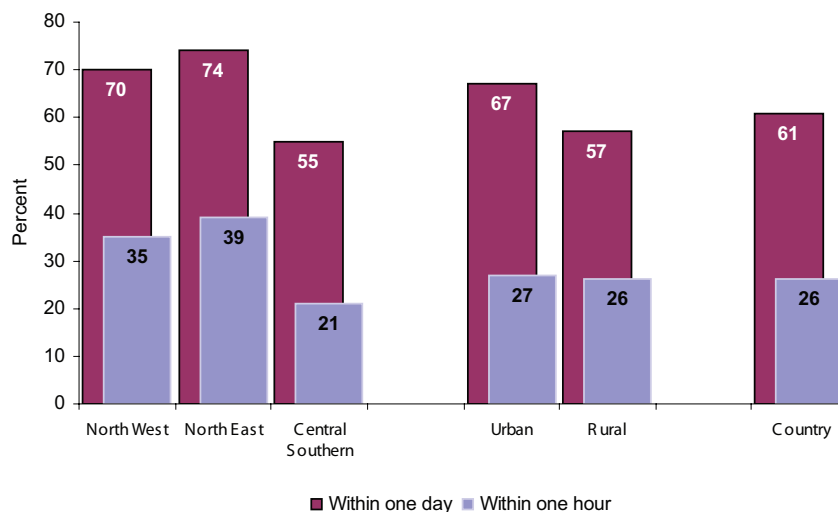
It is also recommended that breastfeeding be initiated within one hour of birth.

The indicators of recommended child feeding practices are as follows:

- Exclusive breastfeeding rate (< 6 months & < 4 months)
- Timely complementary feeding rate (6-9 months)
- Continued breastfeeding rate (12-15 & 20-23 months)
- Timely initiation of breastfeeding (within 1 hour of birth)
- Frequency of complementary feeding (6-11 months)
- Adequately fed infants (0-11 months)

Table NU.2 provides the proportion of women who started breastfeeding their infants within one hour of birth, and women who started breastfeeding within one day of birth (which includes those who started within one hour). Just over a quarter (26 percent) of women who had given birth in the 2 years preceding the survey started to breastfeed within one hour of birth. As presented in figure NU.2 this ranges from 39 percent in the North East Zone to 21 percent in the Central South Zone. Sixty-one percent of Somali women begin breastfeeding within one day of the birth. Women in urban areas are more likely to begin breastfeeding within one day of the birth compared to their rural counterparts. There is a positive relationship between education and breastfeeding; 71 percent of women with primary education began breastfeeding within one day of birth compared to 59 percent of women with no education.

**Figure NU.2 Percentage of mothers who started breastfeeding within one hour and within one day of birth, Somalia, 2006**

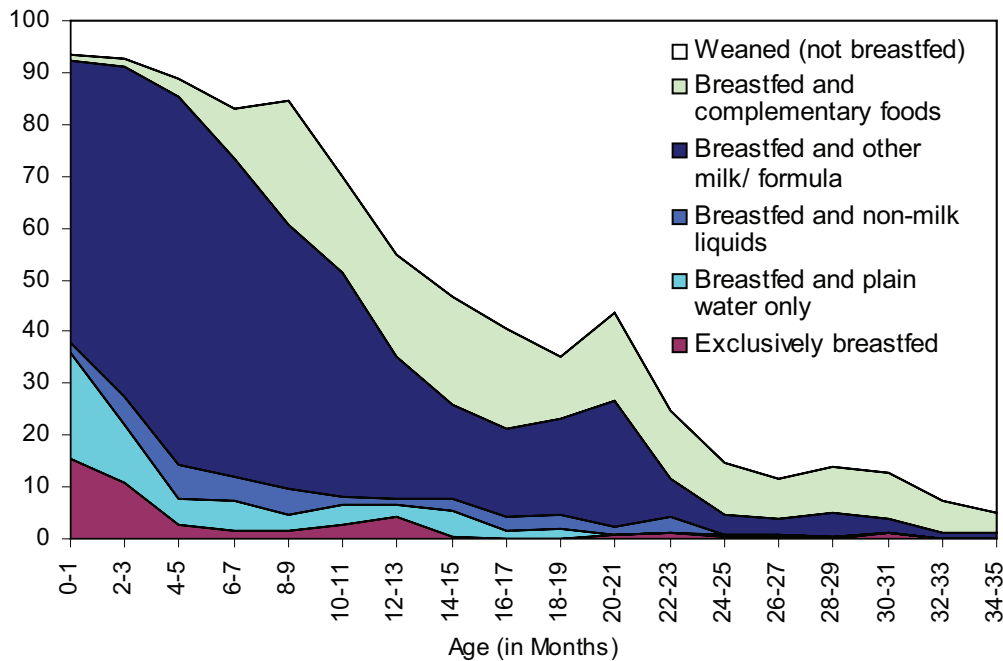


In Table NU.3, breastfeeding status is based on the reports of mothers/caretakers of children's consumption of food and fluids in the 24 hours prior to the interview. Exclusively breastfed refers to infants who received only breast milk and vitamins, mineral supplements, or medicine. The table shows exclusive breastfeeding of infants during the first six months of life (separately for 0-3 months and 0-5 months), as well as complementary feeding of children 6-9 months and continued breastfeeding of children at 12-15 and 20-23 months of age.

Approximately 9 percent of children aged less than six months are exclusively breastfed, a level considerably lower than recommended. At age 6-9 months, 15 percent of children are receiving breast milk and solid or semi-solid foods. By age 12-15 months, 50 percent of children are still being breastfed and by age 20-23 months the percentage falls to 35 percent. Girls were more likely to be exclusively breastfed than boys (14 percent versus 11 percent) and also have a higher rate for timely complementary feeding (11 percent versus 8 percent). Among children age 20-23 months boys were likely to be breastfed for longer than girls.

Figure NU.3 shows the detailed pattern of breastfeeding by the child's age in months. Even at the earliest ages, the majority of children are receiving liquids or foods other than breast milk. By the end of the sixth month, the percentage of children exclusively breastfed is well below 10 percent. Only about 15 percent of children are receiving breast milk after 2 years.

**Figure NU.3 Infant feeding patterns by age: Percent distribution of children aged under 3 years by feeding pattern by age group, Somalia, 2006**



The adequacy of infant feeding in children under 12 months is provided in Table NU.4. 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. Infants aged 6-8 months are considered to be adequately fed if they are receiving breastmilk and complementary food at least two times per day, while infants aged 9-11 months are considered to be adequately fed if they are receiving breastmilk and eating complementary food at least three times a day.

Just 9 percent of infants aged less than six months are exclusively breastfed; this figure ranges from 12 percent in the Central South Zone to 5 percent in the North West Zone and just 1 percent

in the North East Zone. Infants from the poorest households are more likely to be exclusively breastfed compared to infants from wealthier households.

For infants age between 6-8 months, 10 percent received breast milk and complimentary food at least twice in the prior 24 hours to the survey. Fifteen percent of infants age 9 – 11 months were receiving breast milk and complimentary food at the 3 minimum number of recommended times per day. As a result of these feeding patterns, only 12 percent of children aged 6-11 months are being adequately fed. Adequate feeding among all infants (aged 0-11) drops to 11 percent with little variation among sex, urban rural residence and mother's education.

## 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 is to achieve sustainable elimination of iodine deficiency by 2005. The indicator is the percentage of households consuming adequately iodized salt ( $\geq 15$  parts per million).

In about 91 percent of households, salt used for cooking was tested for iodine content by using salt test kits to identify the presence of potassium iodate. Table NU.5 shows that in 7 percent of households there was no salt available. In just 1.2 percent of households, salt was found to contain 15 parts per million (ppm) or more of iodine. Use of iodized salt is extremely low across all zones; with the North West having the lowest rate at just 0.7 percent.

## Vitamin A Supplements

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 programmes, 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, it is recommended 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 programs 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 MICS, 24 percent of children aged 6-59 months received a high dose Vitamin A supplement (Table NU.6). Approximately 7 percent did not receive the supplement in the last 6 months but did receive one prior to that time and 5 percent of children received a Vitamin A supplement at some time in the past but their mother/caretaker was unable to specify when. Vitamin A supplementation coverage is lowest in the North East Zone.

The age pattern of Vitamin A supplementation shows that supplementation in the last six months is around 18 percent among children aged 6-11 months, 23 percent among children 12-23 months and then above 25 percent in the older age groups.

The mother's level of education is also related to the likelihood of Vitamin A supplementation. The percentage receiving a supplement in the last six months increases from 23 percent among children whose mothers have no education to 30 percent of those whose mothers have primary education and 36 percent among children of mothers with secondary or higher education.

Of mothers who gave birth in the previous two years before the MICS, only about 9 percent received a Vitamin A supplement within eight weeks of the birth (Table NU.7). This percentage is highest in the North West at 13 percent and lowest in the North East at 6 percent. Vitamin A coverage is higher in urban areas compared to rural areas (15 percent versus 5 percent respectively) and also increases with the education of the mother. Vitamin A coverage of mothers among the wealth quintiles increases from 5 percent in the poorest and second poorest quintiles to 19 percent in the richest wealth quintile.

## 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. 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 for most developing countries because the majority of newborns are not delivered in facilities, and those who are represent only a selected sample of all births. As a result, 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<sup>9</sup>.

Overall, only 5 percent of Somali children are weighed at birth. This is not surprising due to the large number of births that do not take place in a health facility. Among children born in the two years preceding the survey with a reported weight, five percent weighed less than 2500 grams. However a large proportion of reported weights were exactly 2500 grams and overall 11 percent of births were reported at weighing 2500 grams or less. A table showing these results along with background characteristics is not present in this report due to the small number of cases in each category with a reported birth weight.

In the absence of reported birth weight a mother's subjective assessment of the size of the baby may be useful. Seventeen percent of births were reported to be very small and 10 percent were reported as smaller than average (Table NU.8). Births to mothers with no education are more likely to be reported as very small compared to mother's who have received formal education. Almost a third of births (33 percent) in the Central South Zone are reported to be very small or smaller than average.

9 For a detailed description of the methodology, see Boerma, Weinstein, Rutstein and Sommerfelt, 1996.



## VI. Child Health

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### Immunization

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. 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.

Overall, only 8 percent of mothers or caretakers were able to show the interviewers health cards for their children (CH.2). 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. The percentage of children aged 12 to 23 months who received each of the vaccinations is shown in CH.1. The denominator for the table comprises of children aged 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 bottom panel, only those who were vaccinated before their first birthday 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.

Approximately 26 percent of children aged 12-23 months received a BCG vaccination by the age of 12 months and the first dose of DPT was given to 20 percent of children. The percentage declines for subsequent doses of DPT to 17 percent for the second dose, and 12 percent for the third dose (Figure CH.1). Similarly, 52 percent of children had received Polio 1 by age 12 months and this declines to 35 percent by the third dose. It is not surprising to see that polio coverage is higher than DPT coverage due to the number of polio vaccination campaigns that have taken place since polio reemerged in July 2005.

The coverage for measles vaccine by 12 months is 19 percent; 29 percent of children under 2 years of age had received the measles vaccine but only 19 percent has received it by their first birthday. As a result, the percentage of children who had all eight recommended vaccinations by their first birthday is extremely low at only 5 percent.



**Figure CH.1: Percentage of children 12-23 months who received immunisations by age 12 months, Somalia 2006**

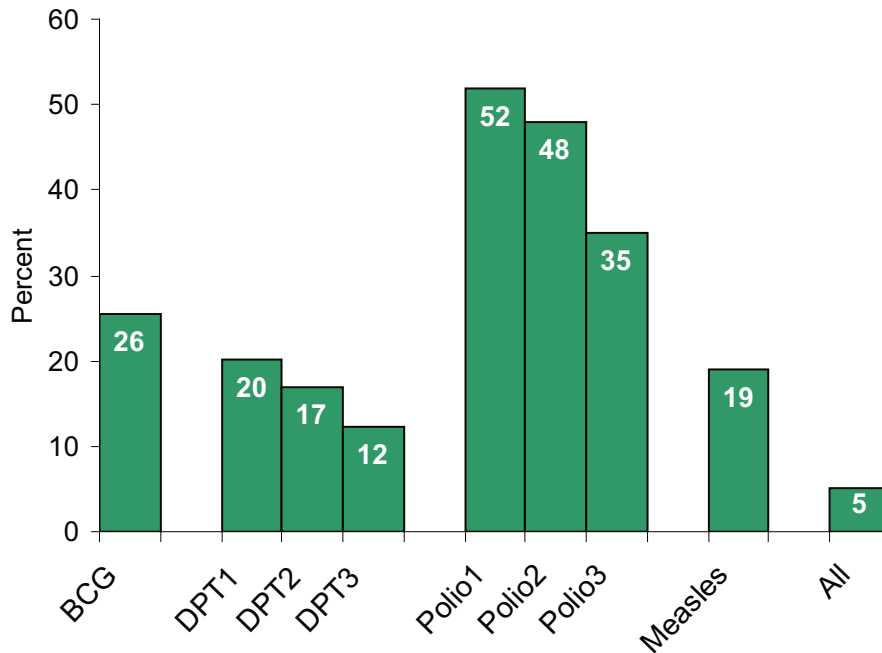


Table CH.2 shows the vaccination coverage rates among children 12-23 months by background characteristics. The figures indicate children receiving the vaccinations at any time up to the date of the survey, and are based on information from both the vaccination cards and mothers'/ caretakers' reports. For most vaccinations the coverage does not vary significantly between boys and girls other than when it comes to receiving all vaccinations where boys are at an advantage (14 percent versus 9 percent). For each vaccination children in urban areas are more likely to be vaccinated compared to their rural counterparts; 40 percent of urban children have received the measles vaccination compared to 23 percent of children living in rural areas. Vaccination coverage also increases with education of the mother; 45 percent of children born to mothers with primary education have received the BCG vaccination compared to 24 percent of children born to mothers with no education.

## Tetanus Toxoid

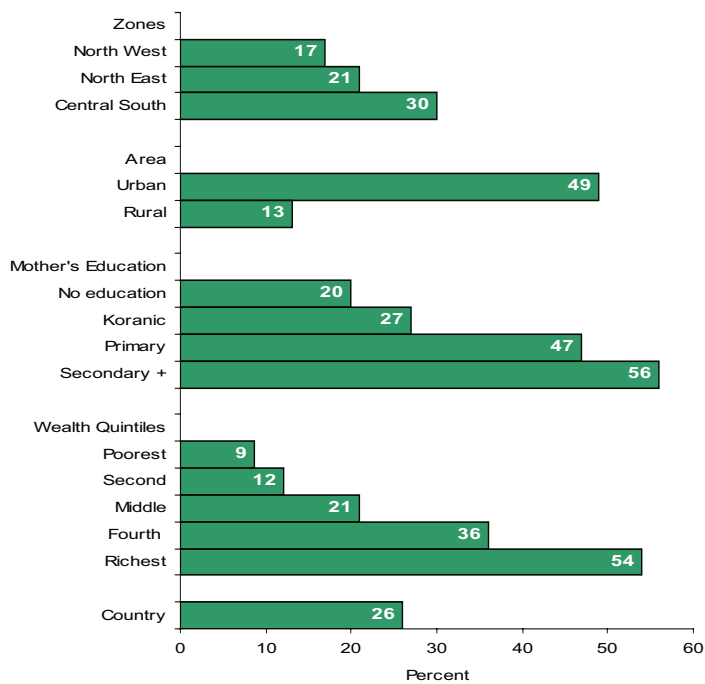
One of the MDGs is to reduce by three quarters the maternal mortality ratio, with one strategy to eliminate maternal tetanus. In addition, another goal is to reduce the incidence of neonatal tetanus to less than 1 case of neonatal tetanus per 1000 live births in every district. A World Fit for Children 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.3 shows the protection status from tetanus of women who have had a live birth within the last 12 months and the protection of women against neonatal tetanus by major background characteristics. Just 18 percent of women received two doses of the tetanus toxoid vaccination during their last pregnancy. A further 6 percent of women received two doses within the three years prior to the birth. Overall 26 percent of women are protected against tetanus. As shown in figure CH.2 women in urban areas are more than three times as likely to be protected against tetanus compared to women living in rural areas (49 percent versus 13 percent). More striking however are the differences among the wealth quintiles; women from the wealthiest households are six times as likely to be protected against neonatal tetanus compared to women from the poorest households (9 percent versus 54 percent).

**Figure CH.2 Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus, Somalia, 2006**



## 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 deaths 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:

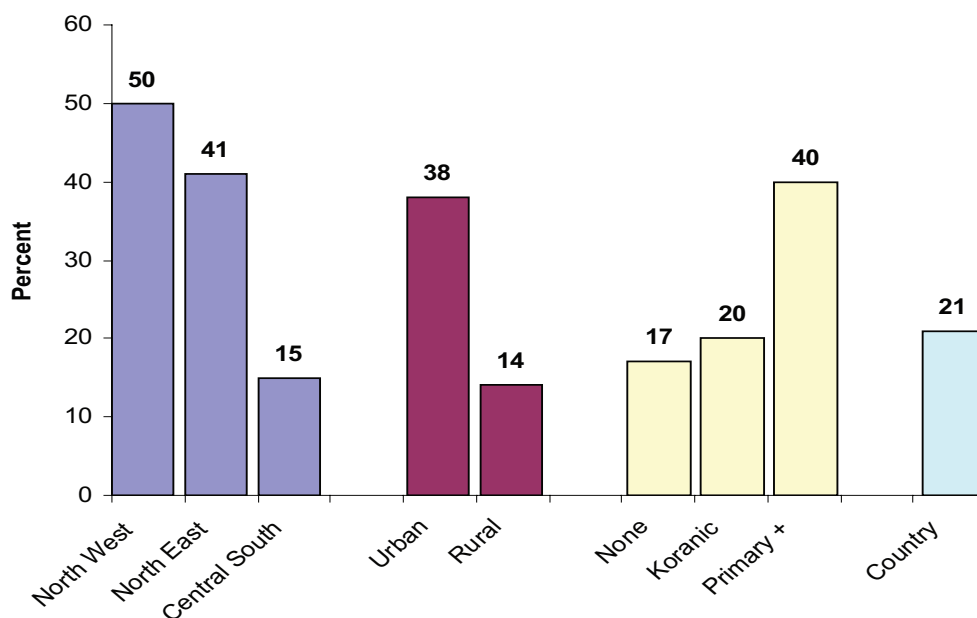
- Prevalence of diarrhoea
- Oral rehydration therapy (ORT)
- Home management of diarrhoea
- (ORT or increased fluids) AND continued feeding

In the MICS 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, 21 percent of under five children had diarrhoea in the two weeks preceding the survey (Table CH.4). Diarrhoea prevalence was much higher in the Central South Zone at 25 percent compared to 13 percent in the North West and 11 percent in the North East Zone. The peak of diarrhoea prevalence occurs among children in their first and second year of life.

Table CH.4 also shows the percentage of children receiving various types of recommended liquids during the episode of diarrhoea. Since mothers were able to name more than one type of liquid, the percentages do not necessarily add to 100. Seventy-nine percent of children who had diarrhoea in the two weeks preceding the survey did not receive any treatment. About 9 percent received fluids from ORS packets; 7 percent received pre-packaged ORS fluids, and 9 percent received recommended homemade fluids. Children of mothers with no education are less likely to receive oral rehydration treatment than other children. Approximately just one-fifth (21 percent) of children with diarrhoea received one or more of the recommended home treatments (i.e., were treated with ORS or RHF).

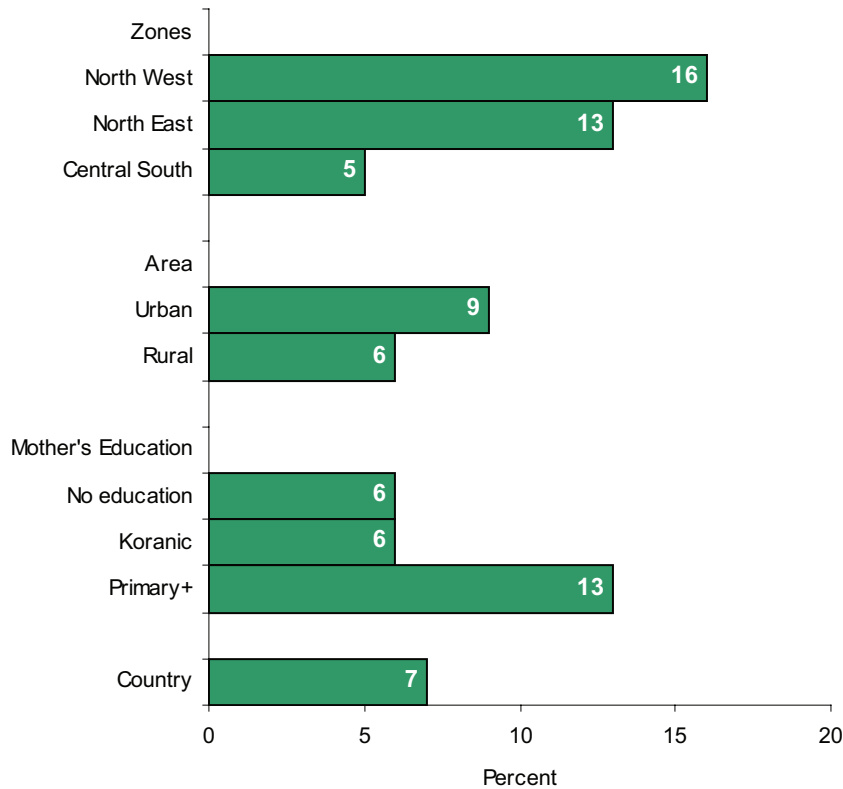
**Figure CH.3 Percentage of children aged 0-59 months with diarrhoea who received oral rehydration treatment, Somalia, 2006**



Only 3 percent of under five children with diarrhoea in the last two weeks drank more than usual while 94 percent drank the same or less (Table CH.5). Twenty-eight percent ate somewhat less, same or more (continued feeding), but 71 percent ate much less or ate almost nothing. Combining the information in Table CH.5 with those in Table CH.4 on oral rehydration therapy, it is observed that 7 percent of children either received ORT or fluid intake was increased, and at the same time, feeding was continued, as is the recommendation.

There are significant differences in the home management of diarrhoea by background characteristics. In the Central South, only 5 percent of children received ORT or increased fluids AND continued feeding, while the figure is 13 percent in the North East and 16 percent North West.

**Figure CH.4 Percentage of children aged 0-59 with diarrhoea who received ORT or increased fluids, AND continued feeding, Somalia, 2006**



## 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. The indicators are:

- Prevalence of suspected pneumonia
- Care seeking for suspected pneumonia
- Antibiotic treatment for suspected pneumonia
- Knowledge of the danger signs of pneumonia

Table CH.6 presents the prevalence of suspected pneumonia and, if care was sought outside the home, the site of care. Fifteen percent of children aged 0-59 months were reported to have had symptoms of pneumonia during the two weeks preceding the survey. Of these children, only 13 percent were taken to an appropriate provider although this varied significantly with background characteristics. Male children were more likely to be taken to an appropriate provider than female children (14 percent versus 11 percent). The most common provider reported across all zones was a pharmacy which incidentally is not considered an appropriate provider.

Table CH.7 presents the use of antibiotics for the treatment of suspected pneumonia in under-5s by sex, age, region, residence, age, and socioeconomic factors. In Somalia, 32 percent of under-5 children with suspected pneumonia had received an antibiotic during the two weeks prior to the

survey. There are noticeable differences between male and female children; 35 percent of male children received antibiotics compared to 29 of their female counterparts. The percentage was higher in urban areas at 49 percent, while the percentage declines to only 24 percent for children living in urban households. The table also shows that antibiotic treatment of suspected pneumonia is very low among the poorest households. The use of antibiotics rises with the education of the mother.

Issues related to knowledge of danger signs of pneumonia are presented in Table CH.7A. Obviously, mothers' knowledge of the danger signs is an important determinant of care-seeking behaviour. Overall just 15 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 diarrhoea followed closely by fever. Twenty eight percent of mothers identified fast breathing and 31 percent of mothers identified difficult breathing as symptoms which would cause them to immediately take their children to a health care provider. Interestingly mother's knowledge of the danger signs of pneumonia did not increase with education and women in rural areas reported better knowledge of the danger signs than woman in urban areas.

## 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, SO<sub>2</sub>, 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.

Overall, as is shown in Table CH.9, almost all households in Somalia are using solid fuels for cooking (99.6 percent). The table clearly shows that percentage is high due to the large levels of wood (63 percent) and charcoal (33 percent) use for cooking purposes.

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. The type of stove used with a solid fuel is depicted in Table CH.10. Alarming 91 percent of households that use solid fuel cook on an open stove or fire with no chimney or hood.

## Malaria

Malaria is a leading cause of death of children under age five in Somalia. 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.

The MICS questionnaire incorporates questions on the use of bednets, both at household level and among children under five years of age, as well as anti-malarial treatment, and intermittent preventive therapy for malaria. As presented in Table CH. 11, in Somalia households with at least one insecticide treated net is 22 percent. Just over half of the mosquito nets (12 percent) used at household level were treated with insecticide and 10.5 percent were long lasting nets.

Results indicate that 18 percent of children under the age of five slept under a mosquito net the night prior to the survey and 9 percent slept under a long lasting insecticide treated net (Table CH.12). ITN use among children under five years of age declines steadily with age but there were no significant gender disparities. In general children in the Central South Zone are less likely to sleep under mosquito nets than their northern counterparts. However, in terms of the type of net children in the Central South Zone are comparatively better off with 10 percent sleeping under a long lasting insecticide treated net compared to just over 7 percent in both the North West and North East Zones.

Questions on the prevalence and treatment of fever were asked for all children under age five. In Somalia 22 percent of children under five were ill with fever in the two weeks prior to the MICS (Table CH.13). Fever prevalence was considerably higher in the Central South Zone (27 percent) compared with Puntland (15 percent) and Somaliland (9 percent). Prevalence was also higher in rural areas compared to urban areas. Fever prevalence was not as high among children whose mothers had primary or secondary education than among children of less educated mothers. Wide differences in fever prevalence were also found between the rich and poor; the prevalence ranging from 27 to 13 percent between the poorest and richest groups.

Mothers were asked to report all of the medicines given to a child to treat the fever, including medicine given at home and medicines given or prescribed at a health facility. "Appropriate" anti-malarial drugs include Chloroquine, SP/Fansidar, Artemisine combination drugs, Quinine and Amodiaquine. Overall, just 8 percent of children with fever in the last two weeks were treated with an "appropriate" anti-malarial drug and only 3 percent received the anti-malarial drugs within 24 hours of onset of symptoms. In Somalia, 5 percent of children with fever were given chloroquine, less than 1 percent received artemisinin combination therapy and less than 1 per cent received other appropriate anti-malarials. Nine percent of children were given other types of medicines that are not anti-malarials, including anti-pyretics such as paracetamol, aspirin or ibuprofen. Urban children and children from the richest households were more likely than rural children to be treated appropriately as were the children of mothers with primary or secondary education. A small difference was noted between boys and girls receiving appropriate anti-malarial drugs.

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. 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 Somali 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 who gave birth in the two years preceding the survey is presented in Table CH.14. Just six percent of women report taking medicine during pregnancy to prevent malaria, the most common type of medicine taken was chloroquine.

As in the case for children age under five, pregnant women are also a priority target group for use of insecticide treated nets. Table CH.14A shows the percentage of women who had given birth in the two years preceding the survey who had regularly slept under a mosquito net. Overall 17 percent of women reported that they had regularly slept under some type of bednet while they were pregnant. This ranged from 30 percent in the North East Zone to 23 percent in the North West Zone to just 13 percent in the Central South Zone. Women from wealthier households are more likely to sleep under a bednet while pregnant than women from poorer households.

In the Somalia MICS mothers and primary caretakers were also asked if they could recognise the signs and symptoms of malaria. As shown in Table CH.15 two thirds of respondents (66 percent) identified fever and sweats as a typical malaria symptom. The second most commonly reported symptom was vomiting and nausea (47 percent) and over a third of mother's and caretakers identified headaches, chills/shivers and bitterness in the mouth as being symptoms. .

### **Attitudes towards polio vaccination**

Negotiating protection against poliomyelitis is an ongoing issue for Somalia despite the repeated and widespread vaccination campaigns that occur on an annual basis. The Somali MICS included some questions in order to assess the proportion of mothers/caretakers who refuse polio vaccinations. A question was also included to determine who is the main decision maker when it comes to vaccinating children. The results are presented in Table CH.16.

Encouragingly 82 percent of mothers/caretakers have heard of polio. When these mothers/caretakers were asked if they agree with having their children receive the repeat vaccinations 86 percent reported they were in favour. Support of polio vaccinations was lowest in the North East Zone at 60 percent while in the Central South Zone support was at 91 percent and 83 percent in North West Zone. However despite the lack of complete support, 83 percent of mothers/caretakers reported that they had never refused to vaccinate their child against Polio, 6 percent reported that they had refused on one occasion and 9 percent reported that they had refused several times. Refusing vaccinations also varied by zone, mothers/caretakers in the North East are much less likely to allow their child to receive a polio vaccination (35 percent) compared to the North West Zone (20 percent) and the Central South Zone (13 percent).

In order to design awareness raising programmes for polio vaccination campaigns it is important to target the key decision makers in the household. Just under half of the mothers/caretakers interviewed (46 percent) reported that it is only the father who makes decisions about whether to vaccinate the children or not. Twenty-four percent reported that it is only the mother who makes the decisions while 21 percent reported that both the father and mother make decisions regarding child vaccinations.

## VII. Environment

### Water and Sanitation

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 are 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
- Sanitary disposal of child's faeces

The distribution of the population by source of drinking water is shown in Table EN.1 and Figure EN.1. The population using improved sources of drinking water are those using any of the following types of supply: piped water (into dwelling, yard or plot), public tap/standpipe, tubewell/borehole, protected well, protected spring, 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.

### Water

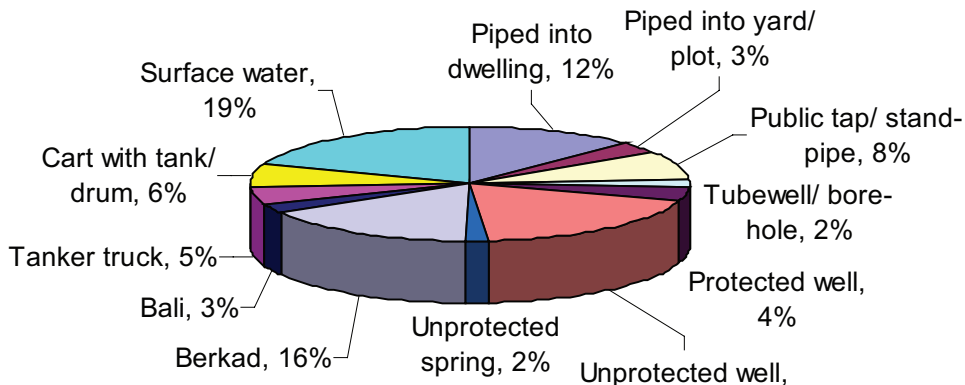
Overall, 29 percent of the population is using an improved source of drinking water – 58 percent in urban areas. The situation in the Central South and North East is considerably worse than in the North West Zone; only 25 percent of the population in the Central South and North East Zones get their drinking water from an improved source.

Those living in urban areas are five times more likely to have access to an improved source of drinking water compared to those living in rural areas. People living in households where the household head has attended secondary education are almost three times as likely to have access to an improved source of drinking water compared to households where the head has not received any education (62 percent versus 24 percent). As to be expected wealth is positively linked to improved water sources.



The source of drinking water for the population varies by zone (Table EN.1). In the North West 17 percent of the population uses drinking water that is piped into their dwelling or into their yard or plot. In the North East and the Central South Zone, 9 and 11 percent respectively use piped water. In the North West and North East the most important source of drinking water is a berkad; a berkad however is not considered an improved source. In the Central South Zone, the most common source of drinking water is surface water (28 percent) followed by unprotected wells (22 percent); both of these sources are deemed unsafe.

**Figure EN.1 Percentage distribution of household members by source of drinking water, Somalia, 2006**



Use of in-house water treatment is presented in Table EN.2. Households were asked if and how they treated water at home to make it safer to drink – boiling, adding bleach or chlorine, using a water filter, and using solar disinfection were considered as proper treatment of drinking water. The table shows the percentages of household members using appropriate water treatment methods, separately for all households, for households using improved and unimproved drinking water sources.

Among the population using an improved drinking water source, 37 percent were also using an appropriate water treatment method. This compares to just 16 percent of the population who rely on an unimproved drinking water source. The most common method of water treatment appears to be adding bleach or chlorine to the water, 13 percent of the household population reported using this method. Households in urban areas were significantly more likely to use a water treatment method, 45 percent reported using an appropriate method compared to just 9 percent in rural areas. The higher the educational level of the household head the more likely the household is to use an appropriate method to treat the drinking water.

The Somali MICS also asked household respondents whether they use a method to prevent contamination of water while it was being stored or when they were handling it. Thirty six percent of the household population reported that they did not do anything to prevent contamination of drinking water (Table EN2B). Forty one percent of households reported that they store water in a clean container with a cover.

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

Table EN.3 shows that for 15 percent of households, the drinking water source is on the premises. For just under a third of all households, it takes more than one hour to get to the water source and bring water. Excluding those households with water on the premises, the average time to and from the source of drinking water is 70 minutes. As to be expected there is a considerable

time difference for collecting water between urban and rural households (38 minutes versus 82 minutes respectively). The time spent in the Central South Zone for collecting water is higher than the North West and North East (82 minutes versus 57 and 58 minutes respectively). As to be expected the time spent in collecting water decreases with wealth, however those living in the richest households still spend on average, 47 minutes to go and collect water.

Household respondents were also asked to state how reliable their main source of water supply is. Just over a third of households almost never have problems with their water supply (34 percent). There is a positive relationship between education of household head and reliability of water supply; household heads with secondary education reported almost never having problems compared to 30 percent of households where the head has no education. Over a fifth of respondents in the poorest households (21 percent) reported that they had daily problems with their water supply and 36 percent of households in rural areas reported that their water supply was seasonal.

Table EN.4 shows that for the majority of households, when the source of drinking water is not on the premises an adult female is usually the person who collects the water (66 percent). Adult men collect water in 26 percent of cases, while for the rest of the households, female or male children under age 15 collect water.

## Sanitation

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. Improved sanitation facilities include: flush toilets connected to sewage systems, septic tanks or pit latrines, ventilated improved pit latrines and pit latrines with slabs.

In Somalia just over 37 percent of the population is living in households using improved sanitary facilities (Table EN.5). This percentage ranges from 78 percent in urban areas and 13 percent in rural areas. Residents of the Central South Zone are less likely than those in the North West and North East Zone to use improved facilities. More than half of the population in the Central South (58 percent) uses rivers, bush, fields, or has no facilities. There are also striking differences between the wealth quintiles, in the poorest and second poorest households less than 1 percent of the population are using sanitary facilities compared to 74 percent in the fourth richest quintile and 86 percent in the richest.

Safe disposal of a child's faeces is determined by whether the last stool by the child was disposed of by use of a toilet or rinsed into toilet or latrine. Disposal of faeces of children 0-2 years of age is presented in Table EN.6. For thirty five percent of children aged 0-2, stools are disposed of in a safe way. This varies considerable with zone ranging from 50 percent in the North West to 37 percent in the North East to 30 percent in the Central South. In urban areas stools are considerably more likely to be disposed of in a safe way compared to rural areas (75 percent versus 12 percent).

An overview of the percentage of households with improved sources of drinking water and sanitary means of excreta disposal is presented in Table EN.7. One fifth of the Somali household population use both improved sources of drinking water and sanitary means of excreta disposal. There is a stark contrast between urban and rural populations; 47 percent of urban households use both improved sources of drinking water and sanitary means of excreta disposal compared to just 4 percent of rural households. There are also large differentials between wealth quintiles.

## Hygiene

In Somalia UNICEF has been engaged with promoting improved hygiene and environmental sanitation. One aspect of these efforts has been to promote positive behavioural change in hand-washing practices through extensive social mobilisation. The Somali MICS included a question in the household questionnaire to find out whether soap is being used in households for hand-washing and if so, in which situations. The results are presented in Table EN.8.

More than half of all the household respondents (55 percent) reported that soap in the household was used for washing hands in one or more of the given situations. This ranges from 84 percent in the North East to 77 percent in the North West and 41 percent in the Central South. Households in urban areas are more likely to have soap in the household for hand washing compared to rural areas (71 percent versus 46 percent respectively).

The most common reason reported for using soap to wash hands was for after defecation (48 percent), followed by cleaning babies' bottom (45 percent). Only 27 percent of the household respondents reported using soap to wash hands before cooking.

## VIII. Fertility

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Population size may play a critical role in achieving the MDGs. At both the household and national levels, larger families and rapidly growing populations obstruct development and prolong poverty. Children born into large, poor families face increased competition for limited resources, including food, clothing, health and education. At the national level, rapid population growth in poor countries stretches the demand for services, including health care and education, faster than the capacity to satisfy it. Monitoring levels of fertility is one of the three components of population dynamics needed to determine the future size and structure of the population.

This chapter presents the 2006 MICS results on the levels and trends in fertility. The analysis is based on birth history information collected from women age 15-49 interviewed during the survey. Each eligible woman was asked a series of questions on the number of sons and daughters who were living with her, the number living elsewhere, and the number who had died, in order to obtain the total number of live births she had had in her lifetime. For each live birth, information was also collected on the name sex, age and survival status of the child. For dead children, age at death was recorded. Information from the birth history is then used to assess current levels and trends in fertility.

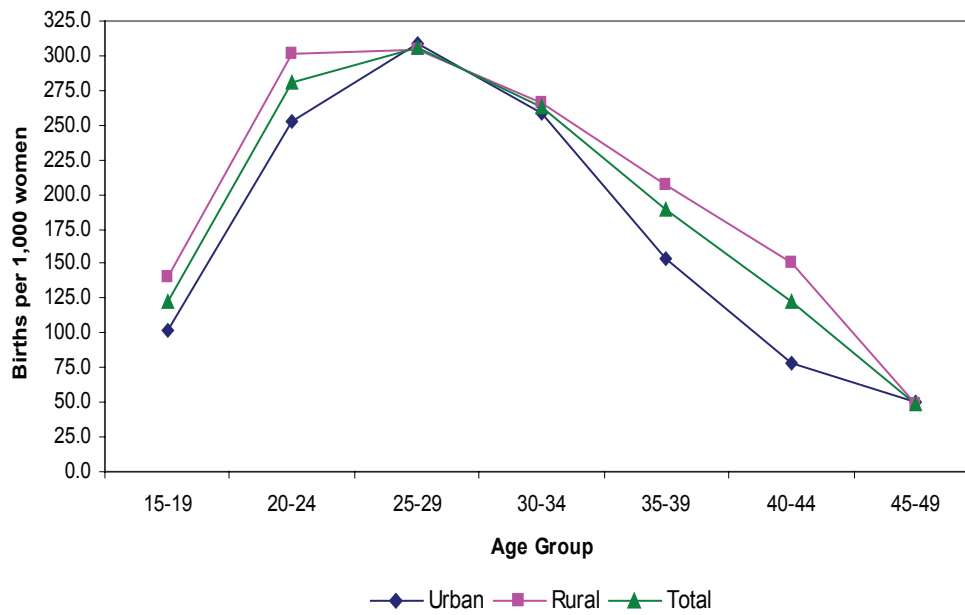
### Current Fertility

Measures of current fertility are presented in Table FE.1 for the three year period preceding the survey, corresponding to the calendar period 2003-2006. A three-year period was chosen because it reflects the most current information, while also allowing the rates to be calculated on a sufficient number of cases so as not to compromise the statistical precision of the estimates.

Two measures of current fertility are shown. Age-specific fertility rates (ASFRs), expressed as the number of births per thousand women in a specified age group, are calculated by dividing the number of live births to women in a specific age group by the number of woman-years lived in that age-group. The total fertility rate (TFR) is defined as the average number of babies born to a woman during her reproductive years if she were to pass through those years bearing children at the currently observed age-specific fertility rates.

Table FE.1 shows the current fertility rates for Somalia as a whole and for urban and rural areas. The total fertility rate for Somalia is estimated at 6.7 births per woman. Such high fertility is a strong indication of the huge population growth that Somalia will experience. Childbearing begins early in Somalia as reflected by the overall age pattern of fertility shown in the ASFRs. Fertility is low among adolescents and increases to a peak of 306 births per 1,000 among woman age 25-29 and declines thereafter (Table FE.1).

Fertility rates are higher in rural areas than urban areas; the TFR in rural areas is above seven births (7.1) while the TFR in urban areas is 6 births per woman. Rural ASFRs are higher than urban ASFRs at the early ages (15-24) as well as the later ages (35-44) during the reproductive period.(Figure FE.1).

**Figure FE.1: Age-specific Fertility Rates by Urban-Rural Residence, Somalia, 2006**

## Fertility Differentials

Table FE.2 present differentials in the total fertility rates over the 3 years preceding the survey by zone, residence, education and wealth quintiles. There are sizeable differentials in fertility among zones; the North West Zone has the lowest TFR at 5.9, followed by 6.2 in the North East Zone and is highest in the Central South Zone at 7.1. There are also noticeable differentials by education of the mother ranging from a low of 5.8 among women who have only received non standard curriculum education to a high of 7.0 among women who have not received any education at all. Women living in the poorest 60 percent of households experience a TFR of 7.0 while those living in the richest 40 percent of households experience a TFR of 6.2.

## Fertility Trends

In addition to estimating levels and patterns of current fertility, retrospective data from birth histories can also be used to assess trends in fertility over time. Table FE.3 compares age-specific fertility for successive three-year periods preceding the survey. The numerators of the rates are classified by three-year segments of time preceding the survey and the mother's age at the time of survey. Women 50 years and over were not interviewed in the survey, therefore rates for older age groups of women become progressively more truncated for periods more distant from the survey date.

Table FE.3 shows an interesting pattern of fertility in Somalia over the last fifteen years. Fertility seems to have peaked during the 6-8 year period preceding the survey. Rates prior to this period appear to be lower in almost all age groups. The results indicate that fertility has been declining during the most recent periods. The decline is especially significant during the most recent two 3-year periods, where declines in excess of 15 percent are observed in all age groups. In light of the low contraceptive prevalence in Somalia, further understanding of these apparent fertility declines during the most recent period, along with the causes and modalities require further investigation.

## IX. Reproductive Health

### 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. A World Fit for Children goal is access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many.

The current level of contraceptive use is a measure of actual contraceptive use at the time of the survey. Currently married women were asked if they were using any method to space the number of births or to delay pregnancy. The current use of contraception was reported by just 15 percent of women (Table RH.1). Of the different family planning methods only 1 percent of currently married women reported using a modern method of contraception<sup>10</sup>. The single most popular method reported was the lactation amenorrhea method (LAM) which is used by 13 percent of married Somali women.

Both traditional and modern methods of contraceptive prevalence were highest in the North West (26 percent) compared to the North East (12 percent) and the Central South Zone (12 percent). In both the North West and the Central South Zone modern contraceptive use was particularly rare with less than one percent of married women reporting any use. In the North West Zone 3 percent of women reported using the pill. There did not appear to be any large differentials in contraceptive prevalence between married women of different age groups once women were over 20 years of age. Married women between ages 15 to 19 reported the lowest contraceptive prevalence use (7 percent). Women's education level may be associated with contraceptive prevalence. The percentage of women using any method of contraception rises from 14 percent among those with no education to 16 percent among women with primary education to 23 percent among women with secondary education or higher.

### Unmet Need

Unmet need<sup>11</sup> for contraception refers to fecund women who are not using any method of contraception, but who wish to postpone the next birth or who wish to stop childbearing altogether. Unmet need is identified by using a set of questions eliciting current behaviours and preferences pertaining to contraceptive use, fecundity, and fertility preferences. However it must be noted that due to the customisation of the Somali questionnaire it is not possible to use this data to make global comparisons.

In the Somali MICS women who have an unmet need for spacing includes women who are currently married, believe they can still get pregnant and want to space their births. Pregnant women are also included if they want to have another birth at least two years later.

Women in unmet need for limiting are those women who are currently married and want to limit their births. This group includes women who are currently pregnant but do not want any more children and women who are not currently pregnant but do not want to have another child.

<sup>10</sup> Known modern methods available in Somalia include the pill, IUD, injections, and condoms

<sup>11</sup> Unmet need measurement in MICS is somewhat different than that used in other household surveys, such as the Demographic and Health Surveys (DHS). In DHS, more detailed information is collected on additional variables, such as postpartum amenorrhoea, and sexual activity. Results from the two types of surveys are strictly not comparable. The Somali questionnaire was further modified so comparisons with other MICS data should also be done with caution.

Total unmet need for contraception is simply the sum of unmet need for spacing and unmet need for limiting.

Using information on contraception and unmet need, the percentage of demand for contraception satisfied is also estimated from the data. Percentage of demand for contraception satisfied is defined as the proportion of women currently married 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.

Table RH.2 shows the results of the survey on contraception, unmet need, and the demand for contraception satisfied. In Somalia the unmet need for contraception appears fairly low at 26 percent; the majority for this unmet need is for birth spacing (21 percent) as opposed to birth limiting (5 percent). It seems apparent therefore that Somali women want to have many children which results in a low unmet need for contraception.

Of the unmet need, just thirty six percent of the demand is satisfied. The unmet need for contraception is highest in the North West Zone. There appears to be a positive relationship between unmet need and women's age. Among women age 45 - 49 the unmet need is reported to be 42 percent as opposed to 21 percent among women age 15 -19. There are little differences between unmet need and other background variables such as urban rural residence, education and wealth.

## 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 bacteriuria 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 is presented in Table RH.3. In Somalia over two thirds of women (68 percent)

do not receive any form of antenatal care. In total 26 percent of women received antenatal care from skilled health personnel. This ranged from 32 percent in the North West to 26 percent in the North East and 24 percent in the Central South. Women in urban areas are considerably more likely than women in rural areas to see receive antenatal care from skilled health personnel (46 percent versus 15 percent respectively). There is also a positive relationship between receiving antenatal care from a skilled provider and wealth; women in the richest households are 6 times as likely to receive skilled care than women from the poorest households.

The types of services pregnant women received are shown in table RH.4. Among the women who received antenatal care at least once during their pregnancy, 14 percent had a blood test, 21 percent had their blood pressure measured, 9 percent had a urine specimen taken and 22 percent had their weight measured. The type of services received varies by zone. Women in the North West Zone are considerably more likely to receive each type of service, for example in this zone 32 percent of women report having their blood pressure measured compared to 22 percent in the North East and 17 percent in the Central South. Mother's education and wealth also appears to affect the type of services received during antenatal care visits; women with primary education were at least twice as likely to have each test performed compared to women with no education.

Table RH.4A presents the number of antenatal care check-ups received by women who had given birth in the 2 years preceding the survey. Eighteen percent of women had between 2-3 antenatal care visits, eight percent had just one visit and 6 percent had over four visits. Overall, among the women who received antenatal care, the mean number of visits received was 2.

## 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 a third of births (33 percent) occurring in the year prior to the survey were delivered by skilled personnel (Table RH.5). This percentage is highest in the North West Zone at 41 percent and lowest in the Central South at 30 percent. Women in urban areas were considerably more likely than their rural counterparts to have delivered with the assistance of a skilled attendant (65 percent versus 15 percent). The more educated and more wealthy a woman is, the more likely she is to have delivered with the assistance of a skilled attendant, 73 percent of women with secondary education reported giving birth with the assistance of a skilled attendant compared to just 25 percent of women with no education.

Just under a quarter of the births (24 percent) in the year prior to the survey were delivered with assistance by an auxiliary midwife. Doctors assisted with the delivery of 7 percent of births and nurses assisted with just 2 percent. Overall, about 51 percent of births were delivered by traditional birth attendants.



## Post Natal Care

The Somali MICS also included several questions to assess whether women in Somalia receive any postnatal care and whether women had experienced any postpartum complications after childbirth.

Of women who had given birth in the two years preceding the survey 88 percent did not receive any postnatal care (Table RH.5a). Of the small number that did, around 6 percent visited a doctor and 4 percent visited an auxiliary/midwife.

Women were asked if they had experienced any of the following problems during the postpartum period: fever, problem controlling urine, urinary tract infection, mastitis, offensive discharge, tear or injury to the genital area, wound infection, haemorrhage or post delivery depression. Results are presented in Table RH.5b; the most commonly cited problem reported was fever (52 percent) followed by mastitis (41 percent). More than a quarter of women who had given birth in the 2 years preceding the survey reported experiencing haemorrhage, this ranged from 21 percent of women in urban areas to 30 percent in rural areas.

## Maternal Mortality

The complications of pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in developing countries. It is estimated worldwide that around 529,000 women die each year from maternal causes. And for every woman who dies, approximately 20 more suffer injuries, infection and disabilities in pregnancy or childbirth. This means that at least 10 million women a year incur this type of damage.

The most common fatal complication is post-partum haemorrhage. Sepsis, complications of unsafe abortion, prolonged or obstructed labour and the hypertensive disorders of pregnancy, especially eclampsia, claim further lives. These complications, which can occur at any time during pregnancy and childbirth without forewarning, require prompt access to quality obstetric services equipped to provide lifesaving drugs, antibiotics and transfusions and to perform the caesarean sections and other surgical interventions that prevent deaths from obstructed labour, eclampsia and intractable haemorrhage. One MDG target is to reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.

Maternal mortality is defined as the death of a woman from pregnancy-related causes, when pregnant or within 42 days of termination of pregnancy. The maternal mortality ratio is the number of maternal deaths per 100,000 live births. In the MICS, the maternal mortality ratio is estimated by using indirect sisterhood method. To collect the information needed for the use of this estimation method, adult household members are asked a small number of questions regarding the survival of their sisters and the timing of death relative to pregnancy, childbirth and the postpartum period for deceased sisters. The information collected is then converted to lifetime risks of maternal death and ratios<sup>12</sup>.

The Somali 2006 MICS results on maternal mortality are shown in Table RH.6. Note that the estimates refer to a period approximately 10 to 12 years before the survey (1994-1996). The results are also presented only for the national total, since maternal mortality ratios generally have very large sampling errors.

The level of maternal mortality in Somalia is extremely high. The maternal mortality ratio is estimated to be around 1044 per 100,000 live births (or alternatively 10 deaths per 1000 live births).

<sup>12</sup> For more information on the indirect sisterhood method, see WHO and UNICEF, 1997.

## X. Child Development

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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. A World Fit for Children goal is that "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 over two-thirds (65 percent) of under-five children, an adult engaged in more than four activities that promote learning and school readiness during the 3 days preceding the survey (Table CD.1). The average number of activities that adults engaged with children was 4. The table also indicates that the father's involvement in such activities was somewhat limited. Father's involvement with one or more activities was 39 percent. Sixteen percent of children were living in a household without their fathers.

There are no significant gender differentials in terms of adult activities with children or whether fathers engaged in activities more with male children than with female children. A slightly higher proportion of adults engaged in learning and school readiness activities with children in urban areas (67 percent) than in rural areas (63 percent). Stronger differentials by zone are observed: Adult engagement in activities with children was greatest in the North East Zone (79 percent) and lowest in the Central South Zone (62 percent). Father's involvement showed a similar pattern in terms of adults' engagement in such activities.



# XI. Education

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## Pre-School Attendance and School Readiness

Attendance to pre-school education in an organized learning or child education program is important for the readiness of children to school. One of the World Fit for Children goals is the promotion of early childhood education.

Extremely few Somalia children (2 percent) aged 36-59 months are attending pre-school (Table ED.1). With such a low numbers, background differentials should be compared with caution. Among children aged 36-59 months, attendance to pre-school is more prevalent in the richest households (6 percent) and among children born to mothers with secondary and non standard curriculum education.

## 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
- Net primary school attendance rate
- Net secondary school attendance rate
- Net primary school attendance rate of children of secondary school age
- Female to male education ratio (GPI)

The indicators of school progression include:

- Survival rate to grade five
- Transition rate to secondary school
- Net primary completion rate

In 1990, prior to start of the civil war the Somali education system had four basic levels-preprimary, primary, secondary, and higher; however in the societal chaos that followed the fall of Said Barre in 1991, schools ceased to exist for all practical purposes. During the years following many Somali children and young people lost the chance to access any formal education. Slowly, and with the help of international assistance, there have now been substantial increases in the number of operational primary and secondary schools; however education and formal classroom learning opportunities are limited and still unavailable for a majority of children in Somalia.

Koranic schools remain the basic system of instruction in religion in Somalia. They provide Islamic education for children usually between the ages of 5-14, thereby filling a clear religious and social role in the country. Compared to other education sub-sectors, koranic schools teach the greatest number of students across the country and remain the only system available for nomadic children.

Of children who are of primary school entry age (age 6) in Somalia, just 9 percent are attending the first grade of primary school (ED.2). There are large differentials by zone and urban-rural

areas. In the North West Zone, for instance, the value reaches 22 percent, while it is 11 percent in the North East Zone and just 4 percent in the Central South Zone. Children's participation in primary school is timelier in urban areas (16 percent) than in rural areas (5 percent). A positive correlation with mother's education and socioeconomic status is observed; for children age 6 whose mothers have at least primary school education, 20 percent were attending the first grade. In rich households, the proportion is around 23 percent, while it is just under 2 percent among children living in the poorest households.

Table ED.3 provides the percentage of children of primary school age (6 to 13 years) who are attending primary or secondary school. Overall, 23 percent of children of primary school age in Somalia are attending primary school or secondary school. In urban areas, 41 percent of children attend school while in rural areas attendance is only 12 percent. School attendance in the Central South Zone is significantly lower than in the rest of the country at 13 percent. At the national level, just over a quarter of all boys of primary school age (25 percent) attend primary or secondary school, this drops to 21 percent for girls of the same age.

The secondary school net attendance ratio is presented in Table ED.4; the secondary school age in Somalia is between 14 and 17 years. Only 7 percent of children of secondary school age are attending secondary school. Of the remaining some are attending primary school but the majority are out of school (see below). The most striking differential is between urban and rural areas; in urban areas 14 percent of secondary school age children attend secondary school compared to just over 1 percent in rural areas. Once again a positive correlation with mother's education and socioeconomic status is observed: 16 percent of secondary school age children with mothers educated to at least primary level attend secondary school compared to just 4 percent of children whose mothers have no education.

The primary school net attendance ratio of children of secondary school age is presented in Table ED.4W. Just under one fifth (19 percent) of secondary school age children are attending primary school. The large number of secondary school age children attending primary school is probably due to the lack of educational opportunity these children had in the preceding years. There are significant differentials in all the background characteristics; 31 percent of secondary school age children in urban areas are attending primary school compared to 10 percent in rural areas. In the richest households, 36 percent of secondary school age children attend primary school compared to just 4 percent in the poorest households.

The percentage of children entering first grade who eventually reach grade 5 is presented in Table ED.5. However due to a low proportion of children in the sample who attend school the numbers in these categories are very small and therefore this table must be treated with caution. Of all children starting grade one, 92 percent will eventually reach grade five. When this data is compared to other school surveys completed in Somalia the figure is considered to be extremely optimistic<sup>13</sup>. Notice that this number includes children that repeat grades and that eventually move up to reach grade five.

The net primary school completion rate is presented in Table ED.6. At the time of the survey, only 4 percent of the children of primary completion age (13 years) were attending the last grade of primary education. This value should be distinguished from the gross primary completion ratio which includes children of any age attending the last grade of primary.

<sup>13</sup> The UNICEF Primary School Survey 2006 estimates that just 56 percent of children entering grade one will eventually reach grade 5.

The ratio of girls to boys attending primary and secondary education is provided in Table ED.7. The table shows that gender parity for primary school is 0.8, i.e. for every 10 boys in school, there are only 8 girls, indicating the disadvantage for girls. The national gender parity indicator drops even further for secondary education to 0.5. The disadvantage of girls in secondary education is particularly pronounced in the North West Zone (0.3). In rural areas only 1 girl is attending secondary school for every 10 boys.

## Adult Literacy

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. In MICS, since only a women's questionnaire was administered, the results are based only on females age 15-24. Literacy was assessed on the ability of women to read a short simple statement written in Af-Somali language.

Table ED.8 indicates that only a quarter of women in Somalia (25 percent) are literate and that literacy status varies greatly by place of residence. Forty five percent of women residing in urban areas are literate compared with only 10 percent of their rural counterparts indicating the lack of learning opportunities available for women in rural areas.

The slightly higher level of literacy among women aged 15-19 (28 percent) compared to women aged 20-24 (22 percent) may suggest that the younger generation has had more opportunity for learning. There is a marked difference in literacy by women's wealth status ranging from 2 percent in the lowest wealth quintile to 59 percent in the highest wealth quintile.

Of women who stated that primary school was their highest level of education, just 72 percent were actually able to read the statement shown to them. Of women who had attended Koranic school, just 10 percent were literate in Af-Somali.



## XII. Child Protection

### 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. However there is currently no formal mode of Somali birth registration therefore the figures for birth registration are unsurprisingly low.

The births of just 3 percent of Somali children under the age of five years have been registered (Table CP.1). Children in the North West Zone are more likely to have their births registered (7 percent) compared to children in the North East Zone (3 percent) and Central South Zone (2 percent). Among those whose births are not registered the main reasons stated were not knowing where to register (33 percent), not knowing that the child should be registered (28 percent) and do not see the need to register the child (22 percent).

### 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 to differentiate child labour from 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 before. Table CP.2 presents the results of child labour by the type of work. Very few children appear to be engaged in work outside the household whether paid or unpaid (2.5 percent). Just under a quarter (24 percent) of children aged 5-14 perform more than 28 hours of household chores per week and almost one in four children aged 5-14 (37 percent) are working for the family business. Overall almost half (49 percent) of the children aged 5-14 in Somalia are engaged in child labour. Females are more likely to be involved in child labour (54 percent) compared to their male counterparts (45 percent).

Table CP.3 presents the percentage of children classified as student labourers or as labourer students. Student labourers are the children attending school that were involved in child labour activities at the moment of the surveys. More specifically, of the 49 percent of the children 5-14 years of age attending school, 44 percent are also involved in child labour activities. Out of the



49 percent of the children classified as child labourers, less than half are also attending school (44 percent). Female children are more likely to be engaged in child labour than male children (54 percent versus 45 percent) and females who are attending school are more likely to be engaged in labour than their male student counterparts (51 percent versus 40 percent).

## Early Marriage and Polygyny

Marriage before the age of 18 is a reality for many young girls. According to UNICEF's worldwide estimates, over 60 million women aged 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 can put them at increased risk of HIV infection.

Two of the indicators are to estimate the percentage of women married before 15 years of age and percentage married before 18 years of age. The percentage of women married at various ages is provided in Table CP.4. Marriage occurs relatively early in Somalia. Almost 8 percent of women between the ages of 15 to 49 married before they reached the age of 15 and a quarter of all women (25 percent) aged between 15 and 19 are married. Women in the Central South Zone are more likely to get married before the age of 15 (10 percent) than women in the North West and North East (3 percent and 4 percent respectively).

The number of women in a polygynous union is provided in Table CP.4. The data show that 23 percent of married women in Somalia are in polygynous unions. The percentage of women in polygynous unions tends to increase with age, from 13 percent among woman age 15 - 19 to 37 percent of women age 45 - 49. Women living in rural areas are slightly more likely to be in polygynous unions (24 percent) than women living in urban areas (21 percent). The difference between the zones is more pronounced with polygyny ranging from 17 percent in the North West Zone, to 24 percent in the Central South Zone and 26 percent in the North East Zone. There appears to be little difference in the percentage of polygynous unions across the different wealth quintiles.

Another component is the spousal age difference with an indicator being the percentage of married/in union women with a difference of 10 or more years of age compared to their current spouse. Table CP.5 presents the results of the age difference between husbands and wives. Of the women aged 15-19 years 31 percent were married to a man 10 years older than themselves. There appears to be no marked differences between zone, urban and rural residence, education or wealth quintile. The spousal age difference also displayed the same pattern for women aged 20-24; 30 percent of this age group were married to men 10 or more years their senior.

## 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. In Somalia the procedure is generally carried out on girls between the ages of 4 and 14. It is often performed by traditional practitioners, including untrained village midwives, without anaesthesia, using knives, scissors, razor blades or even broken glass. The instruments are often not sterile and the ritual is very often performed in unsanitary conditions. In urban areas, some families use a doctor to perform the operation.

FGM/C is a fundamental violation of human rights. 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.

In the MICS, a series of 16 questions were asked to determine knowledge of FGM/C, prevalence of FGM/C, and details of the type of FGM/C performed. Table CP.6 presents the prevalence of FGM/C among women and the type and extent of the procedure. It appears that in Somalia FGM/C is near universal at 98 percent. Differences by background characteristics are small. Seventy nine percent of women reported that their vagina was sewn closed (infibulation) during circumcision which is the most severe form of FGM/C. Overall 77 percent of women age 15-49 have undergone an extreme form of FGM/C; however this varies by zone rising to 90 percent in both the North West and North East zone and falling to 70 percent in the Central South Zone.

Table CP.6 also presents woman's attitudes towards FGM/C. Just under two thirds of women (65 percent) believe that the practice should continue. Support for FGM/C varies with background characteristics. In the Central South where women are less likely to have received the most severe type of circumcision, 80 percent believe that the practice should be continued. In the North East Zone 53 percent support the continuation of circumcision and in the North West just a third of women (32 percent) support the practice. Women in rural (72 percent) are more likely to support the practice of circumcision than women in urban areas (54 percent). The age of women does not appear to have a marked difference on whether the practice should be continued however the more educated the women the less likely she is to believe that the practice of circumcision should be continued. Women in the poorest households are also more likely to support the practice of circumcision than women in the richest households (78 percent versus 47 percent).

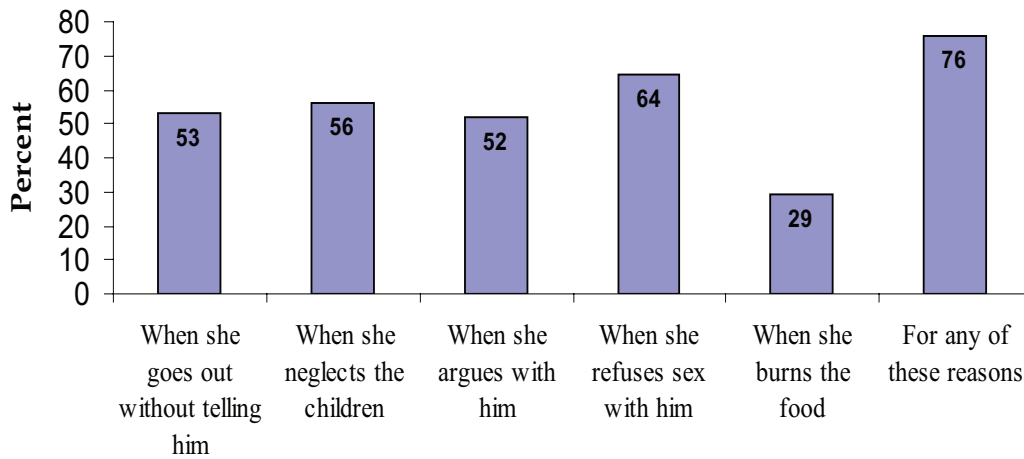
Table CP.7 presents the prevalence and extent of FGM/C performed on daughters of the respondents. Of the women reporting that they had a circumcised daughter, 60 percent reported that the daughter had received an extreme form of FGM/C. Overall 46 percent of women with one living daughter reported that their daughter had been circumcised. However it may be possible that many of the daughters of the women interviewed have not yet reached the age when FGM/C is likely to occur. The likelihood that a respondent's daughter is circumcised varies directly with her age, rising from 4 percent among women age 20-24 to 91 percent among women age 45-49, indicating that there may have been a decline attitudes toward circumcision in recent years. There does not appear to be a wide variation between mother's education or wealth and having a daughter circumcised.

Women were asked about the age at which the daughter had been circumcised. Table CP.7A presents the distribution of circumcised girls according to the age at circumcision. The majority of girls are circumcised between the ages of 5 - 9 (79 percent). In urban areas girls are more likely to be cut at 7 years old compared to any other age (22 percent). In the North West Zone more girls are circumcised at 8 years old (21 percent) which is slightly older than the other two zones where circumcision is more common around 6 and 7 years old.

## Domestic Violence

A number of questions were asked of ever-married women 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 and presented in figure CP.1.

**Figure CP.1: Percentage of ever-married women who believe a husband is justified in beating his wife in various circumstances, Somalia, 2006**



Over three quarters of ever-married women age 15-49 believes that a husband is justified in beating his wife for at least one of the specified reasons. The most widely accepted reason for a husband to beat his wife is for when a wife refuses to have sex with her husband (64 percent). The percentage of women who believe a husband is justified in beating his wife for at least one of the reasons is higher among women residing in rural areas, women with no education and women living in the poorest households.

## Orphaned Children

Children who are orphaned may be at increased risk of neglect or exploitation if the parents are not available to assist them. Somali children may also have been left vulnerable or orphaned as a result of conflict and/or displacement. 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 CP.10. Approximately 3 in 4 children in Somalia are living with both biological parents. Nine percent of children are living in households with neither of their biological parents and 10 percent of children have lost either one or both of their biological parents. In Somalia just one percent of children are double orphans (both parents have died).

One of the measures developed for the assessment of the status of orphaned and vulnerable children relative to their peers looks at the school attendance of children 10-14 for children who have lost both parents (double orphans) versus children whose parents are alive (and who live with at least one of these parents). If children whose parents have died do not have the same access to school as their peers, then families and schools are not ensuring that these children's rights are being met.

In Somalia among the children age 10-14 who have lost one biological parent, 30 per cent are currently attending school (Table CP.11); among children age 10-14 who have not lost a parent and who live with at least one parent, 30 percent are also attending school. This would suggest therefore that currently, due to the generally low school attendance within the country among all children, there is no large educational disadvantage between orphans to non-orphaned children.

The prevalence of malnutrition among orphaned children under five years of age is presented in Table CP.12. Orphaned children appear to have slightly higher rates of malnutrition compared to non-orphaned children. Forty percent of orphaned children are underweight compared to 35 percent of non-orphaned children.



## XIII. HIV/AIDS

### Knowledge of HIV Transmission

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. Women were asked whether they knew of the three main ways of HIV transmission – having only one faithful uninfected partner, using a condom every time, and abstaining from sex. The results are presented in Table HA.1. In Somalia, 65 percent of the interviewed women have heard of AIDS. However, the percentage of women who know of all three main ways of preventing HIV transmission is extremely low at 5 percent. Thirty-six percent of women know of having one faithful uninfected sex partner, 15 percent know of using a condom every time, and 23 percent know of abstaining from sex as main ways of preventing HIV transmission. While 46 percent of women know at least one way, more than half of women (54 percent) do not know any of the three ways.

Accurate knowledge of HIV transmission varies by zone; in the North West 12 percent of women could identify all 3 ways compared to 6 percent in the North East and just 3 percent in the Central South. Women in urban areas are more likely to be able to identify the 3 main ways of preventing HIV compared to women from rural areas (9 percent versus 4 percent). There does not appear to be any difference in knowledge across age groups but there is a positive relationship with education. Seventy eight percent of women with secondary or higher education could identify at least one mode of prevention compared to 37 percent of women with no education.

Table HA.2 presents the percent of women who can correctly identify misconceptions concerning HIV. The indicator is based on the two most common and relevant misconceptions in Somalia, that HIV can be transmitted by supernatural means and mosquito bites. The table also provides information on whether women know that HIV cannot be transmitted by sharing food. Of the interviewed women, just 13 percent reject the two most common misconceptions and know that a healthy-looking person can be infected. Thirty-nine percent of women know that HIV cannot be transmitted by sharing food, while 34 percent of women know that a healthy-looking person can be infected.

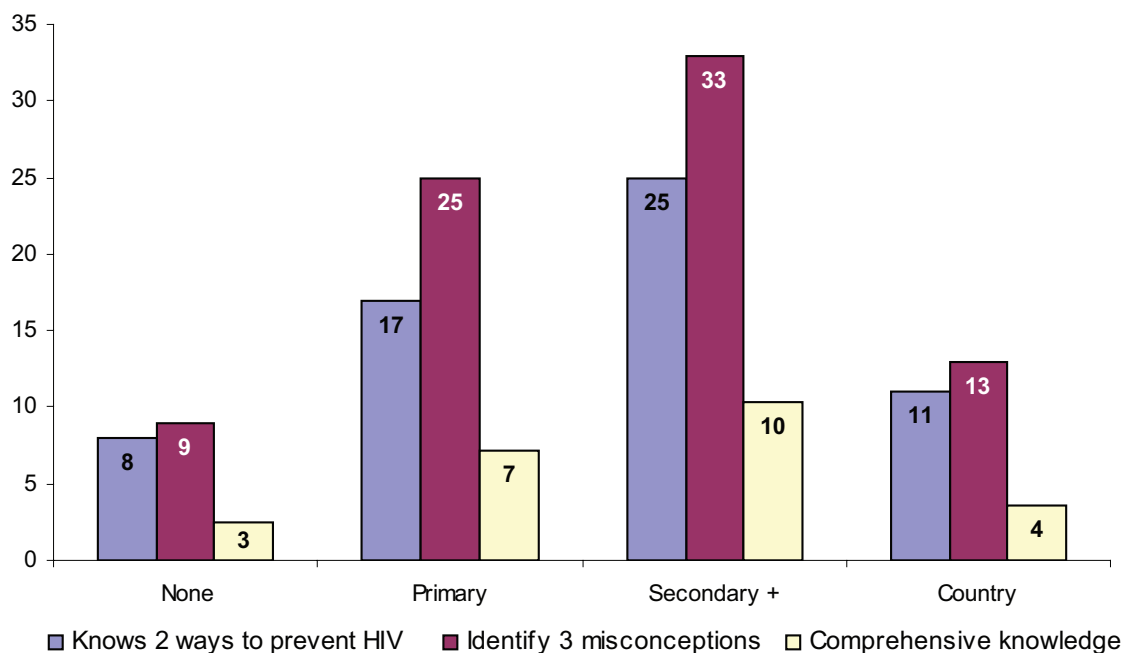
Education and wealth are directly related to correct knowledge concerning common misconceptions. Among women, for example, a quarter of women with secondary school or higher education, reject the two most common misconceptions and know that a healthy-looking person can be infected compared to just 9 percent of women with no education. Interestingly

women who have attended a non standard curriculum form of schooling are the most likely of all women to identify common misconceptions about HIV/AIDS.

Table HA.3 presents the percentage of women 15-49 years who know two ways of preventing HIV transmission. Knowledge of HIV prevention methods is still very low although there are differences by residence. Overall, 11 per cent of women report knowing two prevention methods, knowledge is higher in urban areas than rural areas. The percentage of women who know two prevention methods increases with the woman's education level.

A key indicator used to measure countries' responses to the HIV epidemic is the proportion of young people 15-24 years who know two methods of preventing HIV reject two misconceptions and know that a healthy looking person can have HIV. In Somalia just 4 percent of young women have comprehensive correct knowledge of HIV. The level of education and residence are highly associated with knowledge of HIV.

**Figure HA.1 Percent of women who have comprehensive knowledge of HIV/AIDS transmission, Somalia, 2006**



## Knowledge of Mother-to-Child Transmission

Knowledge of mother-to-child transmission (MTCT) 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.4. Overall, 54 percent of women know that HIV can be transmitted from mother to child. The percentage of women who know all three ways of mother-to-child transmission is 38 percent, while 11 percent of women did not know of any specific way.

There are marked differences in MTCT knowledge among women by zone, residence, education and wealth. Knowledge about mother-to-child transmission is highest among women living in urban areas and women living in the North West Zone. Knowledge levels are lowest among women with no education, are in the lowest wealth quintile and who live in the Central South Zone.

## Attitudes toward people living with HIV

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.5 presents the attitudes of women towards people living with HIV/AIDS.

Women tend to express more positive attitude in response to the questions concerning behaviour towards HIV-infected relatives than to questions about shopkeepers or teachers. Forty-two percent of women say that they would not care for a family member who was sick with AIDS. Sixty-four percent say that a teacher with HIV should not be able to work and 73 percent say that they would not buy food from a person with HIV or AIDS. The percentage expressing accepting attitudes on all four measures is low at just 5 percent among the women.

## Knowledge of HIV Testing Facilities

Another important indicator is the knowledge of where to be tested for HIV and use of such services. Questions related to knowledge among women of a facility for HIV testing and whether they have ever been tested is presented in Table HA.6. Only 16 percent of women know where to be tested, the proportions of women who know where to be tested are higher for women in urban areas, women with secondary or higher education and those in the highest wealth quintile. Just 3 percent of the women have actually been tested, of these, a large proportion has been told the result (73 percent).



## List of References

- 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.
- Blanc, A. and Wardlaw, T. 2005. "Monitoring Low Birth Weight: An Evaluation of International Estimates and an Updated Estimation Procedure". *WHO Bulletin*, 83 (3), 178-185.
- 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.
- Rutstein, S.O. and Johnson, K., 2004. The DHS Wealth Index. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro.
- UNICEF, 2006. Monitoring the Situation of Children and Women. Multiple Indicator Cluster Survey Manual, New York.
- UNICEF, 2006 Primary Education Survey, USSC Nairobi
- United Nations, 1983. Manual X: Indirect Techniques for Demographic Estimation (United Nations publication, Sales No. E.83.XIII.2).
- United Nations, 1990a. QFIVE, United Nations Program for Child Mortality Estimation. New York, UN Pop Division
- United Nations, 1990b. Step-by-step Guide to the Estimation of Child Mortality. New York, UN
- WHO and UNICEF, 1997. The Sisterhood Method for Estimating Maternal Mortality. Guidance notes for potential users, Geneva.
- [www.Childinfo.org](http://www.Childinfo.org) as accessed on 20.07.07

# Tables

**Table HH.1: Results of household and individual interviews**

Number of households, women, and children under 5 by results of the household, women's and under-five's interviews, and household, women's and under-five's response rates, Somalia, 2006

	Residence		Zone			Total
	Urban	Rural	North West	North East	Central South	
<b>Number of households</b>						
Sampled	2232	3768	1440	1440	3120	6000
Occupied	2232	3768	1440	1440	3120	6000
Interviewed	2222	3747	1411	1440	3118	5969
Response rate	99.6	99.4	98.0	100.0	99.9	99.5
<b>Number of women</b>						
Eligible	3067	4210	1833	1702	3742	7277
Interviewed	2779	3985	1541	1638	3585	6764
Response rate	90.6	94.7	84.1	96.2	95.8	93.0
Overall response rate	90.2	94.1	82.4	96.2	95.7	92.5
<b>Number of children under 5</b>						
Eligible	2356	4017	1232	1440	3701	6373
Mother/Caretaker interviewed	2317	3988	1204	1418	3683	6305
Response rate	98.3	99.3	97.7	98.5	99.5	98.9
<b>Overall response rate</b>	97.9	98.7	95.8	98.5	99.4	98.4

**Table HH.2: Household age distribution by sex**

Percent distribution of the household population by five-Year age groups and dependency age groups, and number of children aged 0-17 Years, by sex, Somalia, 2006

	<b>Males</b>		<b>Females</b>		<b>Total</b>	
	Number	Percent	Number	Percent	Number	Percent
<b>Age</b>						
0-4	3379	20	3126	18	6506	19
5-9	2983	18	2843	17	5826	17
10-14	2220	13	2183	13	4404	13
15-19	1756	10	1863	11	3619	11
20-24	1172	7	1457	9	2629	8
25-29	887	5	1265	7	2153	6
30-34	787	5	875	5	1662	5
35-39	678	4	850	5	1527	4
40-44	776	5	630	4	1406	4
45-49	465	3	347	2	812	2
50-54	486	3	502	3	987	3
55-59	254	1	237	1	491	1
60-64	416	2	286	2	702	2
65-69	174	1	113	1	286	1
70+	316	2	284	2	599	2
Missing/DK	240	1	103	1	349	1
<b>Dependency age groups</b>						
< 15	8582	51	8153	48	16735	49
15-64	7676	45	8312	49	15989	47
65 +	489	3	396	2	886	3
Missing/DK	240	1	103	1	349	1
Children aged 0-17	9668	57	9174	54	18842	55
Adults 18+/ Missing/ DK	7320	43	7791	46	15117	45
<b>Total</b>	<b>16988</b>	<b>100</b>	<b>16965</b>	<b>100</b>	<b>33959</b>	<b>100</b>

**Table HH.3: Household composition**

Percent distribution of households by selected characteristics, Somalia, 2006

	Weighted percent	Number of households	
		Weighted	Unweighted
<b>Sex of household head</b>			
Male	82.0	4894	4851
Female	18.0	1075	1118
<b>Zone</b>			
North West	24.4	1455	1411
North East	11.5	687	1440
Central South	64.1	3827	3118
<b>Residence</b>			
Urban	35.4	2113	2222
Rural	64.6	3856	3747
<b>Number of household members</b>			
1	0.8	49	49
2-3	21.0	1252	1319
4-5	29.9	1787	1806
6-7	26.2	1565	1517
8-9	14.0	833	807
10+	8.1	482	471
Total	100	5969	5969
At least one child aged < 18 Years	90.6	5969	5969
At least one child aged < 5 Years	65.8	5969	5969
At least one woman aged 15-49 Years	91.2	5969	5969

**Table HH.4: Women's background characteristics**

Percent distribution of women aged 15-49 Years by background characteristics, Somalia, 2006

	Weighted percent	Number of women	
		Weighted	Unweighted
<b>Zone</b>			
North West	25.5	1723	1541
North East	11.1	750	1638
Central Southern	63.4	4291	3585
<b>Residence</b>			
Urban	40.4	2735	2779
Rural	59.6	4029	3985
<b>Age</b>			
15-19	25.2	1706	1695
20-24	20.0	1354	1374
25-29	17.5	1183	1193
30-34	12.1	822	816
35-39	11.8	798	799
40-44	8.6	580	572
45-49	4.7	320	315
<b>Marital/Union status</b>			
Currently married/in union	65.3	4417	4400
Formerly married/in union	9.3	630	642
Never married/in union	25.4	1717	1722
<b>Motherhood status</b>			
Ever gave birth	91.1	4597	4581
Never gave birth	8.9	450	461
<b>Education</b>			
None	58.3	3944	3862
Koranic	16.0	1082	1086
Primary	15.4	1040	1101
Secondary +	4.7	320	340
Non standard Curriculum	3.7	250	242
Don't Know/Missing	1.9	128	133
<b>Wealth index quintiles</b>			
Poorest	18.0	1214	1119
Second	19.8	1337	1284
Middle	19.7	1334	1328
Fourth	20.3	1373	1450
Richest	22.3	1506	1583
<b>Total</b>	<b>100</b>	<b>6764</b>	<b>6764</b>

**Table HH.5: Children's background characteristics**

Percent distribution of children under five Years of age by background characteristics, Somalia, 2006

	Weighted percent	Number of under-5 children	
		Weighted	Unweighted
<b>Sex</b>			
Male	51.9	3275	3270
Female	48.1	3030	3035
<b>Zone</b>			
North West	16.4	1032	1013
North East	13.9	879	1609
Central Southern	69.7	4394	3683
<b>Residence</b>			
Urban	35.7	2254	2317
Rural	64.3	4051	3988
<b>Age</b>			
< 6 months	10.8	681	687
6-11 months	10.2	646	653
12-23 months	17.2	1086	1096
24-35 months	20.0	1264	1243
36-47 months	20.7	1307	1317
48-59 months	21.0	1322	1309
<b>Mother's education</b>			
None	62.2	3924	3838
Koranic	18.3	1151	1151
Primary	13.0	821	902
Secondary +	3.1	194	203
Non standard Curriculum	3.1	194	190
Don't Know/Missing	0.3	21	21
<b>Wealth index quintiles</b>			
Poorest	20.1	1266	1160
Second	20.5	1294	1242
Middle	20.7	1304	1307
Fourth	20.7	1308	1406
Richest	18.0	1132	1190
Total	100	6305	6305

**Table CM.1: Childhood mortality rates**

Neonatal, post neonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Somalia 2006

Years preceding the survey	Neonatal mortality (NN)	Post neonatal mortality (PNN)	Infant mortality ( ${}_1q_0$ )*	Child mortality ( ${}_4q_0$ )	Under five mortality ( ${}_5q_0$ **)
0-4	41	45	86	53	135
5-9	37	54	91	67	152
10-14	50	59	109	94	192

\* MICS indicator 2; MDG indicator 14

\*\* MICS indicator 1; MDG indicator 13

**Table CM.2: Child mortality by sex and residence**

Neonatal, postneonatal, infant, child, and under-five mortality rates for the five-year periods preceding the survey, by background characteristics Somalia 2006

	Neonatal mortality (NN)	Post neonatal mortality (PNN)	Infant mortality ( ${}_1q_0$ )	Child mortality ( ${}_4q_0$ )	Under five mortality ( ${}_5q_0$ **)
<b>Sex</b>					
Male	43	48	91	53	139
Female	33	43	76	54	126
<b>Zone</b>					
North West	36	52	88	27	113
North East	35	45	80	46	122
Central South	44	43	87	63	144
<b>Residence</b>					
Urban	40	48	88	50	134
Rural	42	44	85	55	136
<b>Total</b>	41	45	86	53	135

**Table NU.1: Child malnourishment**

Percentage of children aged 0-59 months who are severely or moderately malnourished, Somalia, 2006

	Weight for age		Height for age		Weight for height			Number of children aged 0-59 months
	% below	% below	% below	% below	% below	% below	% above	
	- 2 SD*	- 3 SD	- 2 SD**	- 3 SD	- 2 SD***	- 3 SD	+ 2 SD	
<b>Sex</b>								
Male	36.7	11.4	37.7	20.9	11.7	2.5	2.8	2821
Female	34.3	11.7	38.0	20.0	10.1	1.9	3.6	2603
<b>Residence</b>								
Urban	22.8	6.0	27.8	12.5	6.7	1.1	2.4	1992
Rural	43.0	14.8	43.6	25.1	13.4	2.8	3.6	3432
<b>Age</b>								
< 6 months	6.6	1.1	9.5	2.8	6.4	1.1	6.5	531
6-11 months	18.0	5.2	18.8	6.4	12.6	2.6	4.5	588
12-23 months	37.3	12.9	37.9	19.4	15.7	4.7	3.9	928
24-35 months	45.1	18.7	46.9	27.4	10.4	1.7	1.6	1125
36-47 months	42.5	13.9	46.8	27.2	10.0	1.5	2.2	1127
48-59 months	40.5	9.2	43.0	23.4	9.8	1.6	2.8	1125
<b>Mother's education</b>								
None	39.3	13.5	41.7	24.0	11.7	2.5	3.1	3343
Koranic	37.6	11.7	39.5	19.9	11.4	1.9	3.3	1011
Primary	22.1	5.7	24.3	10.1	8.0	1.5	2.8	717
Secondary +	14.5	3.7	20.6	7.5	7.4	1.4	5.0	170
Non standard curriculum	28.5	5.9	23.6	11.4	9.8	2.6	2.7	167
<b>Wealth index quintiles</b>								
Poorest	48.1	17.1	47.7	26.6	14.6	3.2	4.2	1064
Second	46.3	17.0	47.9	29.5	12.8	2.2	3.3	1120
Middle	40.3	13.8	42.4	24.9	13.2	2.8	2.7	1105
Fourth	26.0	6.3	28.8	12.2	9.2	2.3	3.2	1101
Richest	16.2	3.1	21.4	8.5	4.6	0.3	2.5	1034
<b>Total</b>	<b>35.6</b>	<b>11.6</b>	<b>37.8</b>	<b>20.5</b>	<b>11.0</b>	<b>2.2</b>	<b>3.2</b>	<b>5424</b>

\* MICS indicator 6; MDG indicator 4

\*\* MICS indicator 7

\*\*\* MICS indicator 8

Total includes 16 children missing information on mother's education who are not shown separately.

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

Zones are excluded from table (see text page 26))



**Table NU.2: Initial breastfeeding**

Percentage of women aged 15-49 years with a birth in the two years preceding the survey who breastfed their baby within one hour of birth and within one day of birth, Somalia, 2006

	Percentage who started breastfeeding within one hour of birth*	Percentage who started breastfeeding within one day of birth**	Number of women with a live birth in the two years preceding the survey
<b>Zone</b>			
North West	35.1	69.8	496
North East	38.5	74.4	269
Central South	21.4	55.3	1560
<b>Residence</b>			
Urban	26.6	67.2	852
Rural	26.1	56.8	1472
<b>Months since birth</b>			
< 6 months	23.9	61.1	551
6-11 months	30.5	61.1	614
12-23 months	25.5	60.5	959
<b>Mother's education</b>			
None	26.2	58.5	1460
Koranic	17.7	55.6	369
Primary	35.5	71.2	314
Secondary +	30.0	71.8	64
Non standard curriculum	24.9	71.6	75
<b>Wealth index quintiles</b>			
Poorest	23.5	49.6	435
Second	28.6	55.3	468
Middle	25.6	59.0	483
Fourth	24.3	66.0	508
Richest	29.7	73.0	430
<b>Total</b>	<b>26.3</b>	<b>60.6</b>	<b>2325</b>

\* MICS indicator 45

\*\* Includes children who started breastfeeding within one hour of birth.

Total includes 43 children missing information on mother's education who are not shown separately.

**Table NU.3: Breastfeeding**

Percentage of living children according to breastfeeding status at each age group, Somalia, 2006

	Children 0-3 months		Children 0-5 months		Children 6-9 months		Children 12-15 months		Children 20-23 months	
	Percent exclusively breastfed	Number of children	Percent exclusively breastfed*	Number of children	Percent receiving breastmilk and solid/mushy food**	Number of children	Percent breastfed***	Number of children	Percent breastfed***	Number of children
<b>Sex</b>										
Male	11.2	238	7.9	366	13.5	239	49.1	273	40.1	98
Female	14.4	200	10.5	315	16.6	254	51.5	227	30.1	86
<b>Zone</b>										
North West	7.0	86	5.1	137	24.1	106	43.1	113	17.0	49
North East	1.9	46.3	1.1	79	13.2	59	38.2	63	(20.4)	18
Central South	15.9	305	11.7	464	12.5	327	55.0	324	45.5	117
<b>Residence</b>										
Urban	9.1	153	6.8	238	21.1	168	31.9	178	26.8	72
Rural	14.6	285	10.4	443	12.0	325	60.4	322	40.9	113
<b>Mother's education</b>										
None	12.7	282	9.4	429	13.1	332	53.2	296	38.5	114
Koranic	12.4	82	8.7	130	17.7	69	52.2	100	(36.7)	27
Primary	(17.9)	47	11.9	79	21.8	63	41.9	68	(30.9)	28
Secondary	(*)	11	(*)	18	(*)	10	(*)	18	(*)	10
Non standard curriculum	(*)	15	(*)	21	(*)	18	(*)	17	(*)	4
<b>Wealth index quintiles</b>										
Poorest	26.1	75	17.7	117	8.8	96	71.0	101	(46.4)	30
Second	18.7	93	14.2	147	11.3	98	64.5	105	(44.3)	43
Middle	13.4	93	8.8	155	17.7	106	52.4	92	(45.8)	37
Fourth	2.9	102	1.9	153	14.8	124	36.7	105	(22.7)	40
Richest	4.2	75	3.7	109	25.8	69	25.5	97	(18.6)	34
<b>Total</b>	12.7	438	9.1	681	15.1	493	50.2	500	35.4	184

\* MICS indicator 15

\*\* MICS indicator 17

\*\*\* MICS indicator 16

Total includes children missing information on mother's education who are not shown separately.

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

**Table NU.4: Adequately fed infants**

Percentage of infants under 6 months of age exclusively breastfed, percentage of infants 6-11 months who are breastfed and who ate solid/semi-solid food at least the minimum recommended number of times yesterday and percentage of infants adequately fed, Somalia, 2006

	Percent of infants					Number of infants aged 0-11 months
	0-5 months exclusively breastfed	6-8 months who received breastmilk and complementary food at least 2 times in prior 24 hours	9-11 months who received breastmilk and complementary food at least 3 times in prior 24 hours	6-11 months who received breastmilk and complementary food at least the minimum recommended number of times per day*	0-11 months who were appropriately fed**	
<b>Sex</b>						
Male	7.9	10.2	13.9	11.5	9.6	683
Female	10.5	10.2	16.4	12.4	11.5	644
<b>Zone</b>						
North West	5.1	18.9	18.8	18.9	12	277
North East	1.1	12.5	9.0	11.4	5.9	148
Central South	11.7	7.0	14.9	9.8	10.8	902
<b>Residence</b>						
Urban	6.8	12.8	17.2	14.3	10.4	460
Rural	10.4	8.8	14.2	10.7	10.5	867
<b>Mother's education</b>						
None	9.2	9.8	16.2	11.9	10.5	893
Koranic	8.7	5.1	11	7.3	8.1	224
Primary or above	9.7	17	15.3	16.4	13.2	204
<b>Wealth index quintiles</b>						
Poorest	17.7	7.1	5.3	6.4	11.8	244
Second	14.2	9.9	14.7	11.4	13	270
Middle	8.8	10.5	19.4	13.4	10.9	291
Fourth	1.9	7.9	18.6	11.3	6.7	311
Richest	3.7	18.5	18.6	18.5	10.8	211
<b>Total</b>	<b>9.1</b>	<b>10.2</b>	<b>15.2</b>	<b>11.9</b>	<b>10.5</b>	<b>1326</b>

\* MICS indicator 18

\*\* MICS indicator 19

Total includes children missing information on mother's education who are not shown separately.

**Table NU.5: Iodized salt consumption**

Percentage of households consuming adequately iodized salt, Somalia, 2006

	Percent of households in which salt was tested	Number of households interviewed	Percent of households with			Total	Number of households in which salt was tested or with no salt
			Salt test result				
			No salt	< 15 PPM	15+ PPM*		
<b>Zone</b>							
North West	93.4	1454.9	4.7	94.6	0.7	100	1426
North East	92.9	686.6	5.8	93.0	1.2	100	677
Central South	89.9	3827.4	8.7	89.8	1.4	100	3772
<b>Residence</b>							
Urban	95.3	2112.8	3.4	94.8	1.8	100	2083
Rural	88.9	3856.2	9.6	89.5	0.9	100	3792
<b>Wealth index quintiles</b>							
Poorest	82.6	1155.3	16.0	82.4	1.6	100	1136
Second	89.6	1325.3	9.1	90.2	0.7	100	1307
Middle	91.5	1245.3	6.4	92.8	0.7	100	1218
Fourth	94.8	1204.1	3.7	94.9	1.5	100	1184
Richest	97.9	1039.0	1.2	97.0	1.8	100	1030
<b>Total</b>	<b>91.1</b>	<b>5969</b>	<b>7.4</b>	<b>91.4</b>	<b>1.2</b>	<b>100</b>	<b>5875</b>

**\* MICS indicator 41**

*Adequately iodized salt* is defined as salt that contains at least 15 parts per million of iodine.

**Table NU.6: Children's vitamin A supplementation**

Percent distribution of children aged 6-59 months by whether they have received a high dose vitamin A supplement in the last 6 months, Somalia, 2006

	Percent of children who received vitamin A:					Total	Number of children aged 6-59 months
	Within last 6 months*	Prior to last 6 months	Not sure when	Not sure if received vitamin A	Never received vitamin A		
<b>Sex</b>							
Male	24.9	6.4	5.6	1.1	61.9	100	2908
Female	23.5	6.7	5.2	0.5	64.0	100	2716
<b>Zone</b>							
North West	25.9	6.7	4.1	1.0	62.2	100	1107
North East	15.2	2.6	3.3	0.3	78.6	100	587
Central South	25.1	7.1	6.1	0.9	60.8	100	3930
<b>Residence</b>							
Urban	29.2	7.3	8.2	0.8	54.6	100	2016
Rural	21.5	6.2	3.9	0.9	67.6	100	3608
<b>Age</b>							
6-11 months	18.0	2.0	2.2	0.7	77.2	100	646
12-23 months	22.8	4.4	4.4	0.7	67.7	100	1086
24-35 months	26.6	5.9	5.7	0.7	61.0	100	1264
36-47 months	25.2	8.5	5.9	0.7	59.7	100	1307
48-59 months	25.1	9.4	7.2	1.4	57.0	100	1322
<b>Mother's education</b>							
None	22.8	6.0	4.4	0.9	65.8	100	3495
Koranic	22.5	6.9	7.0	0.6	62.9	100	1021
Primary	29.5	8.2	7.1	0.7	54.5	100	742
Secondary +	35.7	9.3	8.4	0.2	46.4	100	176
Non standard curriculum	27.0	6.7	6.3	1.8	58.2	100	173
<b>Wealth index quintiles</b>							
Poorest	17.9	5.5	3.8	0.5	72.3	100	1150
Second	24.2	5.8	3.1	0.8	66.0	100	1148
Middle	23.0	6.1	5.8	1.6	63.5	100	1149
Fourth	28.8	7.3	5.4	0.6	57.9	100	1155
Richest	27.5	8.3	9.6	0.7	53.9	100	1023
<b>Total</b>	<b>24.2</b>	<b>6.6</b>	<b>5.4</b>	<b>0.8</b>	<b>62.9</b>	<b>100</b>	<b>5624</b>

\* MICS indicator 42

Total includes 17 children missing information on mother's education who are not shown separately.

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

**Table NU.7: Post-partum mothers' vitamin A supplementation**

Percentage of women aged 15-49 years with a live birth in the 2 years preceding the survey by whether they received a high dose vitamin A supplement before the infant was 8 weeks old, Somalia, 2006

	Received vitamin A supplement*	Not sure if received vitamin A	Number of women aged 15-49 years
<b>Zone</b>			
North West	13.1	2.8	496
North East	6.0	1.1	269
Central South	7.7	1.9	1560
<b>Residence</b>			
Urban	15.1	2.3	852
Rural	4.9	1.8	1472
<b>Education</b>			
None	6.9	2.0	1460
Koranic	7.3	2.8	369
Primary	16.4	1.2	314
Secondary +	23.4	3.8	64
Non standard curriculum	7.7	2.0	75
<b>Wealth index quintiles</b>			
Poorest	4.7	2.3	435
Second	4.7	1.8	468
Middle	5.1	1.5	483
Fourth	10.4	1.7	508
Richest	19.0	2.8	430
<b>Total</b>	<b>8.7</b>	<b>2.0</b>	<b>2325</b>

**\*MICS indicator 43**

Total includes 43 women missing information on education who are not shown separately.

**Table NU.8: Child size at birth**

Percentage of live births in the 2 years preceding the survey by mother's estimate of baby size at birth, Somalia, 2006

	Size of child at birth as estimated by the mother							Total	Number of births
	Weighed at birth*	Very large	Larger than average	Average	Smaller than average	Very small	Don't know/missing		
<b>Zone</b>									
North West	12.2	11.3	10.0	64.5	6.0	5.6	2.7	100	496
North East	2.7	6.3	3.9	70.4	6.8	11.3	1.2	100	269
Central South	2.4	5.1	3.3	53.7	11.7	20.9	5.2	100	1560
<b>Residence</b>									
Urban	10.2	9.6	6.3	53.4	9.0	19.1	2.6	100	852
Rural	1.3	4.8	4.0	60.6	10.5	15.0	5.2	100	1472
<b>Mother's education</b>									
None	2.1	5.9	4.3	57.3	10.3	17.3	4.9	100	1460
Koranic	3.0	5.2	3.3	58.9	9.6	18.6	4.3	100	369
Primary	13.4	9.9	7.3	58.5	9.2	12.9	2.2	100	314
Secondary +	25.5	7.5	10.8	63.5	6.2	8.3	3.8	100	64
Non standard curriculum	7.6	12.5	10.0	48.8	12.9	15.2	0.6	100	75
<b>Wealth index quintiles</b>									
Poorest	1.4	5.8	3.8	52.8	14.1	14.1	9.2	100	435
Second	0.8	4.0	2.8	61.3	9.1	18.6	4.2	100	468
Middle	1.8	4.0	3.4	64.4	10.6	13.9	3.7	100	483
Fourth	3.2	8.4	5.4	60.2	8.6	14.3	3.0	100	508
Richest	16.4	10.7	8.9	49.6	7.4	22.2	1.2	100	430
<b>Total</b>	<b>4.5</b>	<b>6.6</b>	<b>4.8</b>	<b>57.9</b>	<b>9.9</b>	<b>16.5</b>	<b>4.2</b>	<b>100</b>	<b>2325</b>

\*\* MICS indicator 10

Total includes 43 children missing information on mother's education who are not shown separately.

**Table CH.1: Vaccinations in first year of life**

Percentage of children aged 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, Somalia, 2006

	Percentage of children who received:											Number of children aged 12-23 months
	BCG*	DPT1	DPT2	DPT3**	Polio0	Polio1	Polio2	Polio3***	Measles****	All*****	None	
<b>Vaccinated at any time before the survey</b>												
<i>According to:</i>												
Vaccination card	8	8.1	7.6	7.4	6.6	8	7.8	7.5	7.1	7.8	0	1086
Mother's report	21.9	16.3	11.2	6.7	8.5	53.9	46.3	31.1	22.3	4	36.3	1086
Either	29.9	24.4	18.8	14.2	15.2	61.9	54.1	38.6	29.4	11.7	36.3	1086
Vaccinated by 12 months of age	25.7	20.4	16.6	12.2	15.2	51.5	47.7	34.8	18.9	4.8	37.3	1086

\* MICS indicator 25

\*\* MICS indicator 27

\*\*\* MICS indicator 26

\*\*\*\* MICS indicator 28; MDG indicator 15



**Table CH.2: Vaccinations by background characteristics**

Percentage of children aged 12-23 months currently vaccinated against childhood diseases, Somalia, 2006

	Percentage of children who received:											Percent with health card	Number of children aged 12-23 months
	BCG	DPT1	DPT2	DPT3	Polio0	Polio1	Polio2	Polio3	Measles	All	None		
<b>Sex</b>													
Male	29.9	25.3	20.4	15.9	17.3	61.3	54.6	38.7	29.9	13.9	37.4	9.6	577
Female	29.9	23.4	16.9	12.3	12.7	62.7	53.4	38.5	28.8	9.3	35	6.3	510
<b>Zone</b>													
North West	36.7	25.3	11.1	4.8	16.4	72.2	60.3	35.1	33.2	3.3	24.6	1.3	253
North East	18.6	16	11.8	6.4	7.3	40.3	36.7	23.7	15.9	5.2	58.1	2.4	124
Central South	29.5	25.5	22.7	18.8	16.1	62.1	54.9	42.4	30.5	15.9	36.6	11.4	709
<b>Residence</b>													
Urban	47	42.3	34.3	26.4	27.7	75.4	70.1	53.8	40.4	21.9	23.1	15.1	410
Rural	19.6	13.6	9.4	6.8	7.6	53.9	44.6	29.6	23	5.7	44.2	3.8	677
<b>Mother's education</b>													
None	23.5	18.6	13.9	10.6	12.5	58.1	48.9	34.2	23.8	8.8	39.9	6.3	635
Koranic	28.8	23	19	15.6	16.7	57	51.1	37.2	29	12.5	41.6	10.8	209
Primary	44.9	36.4	27	19.2	15.7	75.5	70.4	49.4	42	15.2	23.6	9.3	163
Secondary	63.2	58.9	45.6	24.7	41	83.8	75.1	56	48.4	19.4	14.6	5.3	41
Non Standard Curriculum	40.8	37.5	34.9	32.3	20.9	70.2	64.4	55.9	52.8	31.5	26.5	20.9	36
<b>Wealth index quintiles</b>													
Poorest	18.7	13.2	10.2	5.4	8.2	45	34.9	22.5	22.2	5.4	52.5	3	200
Second	14.5	11	6.5	6.5	5.9	53.4	43.7	26.6	18.9	4.5	45.9	3.7	216
Middle	27.9	20.7	16.5	14.6	15.8	61.2	54.9	43.1	27.4	13.1	36.9	11.1	217
Fourth	33.7	26.9	19.4	14.7	16.1	69.8	63.3	45	30.9	13.1	29.1	9.8	233
Richest	53.1	48.6	40.1	28.8	28.9	78.4	72.4	54.8	47.4	22.2	18.9	12	220
<b>Total</b>	29.9	24.4	18.8	14.2	15.2	61.9	54.1	38.6	29.4	11.7	36.3	8	1086

Total includes 2 children missing information on mother's education who are not shown separately.

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

**Table CH.3: Neonatal tetanus protection**

Percentage of mothers with a birth in the last 12 months protected against neonatal tetanus, Somalia, 2006

	Percent of mothers with a birth in the last 12 months who:						Number of mothers
	Received at least 2 doses during last pregnancy	Received at least 2 doses, the last within prior 3 years	Received at least 3 doses, last within prior 5 years	Received at least 4 doses, last within prior 10 years	Received at least 5 doses during lifetime	Protected against tetanus*	
<b>Zone</b>							
North West	10.9	4.7	0.2	0.4	0.2	16.5	496
North East	14.8	5.7	0.3	0.3	0.2	21.3	269
Central South	20.5	6.4	1.4	1.7	0.3	30.2	1560
<b>Residence</b>							
Urban	33.0	11.0	1.9	2.3	0.4	48.5	852
Rural	9.0	3.0	0.5	0.6	0.2	13.4	1472
<b>Mother's Age</b>							
15-19	20.7	3.4	0.5	0.0	0.0	24.6	240
20-24	19.1	6.2	0.8	0.0	0.0	26.1	630
25-29	20.5	5.2	1.7	0.6	0.2	28.2	631
30-34	15.9	8.2	0.9	3.3	0.6	28.9	391
35-39	11.9	5.4	0.6	3.6	0.0	21.4	279
40 +	12.8	6.7	0.8	1.4	1.8	23.5	154
<b>Mother's education</b>							
None	14.4	4.2	0.4	0.9	0.2	20.0	1460
Koranic	17.0	6.0	2.6	1.4	0.3	27.2	369
Primary	31.4	10.8	1.8	2.6	0.5	47.1	314
Secondary +	32.0	18.2	1.9	4.4	0.0	56.4	64
Non standard curriculum	23.5	12.6	2.3	0.0	1.8	40.1	75
<b>Wealth index quintiles</b>							
Poorest	7.4	1.1	0.0	0.0	0.0	8.6	435
Second	8.6	2.7	0.3	0.3	0.3	12.0	468
Middle	15.2	4.5	0.2	0.9	0.1	20.9	483
Fourth	23.0	9.2	1.5	2.2	0.2	36.1	508
Richest	35.3	12.0	3.0	2.8	0.8	53.9	430
<b>Total</b>	17.8	5.9	1.0	1.2	0.3	26.3	2325

\* MICS indicator 32

Total includes 43 children missing information on mother's education who are not shown separately.

**Table CH.4: Oral rehydration treatment**

Percentage of children aged 0-59 months with diarrhoea in the last two weeks and treatment with oral rehydration solution (ORS) or other oral rehydration treatment (ORT), Somalia, 2006

	Had diarrhoea in last two weeks	Number of children aged 0-59 months	Children with diarrhoea who received:					ORT Use Rate *	Number of children aged 0-59 months with diarrhoea
			Fluid from ORS packet	Recommended homemade fluid	Pre-packaged ORS fluid	No treatment			
<b>Sex</b>									
Male	22.5	3275	9.0	10.3	7.8	78.3	21.7	736	
Female	19.7	3030	9.2	8.2	6.6	80.3	19.7	597	
<b>Zone</b>									
North West	13.1	1244.4	22.9	26.2	15.4	49.9	50.1	163	
North East	11.4	666.4	16.0	18.7	12.9	63.4	36.6	76	
Central South	24.9	4394.3	6.6	6.2	5.7	84.6	15.4	1095	
<b>Residence</b>									
Urban	16.9	2254	18.6	16.5	11.9	62.4	37.6	380	
Rural	23.5	4051	5.3	6.6	5.4	85.8	14.2	954	
<b>Age</b>									
< 6 months	18.3	681	6.9	5.0	7.3	82.8	17.2	124	
0-11 months	30.8	646	11.9	11.0	5.3	76.5	23.5	199	
12-23 months	28.0	1086	7.1	6.0	7.7	82.9	17.1	304	
24-35 months	23.9	1264	8.7	9.4	6.5	79.1	20.9	303	
36-47 months	17.5	1307	11.0	13.3	8.2	75.0	25.0	229	
48-59 months	13.3	1322	9.1	11.3	8.6	78.7	21.3	175	
<b>Mother's education</b>									
None	22.6	3924	7.2	7.5	7.1	83.0	17.0	887	
Koranic	22.6	1151	10.0	8.2	4.1	80.5	19.5	261	
Primary +	15.3	1015	16.6	18.2	11.8	60.0	40.0	156	
Non Standard Curriculum	(13.9)	(194)	(14.2)	(29.2)	(9.7)	(61.1)	(38.9)	27	
<b>Wealth index quintiles</b>									
Poorest	25.9	1266	3.7	3.9	4.3	90.1	9.9	328	
Second	25.5	1294	4.0	4.1	3.9	91.0	9.0	330	
Middle	23.1	1304	8.9	12.6	6.8	76.9	23.1	302	
Fourth	16.8	1308	15.5	17.6	12.7	61.6	38.4	219	
Richest	13.6	1132	22.7	14.6	13.9	59.9	40.1	154	
<b>Total</b>	21.2	6305	9.1	9.4	7.3	79.2	20.8	1334	

**\* MICS indicator 33**

Total includes 3 children missing information on mother's education who are not shown separately.

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

**Table CH.5: Home management of diarrhoea**

Percentage of children aged 0-59 months with diarrhoea in the last two weeks who took increased fluids and continued to feed during the episode, Somalia, 2006

	Had diarrhoea in last two weeks	Number of children aged 0-59 months	Children with diarrhoea who:				Home management of diarrhoea*	Received ORT or increased fluids AND continued feeding**	Number of children aged 0-59 months with diarrhoea
			Drank more	Drank the same or less	Ate somewhat less, same or more	Ate much less or none			
<b>Sex</b>									
Male	22.5	3275	3.7	93.8	27.8	70.8	1.7	7.0	736
Female	19.7	3030	3.0	94.9	27.7	70.2	1.8	6.4	597
<b>Zone</b>									
North West	13.1	1244.4	3.3	93.9	26.2	70.5	1.2	15.9	163
North East	11.4	666.4	2.7	93.8	35.1	61.7	0.0	13.4	76
Central South	24.9	4394.3	3.4	94.4	27.5	71.1	2.0	4.9	1095
<b>Residence</b>									
Urban	16.9	2254	3.9	94.2	32.5	66.4	1.5	8.8	380
Rural	23.5	4051	3.1	94.3	25.8	72.2	1.9	6.0	954
<b>Age</b>									
0-11 months	24.4	1326	1.9	96.5	19.3	79.5	0.7	4.1	323
12-23 months	28.0	1086	3.0	94.3	27.8	69.5	1.4	5.7	304
24-35 months	23.9	1264	3.8	94.5	28.6	69.9	1.2	5.9	303
36-47 months	17.5	1307	3.8	93.8	34.3	64.8	3.7	11.5	229
48-59 months	13.3	1322	5.4	90.4	33.2	64.3	2.7	8.8	175
<b>Mother's education</b>									
None	22.6	3924	3.5	93.7	24.6	73.5	2.1	6.1	887
Koranic	22.6	1151	1.7	97.2	34.1	64.4	0.9	5.8	261
Primary +	15.3	1015	5.1	92.6	36.4	61.9	1.4	12.6	156
Non Standard Curriculum	(13.9)	(194)	(4.8)	(95.2)	(19.1)	(80.9)	(0)	(0)	27
<b>Wealth index quintiles</b>									
Poorest	25.9	1266	4.4	91.4	21.4	76.2	2.9	5.1	328
Second	25.5	1294	3.1	94.3	26.9	71.6	1.7	4.4	330
Middle	23.1	1304	2.1	97.0	27.8	70.7	1.7	7.2	302
Fourth	16.8	1308	3.9	93.4	25.8	72.2	1.4	9.1	219
Richest	13.6	1132	3.3	96.3	45.7	53.4	0.0	11.2	154
Total	21.2	6305	3.4	94.3	27.7	70.5	1.8	6.8	1334

\* MICS indicator 34

\*\* MICS indicator 35

Total includes 3 children missing information on mother's education who are not shown separately.

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

**Table CH.6: Care seeking for suspected pneumonia**

Percentage of children aged 0-59 months with suspected pneumonia in the last two weeks taken to a health provider, Somalia, 2006

	Had acute respiratory infection <sup>1</sup>	Number of children aged 0-59 months	Children with suspected pneumonia who were taken to:										Number of children aged 0-59 months with suspected pneumonia					
			Public sources					Private sources						Other source				
			Govt. Hospital	Govt. health centre**	Govt. health post**	Village health worker	Other public	Private hospital/clinic	Private physician	Pharmacy	Relative or friend	Trad. Practitioner			Any appropriate provider*			
<b>Sex</b>																		
Male	15.4	3275	2.5	5.1	0.3	1.0	0.1	2.8	3.5	18.9	0.2	1.0	14.4	506				
Female	14.2	3030	1.5	3.1	0.3	1.2	0.0	1.9	3.9	15.5	0.7	1.3	11.4	429				
<b>Zone</b>																		
North West	6.6	1244.4	1.1	0.9	0.0	0.0	0.0	6.9	6.9	13.8	1.5	0.0	15.9	82				
North East	6.3	666.4	8.5	3.0	1.2	2.8	1.1	5.5	2.4	10.3	1.4	0.0	22.0	42				
Central South	18.5	4394.3	1.8	4.6	0.3	1.1	0.0	1.8	3.4	18.1	0.3	1.3	12.3	811				
<b>Residence</b>																		
Urban	13.9	2254	4.4	9.4	0.2	0.0	0.0	5.1	5.9	27.6	0.0	1.3	23.7	313				
Rural	15.4	4051	0.8	1.6	0.4	1.6	0.1	1.0	2.6	12.2	0.6	1.0	7.7	622				
<b>Age</b>																		
0-11 months	13.1	1326	2.1	4.1	1.3	1.9	0.0	2.9	4.5	12.0	0.7	0.6	15.5	174				
12-23 months	16.0	1086	1.9	5.9	0.0	0.3	0.0	3.1	2.7	20.9	0.0	0.0	13.0	173				
24-35 months	16.0	1264	2.8	5.9	0.0	1.2	0.2	3.1	5.8	13.1	0.6	2.0	18.5	203				
36-47 months	14.9	1307	0.7	1.9	0.2	1.4	0.0	1.8	3.6	21.9	0.3	2.1	9.8	195				
48-59 months	14.4	1322	2.7	3.2	0.0	0.5	0.0	1.2	1.8	18.7	0.5	0.7	8.3	190				
<b>Mother's education</b>																		
None	15.4	3924	1.3	3.6	0.2	1.0	0.1	1.6	2.4	15.1	0.5	1.2	9.8	605				
Koranic	17.5	1151	2.6	4.1	0.2	1.0	0.0	2.9	3.0	18.3	0.5	1.5	12.6	201				
Primary+	10.0	1015	5.0	7.8	0.0	0.6	0.0	4.5	13.0	23.5	0.0	0.0	29.5	102				
Non Standard Curriculum	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	25				
<b>Wealth index quintiles</b>																		
Poorest	18.0	1266	0.7	1.2	0.0	0.5	0.0	0.4	2.1	6.5	0.0	1.1	4.6	227				
Second	16.0	1294	0.5	3.1	0.0	2.1	0.0	1.4	1.1	11.1	0.5	2.5	7.7	207				
Middle	14.3	1304	1.2	5.5	1.5	2.1	0.0	0.9	3.3	17.8	1.6	1.6	13.1	187				
Fourth	13.7	1308	2.4	5.5	0.0	0.3	0.3	2.6	8.2	30.6	0.0	0.0	18.8	179				
Richest	11.9	1132	7.4	7.3	0.0	0.0	0.0	9.0	5.0	27.0	0.0	0.0	27.7	135				
<b>Total</b>	14.8	6305	2.0	4.2	0.3	1.1	0.0	2.4	3.7	17.3	0.4	1.1	13.0	935				

\* MICS indicator 23 \*\* In the Central South Zone government hospitals, health centres and posts are currently provided by NGOs/JUN

Total includes 2 children missing information on mother's education who are not shown separately. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

**Table CH.7: Antibiotic treatment of pneumonia**

Percentage of children aged 0-59 months with suspected pneumonia who received antibiotic treatment, Somalia, 2006

	Percentage of children aged 0-59 months with suspected pneumonia who received antibiotics in the last two weeks*	Number of children aged 0-59 months with suspected pneumonia in the two weeks prior to the survey
<b>Sex</b>		
Male	35.2	506
Female	29.0	429
<b>Region</b>		
North West	27.7	82
North East	26.1	42
Central South	33.1	811
<b>Residence</b>		
Urban	49.0	313
Rural	24.0	622
<b>Age</b>		
0-11 months	30.6	174
12-23 months	34.1	173
24-35 months	32.8	203
36-47 months	33.7	195
48-59 months	30.5	190
<b>Mother's education</b>		
None	28.3	605
Koranic	34.5	201
Primary	39.7	83
Secondary +	(*)	18
Non Standard Curriculum	(*)	25
<b>Wealth index quintiles</b>		
Poorest	13.8	227
Second	22.7	207
Middle	34.7	187
Fourth	49.3	179
Richest	52.9	135
<b>Total</b>	<b>32.4</b>	<b>935</b>

**\* MICS indicator 22**

Total includes 2 children missing information on mother's education who are not shown separately.

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

**Table CH.7A: Knowledge of the two danger signs of pneumonia**

Percentage of mothers/caretakers of children aged 0-59 months by knowledge of types of symptoms for taking a child immediately to a health facility, and percentage of mothers/caretakers who recognize fast and difficult breathing as signs for seeking care immediately, Somalia, 2006

Zone	Percentage of mothers/caretakers of children aged 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 aged 0-59 months
	Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficult breathing	Has blood in stool	Is drinking poorly	Is coughing	Has diarrhoea	Mothers/caretakers who recognize the two danger signs of pneumonia*		
<b>North West</b>	39.6	47.4	46.6	31.2	37.6	32.2	26.8	46.9	61.6	19.6	1244	
<b>North East</b>	34.5	39.4	49.3	17.8	22.0	17.8	17.1	35.6	59.1	5.4	666	
<b>Central South</b>	38.1	39.8	40.1	29.1	31.0	30.1	27.8	27.7	34.6	15.1	4394	
<b>Residence</b>												
Urban	35.8	39.4	44.1	25.7	27.7	25.7	19.5	29.8	40.5	11.8	2254	
Rural	39.3	42.3	41.4	29.8	33.3	31.2	30.4	33.7	43.7	16.8	4051	
<b>Mother's education</b>												
None	39.6	42.6	42.2	30.3	33.8	30.8	28.7	33.7	43.2	16.8	3924	
Koranic	37.0	38.3	38.3	25.3	26.1	25.9	24.1	26.9	38.6	11.5	1151	
Primary	34.2	38.9	47.2	24.8	28.0	27.5	22.1	32.6	45.1	12.3	821	
Secondary +	33.8	36.4	48.3	23.3	29.2	31.4	23.6	43.4	43.8	13.1	194	
Non standard curriculum	32.9	43.4	42.0	27.2	26.6	21.8	17.9	25.4	41.1	10.7	194	
<b>Wealth index quintiles</b>												
Poorest	39.1	41.4	42.5	32.0	37.0	32.6	32.4	29.7	38.7	18.3	1266	
Second	39.7	44.1	40.0	30.7	31.9	30.2	30.8	36.0	42.8	15.9	1294	
Middle	40.5	40.9	41.7	28.9	31.5	32.5	27.4	34.5	42.9	15.8	1304	
Fourth	38.5	41.7	46.8	28.6	30.9	27.5	24.3	31.5	46.4	16.0	1308	
Richest	31.6	37.9	40.6	20.6	24.7	22.5	16.5	29.7	41.7	8.1	1132	
<b>Total</b>	38.0	41.3	42.4	28.3	31.3	29.2	26.5	32.3	42.5	15.0	6305	

\* Percentage of mothers/caretakers who state fast AND difficult breathing as signs for taking a child to a health facility immediately

Total includes 21 children missing information on mother's education who are not shown separately.

**Table CH.9: Solid fuel use**

Percent distribution of households according to type of cooking fuel, and percentage of households using solid fuels for cooking, Somalia, 2006

	Percentage of households using:										Number of households
	Electricity	Liquified Petroleum Gas (LPG)	Kerosene	Charcoal	Wood	Straw, shrubs, grass	Agricultural crop residue	Total	Solid fuels for cooking*		
<b>Zone</b>											
North West	0.2	0.1	0.4	43.7	44.9	10.2	0.0	100	98.9	1455	
North East	0.3	0.0	0.1	45.1	54.1	0.2	0.0	100	99.4	687	
Central South	0.0	0.0	0.1	27.0	71.6	1.2	0.1	100	99.9	3827	
<b>Residence</b>											
Urban	0.2	0.1	0.3	79.1	19.3	0.8	0.0	100	99.3	2113	
Rural	0.0	0.0	0.1	8.0	87.1	4.6	0.1	100	99.8	3856	
<b>Education of household head</b>											
None	0.1	0.0	0.2	27.9	67.4	4.2	0.1	100	99.6	2323	
Koranic	0.0	0.0	0.1	19.3	77.3	3.2	0.0	100	99.8	1878	
Primary	0.3	0.0	0.0	42.9	54.4	2.0	0.3	100	99.6	840	
Secondary +	0.1	0.1	0.3	74.3	23.1	1.8	0.0	100	99.2	643	
Non standard curriculum	0.0	0.0	1.1	44.4	52.1	1.1	0.0	100	97.6	170	
<b>Wealth index quintiles</b>											
Poorest	0.0	0.0	0.1	0.0	97.8	2.1	0.0	100	99.9	1155	
Second	0.0	0.0	0.0	0.1	93.0	6.8	0.0	100	99.9	1325	
Middle	0.0	0.0	0.2	13.8	79.9	5.4	0.4	100	99.5	1245	
Fourth	0.0	0.0	0.4	66.0	32.3	1.1	0.0	100	99.4	1204	
Richest	0.4	0.2	0.2	97.2	1.9	0.0	0.0	100	99.1	1039	
<b>Total</b>	<b>0.1</b>	<b>0.0</b>	<b>0.2</b>	<b>33.1</b>	<b>63.1</b>	<b>3.3</b>	<b>0.1</b>	<b>100</b>	<b>99.6</b>	<b>5969</b>	

\* MICS indicator 24; MDG Indicator 29



**Table CH.10: Solid fuel use by type of stove or fire**

Percentage of households using solid fuels for cooking by type of stove or fire, Somalia, 2006

	Percentage of households using solid fuels for cooking:				Total	Number of households using solid fuels for cooking
	Closed stove with chimney	Open stove or fire with chimney or hood	Open stove or fire with no chimney or hood	Other stove		
<b>Zone</b>						
North West	0.0	7.0	92.6	0.2	100	1439
North East	0.1	3.3	96.4	0.0	100	682
Central South	0.0	10.5	89.4	0.0	100	3823
<b>Residence</b>						
Urban	0.0	10.3	89.5	0.1	100	2097
Rural	0	8.0	91.8	0.0	100.0	3847
<b>Education of household head</b>						
None	0.0	8.6	91.1	0.1	100	2314
Koranic	0.0	7.8	92.0	0.1	100	1875
Primary	0.0	10.0	90.0	0.0	100	837
Secondary +	0.1	10.6	89.2	0.0	100	639
Non standard curriculum	0.0	12.0	88.0	0.0	100	166
<b>Wealth index quintiles</b>						
Poorest	0.0	10.1	89.7	0.0	100	1154
Second	0.0	7.3	92.5	0.1	100	1324
Middle	0.0	9.6	90.3	0.1	100	1239
Fourth	0.0	7.7	92.1	0.1	100	1197
Richest	0.0	9.8	90.1	0.0	100	1029
<b>Total</b>	0.0	8.8	91.0	0.1	100	5944

**Table CH.11: Availability of insecticide treated nets**

Percentage of households with at least one insecticide treated net (ITN), Somalia, 2006

	Percentage of households with at least one mosquito net	Percentage of households with at least one long lasting insecticide treated net (ITN)*	Percentage of households with at least one insecticide treated net (ITN)*	Number of households
<b>Zone</b>				
North West	28.3	7.3	9.1	1455
North East	35.9	7.8	12.6	687
Central South	17.3	12.2	13.2	3827
<b>Residence</b>				
Urban	26.9	14.4	16.4	2113
Rural	19.5	8.3	9.8	3856
<b>Education of household head</b>				
None	16.9	6.7	8.2	2323
Koranic	19.6	10.6	11.6	1878
Primary	30.1	16.1	17.5	840
Secondary +	32.8	15.0	19.1	643
Non standard curriculum	29.9	15.0	15.7	170
<b>Wealth index quintiles</b>				
Poorest	12.7	5.1	5.5	1155
Second	14.8	7.1	8.0	1325
Middle	26.7	12.0	14.0	1245
Fourth	29.7	14.7	17.6	1204
Richest	27.5	14.1	16.4	1039
<b>Total</b>	<b>22.1</b>	<b>10.5</b>	<b>12.2</b>	<b>5969</b>

\*MICS indicator 36

**Table CH.12: Children sleeping under bednets**

Percentage of children aged 0-59 months who slept under an insecticide treated net during the previous night, Somalia, 2006

	Percentage of children who:						Number of children aged 0-59 months
	Slept under a bednet*	Slept under a long lasting insecticide treated net	Slept under an insecticide treated net**	Slept under a pretreated insecticide net	Slept under an untreated net	Did not sleep under a bednet	
<b>Sex</b>							
Male	18.4	9.4	11.5	2.1	6.7	81.4	3275
Female	17.8	9.0	11.3	2.3	6.4	81.9	3030
<b>Region</b>							
North West	24.5	7.5	9.8	2.3	14.1	75.1	1244
North East	31.8	7.3	13.6	6.4	18.0	68.0	666
Central South	14.2	10.0	11.5	1.5	2.7	85.6	4394
<b>Residence</b>							
Urban	25.4	14.6	17.6	2.9	7.5	74.2	2254
Rural	14.1	6.2	7.9	1.8	6.0	85.8	4051
<b>Age</b>							
0-11 months	22.5	11.5	13.6	2.1	8.7	77.3	1326
12-23 months	20.0	10.1	12.9	2.9	6.8	79.5	1086
24-35 months	17.5	8.7	10.4	1.8	6.9	82.1	1264
36-47 months	16.7	8.8	10.7	1.9	5.8	83.3	1307
48-59 months	14.1	7.0	9.4	2.4	4.7	85.6	1322
<b>Wealth index quintiles</b>							
Poorest	7.6	2.2	2.4	0.2	5.1	92.2	1266
Second	11.3	5.8	7.6	1.8	3.7	88.6	1294
Middle	18.8	9.3	12.4	3.2	6.2	80.9	1304
Fourth	27.4	15.0	18.3	3.3	8.8	72.4	1308
Richest	26.1	14.1	16.5	2.4	9.2	73.5	1132
<b>Total</b>	18.1	9.2	11.4	2.2	6.6	81.6	6305

\* MICS indicator 38

\*\* MICS indicator 37; MDG indicator 22

**Table CH.13: Treatment of children with anti-malarial drugs**

Percentage of children aged 0-59 months who were ill with fever in the last two weeks who received anti-malarial drugs, Somalia, 2006

		Children with a fever in the last two weeks who were treated with:												Number of children with fever in last two weeks		
		Anti-malarials:						Other medications:								
Sex	Had a fever in last two weeks	Number of children aged 0-59 months	SP/ Fansidar	Chloroquine	Amodia- quine	Quinine	Artemis- inin based combin- ations	Other anti- malarial	Any approp- iate anti- malarial drug	Paracet- amol/ Panadol/ Acetamin- ophen	Aspirin	Ibuprofen	Other	Don't know	Any appropriate anti-malarial drug within 24 hours of onset of symptoms*	
Male	21.9	3275	2.2	7.0	0.2	0.5	1.0	0.2	9.7	4.5	3.7	0.2	0.7	0.9	3.1	717
Female	21.7	3030	2.0	3.9	0.2	0.4	0.6	0.1	6.0	4.9	3.9	0.2	0.3	0.4	2.6	659
<b>Zone</b>																
North West	9.4	1244	0.8	1.6	0.0	0.0	0.8	0.0	3.2	2.6	9.3	0.0	3.4	4.4	1.6	117
North East	14.5	666	2.4	3.3	0.5	1.0	0.6	1.0	8.4	7.3	2.3	0.3	0.0	1.8	4.9	96
Central South	26.5	4394	2.2	6.1	0.2	0.4	0.9	0.1	8.4	4.7	3.4	0.2	0.2	0.2	2.8	1163
<b>Residence</b>																
Urban	15.8	2254	4.8	8.3	0.6	1.1	2.0	0.0	14.3	10.0	7.0	0.1	1.1	1.5	7.0	356
Rural	25.2	4051.2	1.1	4.5	0.0	0.2	0.5	0.2	5.7	2.9	2.7	0.3	0.3	0.4	1.4	1020
<b>Age in months</b>																
0-11	19.8	1326	1.0	2.7	0.5	0.0	0.0	0.2	4.3	3.1	4.3	0.0	0.5	0.8	2.0	262
12-24	23.1	1086	1.1	4.2	0.2	0.2	1.2	0.0	6.7	4.9	4.3	0.1	0.4	1.0	3.1	251
24-35	23.6	1264	2.1	6.1	0.0	0.9	0.7	0.4	9.1	4.0	3.3	0.5	0.0	0.1	2.3	299
36-47	21.5	1307	1.8	7.8	0.4	1.1	1.1	0.0	9.8	3.2	3.5	0.5	1.1	0.9	2.3	281
48-59	21.4	1322	4.3	6.2	0.0	0.0	1.2	0.2	9.2	8.3	3.7	0.0	0.4	0.7	4.6	283
<b>Mother's Education</b>																
None	22.6	3924	2.0	4.9	0.1	0.6	0.7	0.1	7.1	3.7	3.6	0.2	0.4	0.6	2.4	888
Koranic	25.3	1151	2.9	6.6	0.5	0.0	0.8	0.0	9.3	5.2	3.9	0.5	0.0	0.6	2.6	291
Primary or above	15.6	1015.0	1.1	5.3	0.0	0.3	2.1	0.0	8.4	8.6	5.1	0.0	1.9	1.4	5.6	158
Non standard curriculum	17.7	193.8	3.4	10.4	0.0	0.0	0.0	0.0	10.4	9.7	2.7	0.0	0.0	1.7	3.5	34
<b>Wealth index quintiles</b>																
Poorest	27.3	1266	0.3	3.5	0.0	0.0	0.0	0.3	3.8	1.4	0.8	0.4	0.4	0.7	0.3	346
Second	26.0	1294	2.6	4.4	0.0	0.7	1.4	0.4	7.2	4.2	2.8	0.0	0.0	0.3	1.9	336
Middle	25.2	1304	1.2	4.9	0.0	0.0	0.0	0.0	6.1	3.5	3.6	0.4	0.0	0.7	1.8	328
Fourth	16.3	1308	2.5	10.9	0.7	1.6	2.7	0.0	16.0	9.5	8.2	0.1	1.6	0.6	6.0	214
Richest	13.5	1132	6.3	5.9	0.8	0.3	0.8	0.0	11.6	9.1	7.0	0.0	1.2	1.4	8.7	152
<b>Total</b>	<b>21.8</b>	<b>6305</b>	<b>2.1</b>	<b>5.5</b>	<b>0.2</b>	<b>0.4</b>	<b>0.8</b>	<b>0.2</b>	<b>7.9</b>	<b>4.7</b>	<b>3.8</b>	<b>0.2</b>	<b>0.5</b>	<b>0.7</b>	<b>2.9</b>	<b>1376</b>

**\* MICS indicator 39; MDG indicator 22**

Total includes 5 children missing information on mother's education who are not shown separately.

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

**Table CH.14: Intermittent preventive treatment for malaria**

Percentage of women aged 15-49 years who gave birth during the two years preceding the survey who received intermittent preventive therapy (IPT) for malaria during pregnancy, Somalia, 2006

	Percentage of pregnant women who took:						Number of women who gave birth in prior two years
	Medicine to prevent malaria during pregnancy	SP/Fansidar only one time	SP/Fansidar two or more times*	Chloroquine	Other medicines	Don't know	
<b>Zone</b>							
North West	4.9	1.1	0.5	1.9	0.2	1.2	496
North East	3.9	0.8	1.0	1.4	0.0	0.5	269
Central South	7.0	1.4	1.1	3.5	0.5	0.6	1560
<b>Residence</b>							
Urban	7.2	1.3	1.4	3.6	0.4	0.5	852
Rural	5.7	1.2	0.7	2.5	0.4	0.8	1472
<b>Mother's Education</b>							
None	5.2	1.0	0.7	2.6	0.4	0.6	1460
Koranic	8.5	1.7	1.2	3.2	1.0	1.3	369
Primary	7.8	2.7	1.4	3.2	0.0	0.6	314
Secondary +	6.8	0.0	2.8	3.9	0.0	0.0	64
Non standard curriculum	9.1	0.0	1.6	5.8	0.0	0.0	75
<b>Wealth index quintiles</b>							
Poorest	4.8	0.5	1.2	1.5	0.3	1.2	435
Second	6.4	1.6	0.5	3.5	0.6	0.4	468
Middle	5.8	1.7	0.9	2.5	0.0	0.5	483
Fourth	8.0	1.4	1.3	3.5	0.7	1.4	508
Richest	5.8	1.1	0.8	3.3	0.3	0.0	430
<b>Total</b>	<b>6.2</b>	<b>1.3</b>	<b>0.9</b>	<b>2.9</b>	<b>0.4</b>	<b>0.7</b>	<b>2325</b>

**\* MICS indicator 40**

Total includes 43 women missing information on mother's education who are not shown separately.

**Table CH.14A: Pregnant women sleeping under bednets**

Percentage of pregnant women who slept under a bednet regularly during their last pregnancy, Somalia, 2006

	Slept under a bednet	Number of women who gave birth in two years preceding survey
<b>Zone</b>		
North West	23.3	496
North East	30.4	269
Central South	12.8	1560
<b>Residence</b>		
Urban	20.7	852
Rural	15.0	1472
<b>Age</b>		
15-19	17.1	240
20-24	20.0	630
25-29	17.4	631
30-34	15.4	391
35-39	11.7	279
40-44	17.5	138
45-49	(*)	16
<b>Education</b>		
None	13.4	1460
Koranic	23.4	369
Primary	27.6	314
Secondary +	20.9	64
Non Standard Curriculum	16.2	75
<b>Wealth index quintiles</b>		
Poorest	8.2	435
Second	14.9	468
Middle	19.3	483
Fourth	21.4	508
Richest	20.9	430
<b>Total</b>	17.1	2325

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

**Table CH.15: Knowledge of symptoms relating to malaria**

Percentage of mothers/caretakers of children aged 0-59 months by knowledge of types of symptoms of malaria, Somalia, 2006

	Reported symptoms of malaria								Number of mothers/ caretakers of children aged 0-59 months
	Fever/ sweats	Headaches	Chills/ shivers	Neckache	Weakness/ tiredness	Loss of appetite	Bitterness in the mouth	Vomiting/ nausea	
<b>Zone</b>									
North West	72.9	37.4	41.0	23.2	20.1	22.2	29.8	41.4	1244
North East	73.8	32.5	22.7	9.3	15.0	21.5	32.2	56.9	666
Central South	63.0	40.2	40.8	27.7	32.0	31.0	37.8	47.4	4394
<b>Residence</b>									
Urban	61.9	38.1	38.5	21.5	22.1	21.6	31.1	43.1	2254
Rural	68.4	39.2	39.1	26.8	31.0	31.9	38.2	49.5	4051
<b>Mother's education</b>									
None	67.1	39.7	40.8	26.8	29.9	30.0	36.8	49.0	3924
Koranic	62.3	37.4	35.0	22.6	25.7	27.4	35.6	41.9	1151
Primary	65.5	36.5	37.0	20.0	22.6	21.4	30.6	46.0	821
Secondary +	69.1	39.7	36.5	24.5	25.6	29.1	37.9	50.7	194
Non standard curriculum	66.6	37.5	35.4	20.2	23.0	26.3	31.7	45.5	194
<b>Wealth index quintiles</b>									
Poorest	68.8	37.2	43.4	30.5	34.4	33.3	37.4	47.5	1266
Second	67.0	40.6	36.6	26.8	30.0	32.7	39.7	49.5	1294
Middle	67.4	41.1	40.5	25.6	30.4	28.9	37.3	48.8	1304
Fourth	68.7	39.8	37.9	23.9	26.5	27.5	36.3	48.0	1308
Richest	57.4	34.8	35.9	16.6	16.5	17.6	26.2	41.7	1132
<b>Total</b>	66.1	38.8	38.9	24.9	27.8	28.2	35.6	47.2	6305

Total includes 21 children missing information on mother's education who are not shown separately.

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

**Table CH.16: Knowledge and attitudes towards polio vaccination**

Percentage of mothers/caretakers who had heard of polio and agree to give their child repeat vaccinations and breakdown of percentage of mother's/caretakers reporting who the key decision maker is over whether to vaccinate the child, Somalia, 2006

Zone	Heard of polio	Number of mothers/caretakers	Agree to repeat vaccinations of polio	Ever refused to vaccinate their child against polio			Who makes the decision in the home to vaccinate children				Number of mothers/caretakers who have heard of polio
				Never	Once	Several times	Father only	Mother only	Father and mother	Grand parents	
North West	88.9	1244	82.8	80.1	7.0	9.4	27.4	41.7	23.3	3.0	1106
North East	82.9	666	59.5	65.5	9.6	23.8	40.0	27.4	28.3	2.5	552
Central South	80.2	4394	90.8	87.1	5.6	6.0	53.4	18.0	19.2	4.2	3522
<b>Residence</b>											
Urban	84.4	2254	86.1	82.9	6.0	9.5	38.9	34.3	18.9	4.4	1902
Rural	80.9	4051	85.6	83.6	6.5	8.1	50.1	18.8	22.4	3.3	3279
<b>Mother's education</b>											
None	82.7	3924	86.1	83.3	6.8	8.2	47.2	23.2	20.4	4.3	3246
Koranic	77.1	1151	87.1	82.7	4.9	10.7	47.9	21.4	21.8	4.2	888
Primary	85.9	821	84.0	83.4	5.2	9.3	39.2	31.0	24.5	1.2	705
Secondary +	82.8	194	85.6	82.7	7.3	7.2	44.6	33.4	19.6	0.7	161
Non standard curriculum	84.7	194	80.7	84.4	8.3	5.4	42.8	28.2	20.5	3.6	164
<b>Wealth index quintiles</b>											
Poorest	78.6	1266	85.3	86.3	5.2	6.3	54.3	17.1	21.6	3.1	996
Second	83.9	1294	88.0	86.2	6.4	5.9	56.6	14.4	20.2	3.7	1086
Middle	81.1	1304	86.9	81.0	7.5	10.2	45.8	20.4	22.9	3.7	1058
Fourth	84.7	1308	84.7	80.8	7.8	9.7	38.2	35.5	19.7	3.6	1107
Richest	82.5	1132	83.8	82.4	4.4	11.2	33.8	35.8	21.6	4.7	934
<b>Total</b>	82.2	6305	85.8	83.3	6.3	8.6	46.1	24.3	21.2	3.7	5181

Total includes 18 children missing information on mother's education who are not shown separately.



**Table EN.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, Somalia, 2007

	Main source of drinking water													Improved source of drinking water*	Number of household members					
	Improved sources						Unimproved sources													
	Piped into dwelling	Piped into yard/plot	Public tap/stand-pipe	Tube-well/bore-hole	Protected well	Protected spring	Rain-water	Bottled water <sup>1</sup>	Unprotected well	Unprotected spring	Berkad	Balli	Tanker truck	Cart with tank/drum	Surface water	Bottled water <sup>1</sup>	Other	Total		
<b>Zone</b>																				
North West	15.0	2.1	18.4	3.0	1.6	0.2	0.3	0.0	11.8	3.5	30.2	2.1	10.1	0.9	0.1	0.0	0.8	100	40.5	8616
North East	8.8	2.3	6.1	0.7	4.9	1.5	0.7	0.0	7.9	2.9	43.2	0.2	13.6	2.5	4.6	0.1	0.0	100	25.0	3535
Central South	11.4	3.3	4.2	1.7	4.9	0.0	0.0	0.1	22.2	0.5	5.5	3.2	0.7	8.7	28.4	0.2	4.7	100	25.5	21809
<b>Residence</b>																				
Urban	31.1	7.7	14.1	1.7	3.6	0.0	0.1	0.1	9.9	0.1	4.7	0.0	7.6	14.2	2.8	0.3	1.8	100	58.4	12945
Rural	0.3	0.0	4.2	2.1	4.3	0.3	0.2	0.0	23.0	2.4	22.5	4.2	2.5	1.1	28.6	0.0	4.1	100	11.3	21014
<b>Education of household head</b>																				
None	7.6	1.9	9.3	2.2	2.8	0.1	0.1	0.0	17.2	2.2	22.1	4.7	5.2	4.9	15.9	0.0	3.4	100	24.0	12638
Koranic	6.1	1.8	4.8	1.0	4.4	0.1	0.2	0.0	25.1	0.7	11.0	1.8	1.8	5.9	31.4	0.0	3.8	100	18.5	10443
Primary	14.9	2.5	8.9	2.3	6.8	0.5	0.0	0.2	14.6	2.5	12.9	1.0	6.2	7.3	16.1	0.6	2.4	100	36.1	4996
Secondary +	36.1	9.0	10.3	2.2	3.8	0.3	0.4	0.0	8.9	0.5	9.3	0.4	6.4	6.8	2.3	0.0	2.7	100	62.1	4231
Non standard curriculum	15.6	3.2	6.8	1.5	3.4	0.3	0.0	0.0	14.7	0.7	16.7	0.2	3.5	15.2	14.5	0.0	2.5	100	30.9	1007
Don't know/ Missing	8.1	4.7	14.6	6.7	2.7	0.0	0.0	0.0	13.2	2.8	27.3	3.9	8.5	2.7	4.4	0.0	0.0	100	36.8	644
<b>Wealth index quintiles</b>																				
Poorest	0.0	0.0	0.3	0.3	2.7	0.0	0.0	0.0	35.3	1.3	22.8	7.1	0.4	0.0	27.6	0.0	1.9	100	3.3	6790
Second	0.0	0.0	3.6	2.1	4.8	0.1	0.1	0.0	23.3	2.2	17.5	4.2	2.1	0.0	35.0	0.1	4.4	100	10.7	6795
Middle	0.3	0.1	10.7	2.7	6.0	0.3	0.1	0.0	18.3	1.8	19.8	1.5	3.3	3.7	25.6	0.0	5.8	100	20.1	6789
Fourth	7.7	2.8	17.5	3.5	5.8	0.5	0.3	0.0	11.6	2.2	14.7	0.1	8.4	15.1	5.5	0.5	3.7	100	38.1	6794
Richest	52.1	11.7	7.9	0.9	1.0	0.1	0.3	0.2	1.7	0.2	3.6	0.0	8.1	11.6	0.0	0.0	0.3	100	74.2	6792
<b>Total</b>	<b>12.0</b>	<b>2.9</b>	<b>8.0</b>	<b>1.9</b>	<b>4.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.0</b>	<b>18.0</b>	<b>1.5</b>	<b>15.7</b>	<b>2.6</b>	<b>4.5</b>	<b>6.1</b>	<b>18.8</b>	<b>0.1</b>	<b>3.2</b>	<b>100</b>	<b>29.3</b>	<b>33959</b>

\* MICS indicator 11; MDG indicator 30

<sup>1</sup> For households using bottled water as the main source of drinking water, the source used for other purposes such as cooking and handwashing is used to determine whether to classify the source as improved.

**Table EN.2: Household water treatment**

Percent distribution of household population according to drinking water treatment method used in the household, and percentage of household population that applied an appropriate water treatment method, Somalia, 2006

Zone	Water treatment method used in the household						All drinking water sources			Improved drinking water sources			Unimproved drinking water sources		
	None	Boil	Add bleach/chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Other	Appropriate water treatment method*	Number of household members	Appropriate water treatment method	Number of household members	Appropriate water treatment method	Number of household members	
North West	82.9	8.9	3.1	1.2	1.4	0.2	2.6	2.9	11.7	8616	16.0	3470	8.8	5145	
North East	81.9	9.0	6.0	1.9	2.2	0.1	1.6	1.1	15.6	3535	15.0	860	15.8	2675	
Central South	62.0	7.6	17.5	5.4	6.1	3.4	13.3	0.1	27.2	21809	53.1	5553	18.3	16256	
<b>Residence</b>															
Urban	55.7	11.0	30.5	3.1	5.3	1.0	4.7	0.4	40.4	12945	45.4	7534	33.5	5411	
Rural	77.7	5.5	1.5	4.5	3.6	2.7	11.3	1.4	10.3	15993	9.7	2156	10.4	13836	
Nomadic	78.2	8.9	1.9	4.5	5.2	4.0	15.3	0.8	12.2	5022	2.2	193	12.6	4828	
<b>Education of household head</b>															
None	74.7	7.5	9.3	3.4	4.8	2.8	7.7	1.2	18.4	12638	32.0	3021	14.1	9617	
Koranic	71.3	6.9	8.0	4.9	5.5	3.1	12.8	0.1	17.9	10443	33.3	1916	14.5	8527	
Primary	63.6	9.2	15.8	5.6	2.7	0.4	10.8	1.0	25.1	4996	36.8	1790	18.5	3206	
Secondary +	59.4	10.8	28.0	2.0	3.6	0.6	4.5	1.0	36.5	4231	44.1	2608	24.1	1622	
Non standard curriculum	52.0	11.8	22.5	2.9	3.5	2.4	11.2	4.7	35.1	1007	46.7	311	29.9	696	
Don't know/ Missing	73.9	7.6	10.6	1.0	3.1	2.9	5.4	1.8	22.5	644	30.4	237	17.9	407	
<b>Wealth index quintiles</b>															
Poorest	88.5	3.0	0.4	1.4	1.6	2.5	6.1	1.3	5.3	6790	7.8	223	5.2	6567	
Second	72.3	7.2	2.1	6.1	6.3	5.0	16.4	0.7	14.5	6795	9.4	721	15.1	6074	
Middle	72.0	8.3	4.3	4.2	5.0	2.1	14.1	1.3	15.3	6789	17.1	1360	14.8	5429	
Fourth	63.6	10.9	18.8	5.3	5.5	1.0	7.1	0.9	28.6	6794	34.3	2574	25.0	4220	
Richest	50.5	11.1	37.5	2.8	4.1	0.7	3.3	0.5	46.7	6792	48.6	5006	41.4	1785	
<b>Total</b>	69.4	8.1	12.6	4.0	4.5	2.2	9.4	0.9	22.1	33959	36.8	9884	16.0	24076	

\* MICS indicator 13 (Drinking water is considered treated if one the following methods of treatment are used: boiling; adding bleach or chlorine; using a water filter; or using solar disinfection)

**Table EN.2B: Household water treatment**

Percent distribution of household population according to treatment method used in the household to prevent contamination while handling water, Somalia, 2006

	Water treatment method used in the household								Number of household members
	None	Wash hands	Store in clean container with cover	Use cup with long handle to remove water from container	Keep animals away from container	Other	Don't know	Appropriate method for preventing contamination of water	
<b>Zone</b>									
North West	29.8	12.0	44.1	10.9	7.2	0.7	0.1	49.7	8616
North East	51.1	8.1	31.6	3.9	5.6	0.5	0.1	34.3	3535
Central South	36.0	15.0	41.6	12.1	13.7	0.0	0.0	48.2	21809
<b>Residence</b>									
Urban	18.4	15.2	33.5	12.5	5.0	0.0	0.1	40.1	12945
Rural	46.8	12.4	45.9	9.9	15.1	0.4	0.1	51.5	21014
<b>Education of household head</b>									
None	42.9	13.9	40.2	10.9	12.6	0.3	0.1	45.6	12638
Koranic	41.4	13.3	43.1	11.1	13.5	0.1	0.0	49.7	10443
Primary	23.5	14.7	51.4	9.6	9.6	0.5	0.0	57.1	4996
Secondary +	16.5	11.2	29.3	12.0	3.7	0.3	0.2	33.9	4231
Non standard curriculum	32.0	15.9	36.8	12.3	9.6	0.0	0.0	48.0	1007
Don't know/ Missing	43.7	10.8	35.7	9.0	12.0	0.0	0.0	42.8	644
<b>Wealth index quintiles</b>									
Poorest	59.9	8.8	36.3	6.5	13.3	0.1	0.0	39.8	6790
Second	48.1	14.5	46.3	10.3	17.8	0.1	0.1	51.3	6795
Middle	37.2	14.6	53.2	11.8	14.7	0.1	0.0	61.1	6789
Fourth	26.6	20.3	50.9	17.0	8.5	0.9	0.2	58.7	6794
Richest	8.3	9.3	19.4	8.9	1.8	0.0	0.1	24.7	6792
<b>Total</b>	<b>36.0</b>	<b>13.5</b>	<b>41.2</b>	<b>10.9</b>	<b>11.2</b>	<b>0.2</b>	<b>0.1</b>	<b>47.1</b>	<b>33959</b>

**Table EN.3: Time to source of water**

Percent distribution of households according to time to go to source of drinking water, get water and return, and mean time to source of drinking water, Somalia, 2006

	Time to source of drinking water					Mean time to source of drinking water*	Reliability of supply					Number of households			
	Water on premises	Less than 15 minutes	15 minutes to less than 30 minutes	30 minutes to less than 1 hour	1 hour or more		Don't know	Total	Almost never problems	Occasional problems but less than weekly	Weekly problems		Daily problems	Seasonal supply	Total
		minutes	minutes	minutes	minutes										
<b>Zone</b>															
North West	17.2	13.7	13.0	23.7	31.3	0.9	100.0	30.7	13.9	9.1	18.2	27.9	100.0	1400	
North East	16.9	12.4	13.1	21.9	29.9	5.5	100.0	39.7	23.2	6.7	10.8	19.7	100.0	1429	
Central South	13.0	16.2	16.3	18.5	32.5	3.4	100.0	34.7	19.7	7.4	14.7	23.5	100.0	3107	
<b>Residence</b>															
Urban	38.4	16.1	11.6	14.0	15.0	4.5	100.0	56.1	23.1	7.2	10.0	3.7	100.0	2208	
Rural	1.0	13.9	16.6	24.5	41.4	2.6	100.0	22.4	16.9	7.9	17.3	35.4	100.0	3728	
<b>Education of household head</b>															
None	9.2	17.1	15.5	22.5	32.2	3.3	100.0	30.7	18.6	7.9	16.4	26.2	100.0	2359	
Koranic	8.1	12.0	16.4	21.6	37.9	3.8	100.0	27.9	18.3	8.9	15.8	28.9	100.0	1755	
Primary	18.3	15.2	15.6	20.2	28.5	2.0	100.0	41.5	21.1	6.7	12.9	17.8	100.0	816	
Secondary +	46.7	11.4	8.1	11.5	19.3	2.7	100.0	58.6	17.5	5.3	7.2	11.5	100.0	698	
Non standard curriculum	18.6	19.8	11.4	17.4	29.3	3.6	100.0	33.7	23.3	5.5	17.2	19.6	100.0	163	
Don't know/ Missing	13.2	15.3	13.2	25.0	24.3	9.0	100.0	38.9	31.3	6.3	11.1	12.5	100.0	144	
<b>Wealth index quintiles</b>															
Poorest	0.1	12.1	12.6	21.8	49.4	3.8	100.0	16.2	17.6	10.7	20.5	34.8	100.0	1044	
Second	0.1	13.9	15.6	23.1	46.2	1.2	100.0	19.7	14.4	6.8	18.5	40.4	100.0	1236	
Middle	0.9	17.1	19.4	29.8	28.6	4.1	100.0	31.0	18.9	8.2	13.7	28.1	100.0	1230	
Fourth	12.1	20.5	19.0	21.0	22.2	4.8	100.0	40.0	24.5	8.6	14.7	12.1	100.0	1296	
Richest	63.4	8.8	5.8	6.1	13.1	2.6	100.0	67.4	20.0	3.9	5.6	3.1	100.0	1130	
<b>Total</b>	14.9	14.7	14.7	20.6	31.6	3.3	100.0	34.9	19.2	7.6	14.6	23.6	100.0	5936	

\* The mean time to source of drinking water is calculated based on those households that do not have water on the premises.

**Table EN.4: Person collecting water**

Percent distribution of households according to the person collecting drinking water used in the household, Somalia, 2006

	Person collecting drinking water				Total	Number of households
	Adult woman	Adult man	Female child under age 15	Male child under age 15		
<b>Zone</b>						
North West	64.4	25.5	5.2	3.4	100	1224
North East	61.5	29.8	4.2	3.2	100	584
Central South	68.0	25.7	3.9	1.6	100	3307
<b>Residence</b>						
Urban	50.7	40.9	4.6	2.2	100	1301
Rural	71.7	21.1	4.2	2.2	100	3814
<b>Education of household head</b>						
None	66.4	25.1	5.1	2.3	100	2108
Koranic	70.3	23.8	3.2	1.8	100	1736
Primary	64.7	26.7	4.7	3.3	100	692
Secondary +	52.7	38.8	4.2	2.2	100	343
Non standard curriculum	60.5	34.4	3.7	0.9	100	138
Don't know/Missing	64.9	29.0	3.6	2.5	100	98
<b>Wealth index quintiles</b>						
Poorest	69.0	23.2	4.5	2.6	100	1154
Second	75.1	18.0	3.9	1.8	100	1324
Middle	71.7	20.8	4.6	2.3	100	1231
Fourth	57.1	34.2	4.9	2.7	100	1048
Richest	34.5	60.5	1.9	0.8	100	358
<b>Total</b>	<b>66.4</b>	<b>26.1</b>	<b>4.3</b>	<b>2.2</b>	<b>100</b>	<b>5115</b>

**Table EN.5: Use of sanitary means of excreta disposal**

Percent distribution of household population according to type of toilet facility used by the household, and the percentage of household population using sanitary means of excreta disposal, Somalia, 2006

	Type of toilet facility used by household										Percentage of population using sanitary means of excreta disposal*	Number of household members
	Improved sanitation facility					Unimproved sanitation facility						
	Flush/pour flush to:			Ventilated improved pit latrine	Pit latrine with slab	Flush/pour flush to somewhere else	Pit latrine without slab/open pit	Other	No facilities / bush / field	Total		
	Piped sewer system	Septic tank	Pit latrine									
<b>Zone</b>												
North West	0.9	0.6	22.8	1.1	14.5	0.2	15.2	0.1	44.2	100	40.0	8616
North East	3.6	0.9	25.6	7.3	6.3	0.0	6.4	0.3	49.4	100	43.7	3535
Central South	11.5	0.5	18.5	0.1	4.7	0.0	6.1	0.2	58.3	100	35.3	21809
<b>Residence</b>												
Urban	20.6	1.4	41.3	1.6	12.5	0.2	14.4	0.1	7.6	100	77.5	12945
Rural	0.2	0.0	7.5	0.7	4.1	0.0	4.8	0.2	82.2	100	12.6	21014
<b>Education of household head</b>												
None	4.1	0.2	16.3	0.6	7.9	0.1	7.0	0.2	63.3	100	29.1	12638
Koranic	6.4	0.3	14.1	1.1	3.4	0.0	4.9	0.3	69.4	100	25.3	10443
Primary	9.4	0.6	28.0	1.2	10.6	0.3	12.0	0.1	37.5	100	49.9	4996
Secondary +	19.8	1.7	38.2	1.8	12.9	0.0	15.3	0.0	10.2	100	74.4	4231
Non standard curriculum	17.5	1.1	25.4	1.9	3.6	0.0	8.5	0.0	41.6	100	49.6	1007
Don't know/ Missing	6.6	1.9	17.0	3.4	5.2	0.0	19.9	0.0	44.8	100	34.0	644
<b>Wealth index quintiles</b>												
Poorest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100	0.0	6790
Second	0.0	0.0	0.6	0.0	0.0	0.0	0.5	0.2	98.4	100	0.6	6795
Middle	0.7	0.4	18.7	0.1	6.0	0.1	12.5	0.6	60.8	100	25.9	6789
Fourth	4.9	0.6	48.4	3.0	17.0	0.1	15.9	0.1	9.5	100	74.0	6794
Richest	34.5	1.8	34.0	2.3	13.6	0.3	13.2	0.0	0.2	100	86.2	6792
<b>Total</b>	<b>8.0</b>	<b>0.6</b>	<b>20.4</b>	<b>1.1</b>	<b>7.3</b>	<b>0.1</b>	<b>8.4</b>	<b>0.2</b>	<b>53.8</b>	<b>100</b>	<b>37.3</b>	<b>33959</b>

\* MICS indicator 12; MDG indicator 31

**Table EN.6: Disposal of child's faeces**

Percent distribution of children aged 0-2 years according to place of disposal of child's faeces, and the percentage of children aged 0-2 years whose stools are disposed of safely, Somalia, 2006

	Place of disposal of child's faeces								Total	Proportion of children whose stools are disposed of safely*	Number of children aged 0-2 years
	Child used toilet	Put/rinsed into toilet or latrine	Put/rinsed into drain or ditch	Thrown into garbage	Buried	Left in the open	Other	Don't know			
<b>Zone</b>											
North West	1.4	49.0	4.3	11.9	7.4	21.4	0.2	0.8	3.6	50.4	726
North East	0.3	37.1	5.9	29.9	11.3	10.7	0.0	0.0	4.9	37.4	394
Central South	0.2	29.7	3.7	32.4	9.7	19.9	0.4	0.1	3.9	29.9	2570
<b>Residence</b>											
Urban	1.1	74.0	7.1	7.2	2.7	3.2	0.1	0.4	4.2	75.1	1320
Rural	0.1	12.2	2.3	39.7	13.2	28.1	0.4	0.2	3.7	12.2	2369
<b>Mother's education</b>											
None	0.5	24.4	3.6	33.3	10.4	23.3	0.3	0.3	4.0	24.9	2289
Koranic	0.2	34.7	4.6	26.8	11.8	17.1	0.7	0.2	3.9	34.9	657
Primary	0.5	64.4	4.6	14.6	4.1	8.5	0.3	0.0	3.0	64.9	501
Secondary +	1.6	75.6	6.1	4.0	1.4	3.5	0.0	0.8	7.0	77.2	115
Non standard curriculum	0.0	55.9	4.4	14.0	7.2	13.6	0.0	1.0	3.8	55.9	118
<b>Wealth index quintiles</b>											
Poorest	0.1	0.1	1.4	36.3	13.6	43.3	0.3	0.2	4.6	0.2	706
Second	0.0	1.2	1.3	50.8	14.3	27.2	0.9	0.0	4.4	1.2	756
Middle	0.5	18.9	4.1	38.5	14	20.8	0.3	0.7	2.3	19.4	783
Fourth	0.8	68.1	6.1	11.4	4.3	4.4	0.0	0.0	4.8	68.8	783
Richest	0.9	86.7	7.3	0.7	0.3	0.0	0.1	0.5	3.4	87.7	661
<b>Total</b>	<b>0.4</b>	<b>34.3</b>	<b>4.0</b>	<b>28.1</b>	<b>9.5</b>	<b>19.2</b>	<b>0.3</b>	<b>0.3</b>	<b>3.9</b>	<b>34.7</b>	<b>3690</b>

**\* MICS indicator 14**

Total includes 10 children missing information on mother's education who are not shown separately.

**Table EN.7: Use of improved water sources and improved sanitation**

Percentage of household population using both improved drinking water sources and sanitary means of excreta disposal, Somalia, 2006

Percentage of household population:				
	Using improved sources of drinking water*	Using sanitary means of excreta disposal**	Using improved sources of drinking water and using sanitary means of excreta disposal***	Number of household members
<b>Zone</b>				
North West	40.5	40.0	23.9	8616
North East	25.0	43.7	16.3	3535
Central South	25.5	35.3	19.7	21809
<b>Residence</b>				
Urban	58.4	77.5	47.1	12945
Rural	11.3	12.6	4.0	21014
<b>Education of household head</b>				
None	24.0	29.1	14.5	12638
Koranic	18.5	25.3	11.5	10443
Primary	36.1	49.9	27.1	4996
Secondary +	62.1	74.4	52.1	4231
Non standard curriculum	30.9	49.6	22.5	1007
Don't know/Missing	36.8	34.0	18.3	644
<b>Wealth index quintiles</b>				
Poorest	3.3	0.0	0.0	6790
Second	10.7	0.6	0.0	6795
Middle	20.1	25.9	8.6	6789
Fourth	38.1	74.0	29.3	6794
Richest	74.2	86.2	64.2	6792
Total	29.3	37.3	20.4	33959

\* MICS indicator 11; MDG indicator 30

\*\* MICS indicator 12; MDG indicator 31



**Table EN.8: Handwashing**

Percent distribution of households according to whether soap is used to wash hands in various circumstances, Somalia, 2006

	Percentage of household respondents reporting that member(s) wash their hands with soap:							Number of households
	Before eating	Before feeding babies	Before defecation	After cleaning babies bottoms	Before cooking	After Eating	For any of these reasons*	
<b>Zone</b>								
North West	56.2	55.4	71.4	64.5	47.4	58.6	77.1	1455
North East	63.9	62.3	74.2	73.4	46.6	67.7	83.5	687
Central South	27.5	26.1	34.3	33.1	16.0	25.7	41.3	3827
<b>Residence</b>								
Urban	47.2	47.2	65.3	62.8	38.8	47.8	70.8	2113
Rural	34.1	32.0	38.4	35.9	20.8	33.5	46.2	3856
<b>Education of household head</b>								
None	37.4	35.0	46.5	42.7	27.5	39.3	54.7	2322
Koranic	32.4	31.4	37.4	35.2	17.3	28.2	44.2	1878
Primary	40.7	40.4	53.2	52.8	30.3	43.0	58.6	840
Secondary +	57.7	57.9	74.0	70.8	48.3	58.7	78.6	643
Non standard curriculum	42.0	40.0	52.0	53.8	31.0	42.5	59.8	170
Don't know/Missing	42.5	43.1	59.2	58.2	34.8	40.1	66.2	114
<b>Wealth index quintiles</b>								
Poorest	26.5	24.9	29.2	25.7	14.2	24.8	37.0	1155
Second	33.0	30.8	36.8	33.9	17.9	29.5	44.1	1325
Middle	34.3	32.8	40.5	38.9	22.5	35.7	49.0	1245
Fourth	49.6	48.1	63.1	60.4	38.5	51.9	69.6	1204
Richest	52.2	53.0	74.3	72.5	45.8	53.2	78.4	1039
<b>Total</b>	<b>38.7</b>	<b>37.4</b>	<b>47.9</b>	<b>45.4</b>	<b>27.2</b>	<b>38.5</b>	<b>54.9</b>	<b>5969</b>

**Table FE.1: Current Fertility**

Age specific and total fertility rate for the three years preceding the survey, Somalia 2006

Age group	Residence		Total
	Urban	Rural	
15-19	102	140	123
20-24	253	301	281
25-29	309	304	306
30-34	258	265	262
35-39	154	208	189
40-44	78	150	123
45-49	50	49	49
<b>TFR</b>	<b>6.0</b>	<b>7.1</b>	<b>6.7</b>

Note: Age-specific fertility rates are expressed per 1,000 women.

TFR: Total fertility rate for ages 15-49, expressed per woman.

**Table FE.2: Fertility by background characteristics**

Total fertility rates for the three year period preceding the survey by background characteristics, Somalia, 2006

	Total fertility rate
<b>Zone</b>	
North West	5.9
North East	6.2
Central South	7.1
<b>Residence</b>	
Urban	6.0
Rural	7.1
<b>Education of woman</b>	
None	7.0
Koranic	6.6
Primary+	6.1
Non standard curriculum	5.8
<b>Wealth index quintiles</b>	
Poorest 60%	7.0
Richest 40%	6.2
<b>Total</b>	<b>6.7</b>

**Table FE.3: Fertility Trends**

Age specific fertility rates for three-year periods preceding the survey, by mother's age at the time of the birth, Somalia 2006

Mother's age at birth	Number of years preceding the survey				
	0-2	3-5	6-8	9-11	12-14
15-19	123	143	154	134	137
20-24	281	326	345	295	300
25-29	306	364	364	317	356
30-34	262	297	331	297	344
35-39	189	262	283	250	279
40-44	123	147	208	176	.
45-49	49	109	.	.	.

**Table RH.1: Use of contraception**

Percentage of women aged 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Somalia, 2006

Zone	N o t using any method											Number of currently married women
	Pill	IUD	Injections	Condom	LAM	Periodic abstinence	Withdrawal	Any modern method	Any traditional method <sup>1</sup>	Any method*		
North West	74.4	3.1	1.1	0.0	18.5	1.4	1.0	4.6	21.0	25.6	943	
North East	88.1	0.1	0.0	0.0	11.8	0.0	0.0	0.1	11.8	11.9	490	
Central South	88.4	0.2	0.0	0.0	11.1	0.1	0.1	0.3	11.3	11.6	2985	
<b>Residence</b>												
Urban	83.1	2.1	0.6	0.1	13.2	0.3	0.3	3.0	13.9	16.9	1551	
Rural	86.6	0.1	0.0	0.0	12.5	0.4	0.2	0.2	13.2	13.4	2866	
<b>Age</b>												
15-19	92.9	0.0	0.0	0.0	6.8	0.0	0.0	0.0	7.1	7.1	419	
20-24	85.4	0.5	0.0	0.0	13.5	0.3	0.3	0.5	14.1	14.6	879	
25-29	83.4	1.0	0.4	0.0	14.7	0.3	0.2	1.4	15.2	16.6	980	
30-34	83.1	0.8	0.3	0.0	14.8	0.8	0.1	1.1	15.8	16.9	717	
35-39	85.7	0.8	0.6	0.2	11.6	0.6	0.2	1.9	12.4	14.3	686	
40-44	84.5	1.6	0.0	0.0	12.9	0.2	0.6	1.6	13.9	15.5	493	
45-49	88.3	1.3	0.4	0.0	9.1	0.0	0.8	1.8	10.0	11.7	244	
<b>Number of living children</b>												
0	98.8	0.2	0.0	0.0	0.7	0.0	0.0	0.2	0.9	1.2	418	
1	87.9	0.4	0.2	0.0	11.2	0.2	0.2	0.6	11.5	12.1	596	
2	83.5	1.1	0.0	0.0	14.1	0.8	0.4	1.1	15.3	16.5	715	
3	85.2	1.0	0.6	0.0	12.3	0.3	0.4	1.6	13.2	14.8	676	
4	82.6	0.9	0.0	0.0	15.8	0.4	0.2	1.1	16.3	17.4	603	
5	82.7	1.2	0.2	0.0	15.3	0.4	0.0	1.6	15.7	17.3	474	
6+	82.5	0.8	0.5	0.1	15.2	0.3	0.4	1.5	15.9	17.5	934	
<b>Education</b>												
None	86.4	0.7	0.2	0.0	11.9	0.5	0.3	0.9	12.7	13.6	2838	
Koranic	83.5	0.3	0.0	0.0	15.7	0.2	0.4	0.3	16.2	16.5	677	
Primary	84.3	1.4	0.8	0.0	13.5	0.0	0.0	2.1	13.5	15.7	564	
Secondary +	77.4	4.9	0.0	0.9	14.5	0.0	0.0	7.3	15.3	22.6	133	
Non Standard Curriculum	86.0	1.0	0.8	0.0	12.2	0.0	0.0	1.8	12.2	14.0	124	
Don't know/missing	87.4	0.0	0.0	0.0	11.4	0.0	1.2	0.0	12.6	12.6	81	
<b>Wealth index quintiles</b>												
Poorest	88.1	0.1	0.0	0.0	11.6	0.1	0.1	0.1	11.8	11.9	851	
Second	86.2	0.1	0.0	0.0	12.3	0.9	0.5	0.2	13.6	13.8	977	
Middle	86.2	0.2	0.0	0.0	13.1	0.2	0.2	0.2	13.6	13.8	909	
Fourth	85.0	1.7	0.0	0.0	12.8	0.3	0.1	1.8	13.2	15.0	882	
Richest	81.2	2.2	0.4	0.2	14.2	0.3	0.3	3.9	14.9	18.8	797	
<b>Total</b>	<b>85.4</b>	<b>0.8</b>	<b>0.1</b>	<b>0.0</b>	<b>12.8</b>	<b>0.4</b>	<b>0.3</b>	<b>1.2</b>	<b>13.4</b>	<b>14.6</b>	<b>4417</b>	

<sup>1</sup>Modern methods refer to the pill, IUD, injections and condoms. All other methods are considered to be traditional methods.

\* MICS indicator 21; MDG indicator 19C

**Table RH.2: Unmet need for contraception**

Percentage of women aged 15-49 years currently married with an unmet need for family planning and percentage of demand for contraception satisfied, Somalia, 2006

	Current use of contraception*	Unmet need for contraception			Number of women currently married or in union	Percentage of demand for contraception satisfied	Number of women currently married with need for contraception
		For spacing	For limiting	Total			
<b>Region</b>							
North West	25.6	22.4	6.8	29.2	943	46.7	516
North East	11.9	17.1	2.2	19.3	490	38.1	153
Central South	11.6	21.8	4.6	26.4	2985	30.5	1133
<b>Residence</b>							
Urban	16.9	19.5	6.3	25.8	1551	39.6	662
Rural	13.4	22.5	4.0	26.4	2866	33.6	1141
<b>Age</b>							
15-19	7.1	20.5	0.3	20.8	419	25.3	117
20-24	14.6	21.5	0.7	22.2	879	39.6	323
25-29	16.6	22.5	1.5	24.0	980	40.9	398
30-34	16.9	23.7	1.6	25.2	717	40.1	302
35-39	14.3	23.1	5.4	28.6	686	33.3	294
40-44	15.5	16.7	16.0	32.7	493	32.2	238
45-49	11.7	16.5	25.3	41.8	244	21.9	131
<b>Education</b>							
None	13.6	22.0	4.8	26.8	2838	33.8	1146
Koranic	16.5	21.5	3.8	25.3	677	39.5	283
Primary	15.7	20.4	3.6	24.0	564	39.4	224
Secondary +	22.6	15.9	8.6	24.5	133	48.0	63
Non Standard Curriculum	14.0	18.5	12.9	31.3	124	30.9	56
<b>Wealth index quintiles</b>							
Poorest	11.9	24.3	3.7	28.1	851	29.8	340
Second	13.8	21.5	3.6	25.1	977	35.5	381
Middle	13.8	23.7	5.3	29.0	909	32.3	390
Fourth	15.0	20.4	5.1	25.5	882	37.1	358
Richest	18.8	16.8	6.4	23.1	797	44.8	334
<b>Total</b>	14.6	21.4	4.8	26.2	4417	35.8	1802

\* MICS indicator 21; MDG indicator 19C

The construction of indicators for unmet need for contraception varies from the standard MICS definition, see text (page 50)

Total includes 30 children missing information on women's education who are not shown separately.

**Table RH.3: 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, Somalia, 2006

	Person providing antenatal care**							Total	Any skilled personnel*	Number of women who gave birth in the preceding two years
	Medical doctor	Nurse/midwife	Auxiliary midwife	Traditional birth attendant	Relative/friend	Other	No antenatal care received			
<b>Zone</b>										
North West	27.9	2.2	1.7	1.9	0.2	5.6	60.4	100	31.8	496
North East	12.4	10.3	2.9	2.8	0.0	1.8	69.8	100	25.6	269
Central South	17.3	1.9	5.2	2.6	0.4	1.9	70.6	100	24.4	1560
<b>Residence</b>										
Urban	34.1	5.2	6.2	1.6	0.3	3.3	49.3	100	45.5	852
Rural	10.2	1.7	3.0	3.0	0.4	2.3	79.4	100.0	14.9	1472
<b>Age</b>										
15-19	16.6	1.5	6.2	4.5	0.5	3.3	67.4	100	24.3	240
20-24	19.8	3.8	3.2	2.3	0.3	1.6	68.9	100	26.9	630
25-29	19.3	3.6	4.8	3.1	0.2	2.8	66.3	100	27.7	631
30-34	21.5	2.5	4.1	1.5	0.9	2.6	66.9	100	28.1	391
35-39	15.6	2.4	4.9	2.6	0.0	4.1	70.4	100	22.9	279
40-44	17.5	0.3	1.8	0.0	0.0	3.3	77.1	100	19.6	138
45-49	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100	(*)	16
<b>Education</b>										
None	14.5	2.3	3.6	2.7	0.5	2.0	74.3	100	20.5	1460
Koranic	16.6	2.7	4.4	2.7	0.0	3.7	69.8	100	23.8	369
Primary	36.4	5.3	5.9	1.2	0.0	4.1	47.0	100	47.7	314
Secondary +	44.1	4.9	4.3	0.0	0.0	3.8	43.0	100	53.3	64
Non Standard Curriculum	30.3	2.8	3.9	4.0	0.0	2.8	56.1	100	37.1	75
<b>Wealth index quintiles</b>										
Poorest	5.2	0.8	2.3	1.3	0.8	2.3	87.2	100	8.4	435
Second	7.7	1.3	3.7	3.9	0.2	2.4	80.7	100	12.8	468
Middle	16.6	2.8	4.0	3.0	0.2	3.2	70.1	100	23.4	483
Fourth	25.6	3.8	5.5	3.2	0.5	2.0	59.4	100	34.9	508
Richest	40.1	6.0	5.3	0.6	0.0	3.5	44.5	100	51.4	430
<b>Total</b>	19.0	3.0	4.2	2.5	0.3	2.7	68.4	100	26.1	2325

**\* MICS indicator 20**

\* Skilled health personnel includes doctors, nurses, midwives, and auxiliary midwives.

\*\* If the respondent mentioned more than one provider, only the most qualified provider is considered

Total includes 43 women missing information on education who are not shown separately.

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

**Table RH.4: Antenatal care content**

Percentage of pregnant women receiving antenatal care among women aged 15-49 years who gave birth in two years preceding the survey and percentage of pregnant women receiving specific care as part of the antenatal care received, Somalia, 2006

	Percent of pregnant women receiving ANC one or more times during pregnancy	Percent of pregnant women who had:				Number of women who gave birth in two years preceding survey
		Blood test taken*	Blood pressure measured*	Urine specimen taken*	Weight measured*	
<b>Zone</b>						
North West	39.6	22.6	32.1	14.5	31.3	496
North East	30.2	20.6	22.3	7.9	20.9	269
Central South	29.4	10.5	17.4	7.7	19.3	1560
<b>Residence</b>						
Urban	50.7	25.8	39.3	16.4	40.6	852
Rural	20.6	7.6	10.6	5.0	11.3	1472
<b>Age</b>						
15-19	32.6	9.8	18.7	6.4	19.1	240
20-24	31.1	13.7	20.8	9.5	20.4	630
25-29	33.7	15.7	24.2	9.3	25.7	631
30-34	33.1	15.9	22.2	10.9	23.7	391
35-39	29.6	13.5	16.7	7.8	18.3	279
40-44	22.9	14.5	17.9	11.4	20.0	138
45-49	(*)	(*)	(*)	(*)	(*)	16
<b>Education</b>						
None	25.7	9.7	15.3	7.0	16.9	1460
Koranic	30.2	12.7	19.1	7.0	18.4	369
Primary	53.0	30.1	42.3	17.9	43.3	314
Secondary +	57.0	41.0	48.8	21.7	45.3	64
Non Standard Curriculum	43.9	20.7	31.6	16.1	30.9	75
<b>Wealth index quintiles</b>						
Poorest	12.8	3.8	5.4	2.9	6.0	435
Second	19.3	6.0	8.9	3.9	9.4	468
Middle	29.9	8.8	16.6	5.5	19.5	483
Fourth	40.6	20.9	28.2	14.2	29.7	508
Richest	55.5	32.0	46.9	19.5	45.8	430
<b>Total</b>	<b>31.6</b>	<b>14.2</b>	<b>21.1</b>	<b>9.2</b>	<b>22.0</b>	<b>2325</b>

**\* MICS indicator 44**

Total includes 43 women missing information on education who are not shown separately.

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

**Table RH.4A: Number of antenatal care visits**

Percentage of pregnant women receiving antenatal care among women aged 15-49 years who gave birth in two years preceding the survey and by number of antenatal care visits, Somalia, 2006

	Number of antenatal care visits during pregnancy				Mean number of visits among women who received antenatal care	Number of women who gave birth in two years preceding survey
	No visit	One visit	2-3 visits	4+ visits		
<b>Zone</b>						
North West	60.4	9.6	19.6	10.3	2.6	496
North East	69.8	8.4	16.0	5.8	2.1	269
Central South	70.6	7.9	16.3	5.2	2.0	1560
<b>Residence</b>						
Urban	49.3	11.0	29.5	10.2	2.4	852
Rural	79.4	6.8	9.7	4.1	1.9	1472
<b>Age</b>						
15-19	67.4	10.9	17.6	4.1	2.1	240
20-24	68.9	7.1	17.9	6.0	2.4	630
25-29	66.3	9.3	16.4	8.0	2.2	631
30-34	66.9	10.2	17.9	5.1	2.1	391
35-39	70.4	7.1	15.2	7.3	2.1	279
40-44	77.1	3.4	14.3	5.2	2.3	138
45-49	(*)	(*)	(*)	(*)	(*)	16
<b>Education</b>						
None	74.3	7.8	12.6	5.3	2.0	1460
Koranic	69.8	6.9	17.0	6.2	2.0	369
Primary	47.0	13.1	32.4	7.5	2.5	314
Secondary +	43.0	11.3	31.6	14.2	2.7	64
Non Standard Curriculum	56.1	6.8	24.6	12.6	2.3	75
<b>Wealth index quintiles</b>						
Poorest	87.2	2.8	5.7	4.2	1.9	435
Second	80.7	5.4	8.3	5.5	1.8	468
Middle	70.1	11.6	13.5	4.7	1.8	483
Fourth	59.4	11.1	22.9	6.7	2.2	508
Richest	44.5	10.3	34.5	10.7	2.6	430
<b>Total</b>	<b>68.4</b>	<b>8.4</b>	<b>17.0</b>	<b>6.3</b>	<b>2.2</b>	<b>2325</b>

Total includes 43 women missing information on education who are not shown separately.

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



**Table RH.5: Assistance during delivery**

Percent distribution of women aged 15-49 with a birth in two years preceding the survey by type of personnel assisting at delivery, Somalia, 2006

	Person assisting at delivery							Delivered in health facility**	Any skilled personnel*	Total	No attendant	Other	Relative/friend	Traditional birth attendant	Nurse/midwife	Auxiliary midwife	Medical doctor	Number of women who gave birth in preceding two years
	Medical doctor	Nurse/midwife	Auxiliary midwife	Traditional birth attendant	Relative/friend	Other	No attendant											
<b>Zone</b>																		
North West Zone	19.5	1.5	20.4	37.0	18.5	2.1	1.2	100	41.3	100	1.2	2.1	37.0	1.5	20.4	19.5	496	
North East Zone	5.3	1.6	29.9	47.1	13.1	1.0	2.0	100	36.8	100	2.0	1.0	47.1	1.6	29.9	5.3	269	
Central South	3.4	2.7	23.7	55.9	9.4	1.7	3.2	100	29.7	100	3.2	1.7	55.9	2.7	23.7	3.4	1560	
<b>Residence</b>																		
Urban	15.3	5.4	44.3	29.5	3.8	1.1	0.6	100	65.0	100	0.6	1.1	29.5	5.4	44.3	15.3	852	
Rural	2.3	0.5	11.8	63.3	16.4	2.0	3.8	100.0	14.5	100.0	3.8	2.0	63.3	0.5	11.8	2.3	1472	
<b>Age</b>																		
15-19	7.0	1.7	22.7	54.5	10.8	1.0	2.4	100	31.4	100	2.4	1.0	54.5	1.7	22.7	7.0	240	
20-24	7.2	2.3	22.1	53.7	11.3	1.3	2.1	100	31.6	100	2.1	1.3	53.7	2.3	22.1	7.2	630	
25-29	7.7	2.5	24.4	49.9	11.9	1.4	2.2	100	34.6	100	2.2	1.4	49.9	2.5	24.4	7.7	631	
30-34	7.5	4.0	24.5	48.7	10.0	1.8	3.4	100	36.1	100	3.4	1.8	48.7	4.0	24.5	7.5	391	
35-39	6.6	0.4	27.0	47.0	12.5	3.7	2.8	100	34.0	100	2.8	3.7	47.0	0.4	27.0	6.6	279	
40-44	3.0	1.1	20.5	50.7	18.2	1.6	5.1	100	24.5	100	5.1	1.6	50.7	1.1	20.5	3.0	138	
45-49	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	16	
<b>Education</b>																		
None	4.4	1.7	18.5	55.8	14.7	1.5	3.5	100	24.5	100	3.5	1.5	55.8	1.7	18.5	4.4	1460	
Koranic	5.0	0.9	25.7	55.8	8.7	2.6	1.4	100	31.6	100	1.4	2.6	55.8	0.9	25.7	5.0	369	
Primary	16.2	4.3	38.8	30.5	7.6	1.6	1.0	100	59.3	100	1.0	1.6	30.5	4.3	38.8	16.2	314	
Secondary +	30.6	8.5	33.6	22.4	1.2	3.8	0.0	100	72.6	100	0.0	3.8	22.4	8.5	33.6	30.6	64	
Non Standard Curriculum	11.7	5.0	38.2	40.3	4.2	0.6	0.0	100	54.8	100	0.0	0.6	40.3	5.0	38.2	11.7	75	
<b>Wealth index quintiles</b>																		
Poorest	0.8	0.2	9.6	59.6	20.6	2.7	6.5	100	10.6	100	6.5	2.7	59.6	0.2	9.6	0.8	435	
Second	1.8	0.6	11.9	63.3	16.6	2.4	3.5	100	14.3	100	3.5	2.4	63.3	0.6	11.9	1.8	468	
Middle	3.2	2.3	14.1	64.2	12.6	1.6	2.0	100	19.6	100	2.0	1.6	64.2	2.3	14.1	3.2	483	
Fourth	7.9	3.5	33.7	45.3	7.7	0.6	1.3	100	45.1	100	1.3	0.6	45.3	3.5	33.7	7.9	508	
Richest	22.4	4.7	49.7	20.1	1.5	1.2	0.3	100	76.8	100	0.3	1.2	20.1	4.7	49.7	22.4	430	
<b>Total</b>	7.1	2.3	23.7	50.9	11.8	1.7	2.6	100	33.0	100	2.6	1.7	50.9	2.3	23.7	7.1	2325	

\* MICS indicator 4; MDG indicator 17

\*\* MICS indicator 5

Total includes 43 women missing information on education who are not shown separately.

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

**Table RH.5C: Postpartum medical problems**

Percentage of pregnant women aged 15-49 years who gave birth in two years preceding the survey who had problems in the postpartum period, Somalia, 2006

	Specific health problems encountered during the postpartum period										Number of women who gave birth in two years preceding survey
	Fever	Problem controlling urine	Urinary tract infection	Mastitis	Offensive discharge	Tear/injury to genital area	Wound infection	Hemorrhage	Post delivery depression		
<b>Zone</b>											
North West	38.6	10.2	11.4	24.0	12.6	9.5	8.9	18.7	13.3	496	
North East	45.7	11.4	14.7	23.1	12.3	17.7	13.9	23.3	4.2	269	
Central South	57.2	14.0	29.1	49.4	37.0	27.9	20.6	29.1	11.8	1560	
<b>Residence</b>											
Urban	45.3	10.5	22.0	40.5	34.9	27.5	16.7	20.5	10.1	852	
Rural	55.8	14.3	24.6	41.2	25.5	20.0	17.6	29.5	11.9	1472	
<b>Age</b>											
15-19	50.0	14.2	23.7	40.7	25.4	21.3	18.1	24.2	10.7	240	
20-24	47.5	12.4	23.5	41.9	27.9	23.4	16.9	24.3	11.6	630	
25-29	51.3	11.8	21.3	39.5	28.6	21.4	17.2	24.8	9.9	631	
30-34	54.8	13.2	25.1	41.4	30.7	24.0	15.8	29.7	11.4	391	
35-39	58.2	15.8	26.4	38.4	31.7	24.5	18.5	30.5	11.8	279	
40-44	60.2	11.3	23.8	47.3	31.8	22.3	20.0	26.4	15.2	138	
45-49	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	16	
<b>Education</b>											
None	55.2	14.4	26.1	43.4	28.3	23.3	18.3	30.5	12.5	1460	
Koranic	47.8	13.0	20.1	42.0	33.4	24.6	17.2	21.6	9.7	369	
Primary	43.7	8.9	17.6	33.5	25.5	20.3	14.4	16.5	9.1	314	
Secondary +	47.3	4.7	14.5	22.4	18.6	10.5	2.6	11.0	3.9	64	
Non Standard Curriculum	43.3	5.0	28.8	33.8	41.6	30.1	19.1	22.5	6.5	75	
<b>Wealth index quintiles</b>											
Poorest	60.7	13.2	29.4	47.0	31.5	26.8	23.1	35.2	13.9	435	
Second	55.5	14.7	25.7	44.2	29.2	20.8	19.0	32.9	13.8	468	
Middle	51.9	14.2	22.9	42.8	23.2	16.7	15.3	24.0	7.9	483	
Fourth	47.7	11.9	18.5	35.5	28.2	24.9	16.7	23.8	12.0	508	
Richest	44.0	10.3	22.4	35.6	33.3	25.1	12.5	15.1	8.6	430	
<b>Total</b>	51.9	12.9	23.7	40.9	28.9	22.8	17.3	26.2	11.2	2325	

Total includes 43 women missing information on education who are not shown separately.

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

**Table RH.6: Maternal mortality ratio**

Lifetime risk of maternal death and proportion of dead sisters dying of maternal causes, Somalia, 2006

Respondent age	Number of adult household respondents	Sisters who reached age 15	Sisters who reached age 15 (adjusted)	Sisters who reached aged 15 and who died	Maternal deaths	Adjustment factor	Sister units of risk exposure	Lifetime risk of maternal death	Proportion of dead sisters dying of maternal causes
15-19	3435.3	3759.9	9793.8	132.6	84.5	0.1	1047.9	0.1	63.7
20-24	2527.5	3883.2	10115.2	200.6	130.5	0.2	2083.7	0.1	65.0
25-29	2082.7	4469.0	11640.9	305.6	160.1	0.3	3992.8	0.0	52.4
30-34	1597.8	3795.0	3795.0	294.2	161.7	0.5	1908.9	0.1	54.9
35-39	1478.1	3852.7	3852.7	345.1	179.3	0.7	2558.2	0.1	51.9
40-44	1353.9	3639.9	3639.9	384.2	187.2	0.8	2919.2	0.1	48.7
45-49	779.8	2001.7	2001.7	259.2	121.7	0.9	1801.5	0.1	47.0
50-54	935.9	2598.2	2598.2	385.2	163.3	1.0	2489.1	0.1	42.4
55-59	458.0	1255.0	1255.0	236.5	96.5	1.0	1237.4	0.1	40.8
60+	1772.9	4676.3	4676.3	1145.2	344.7	1.0	4676.3	0.1	30.1
Total	16421.8	33930.9	53368.6	3688.3	1629.3		24715.1	0.1	44.2
<b>Maternal Mortality Ratio*</b>		1044							

**\* MICS indicator 3; MDG indicator 16**

A total fertility rate of 6.5 was used in the MMR calculation

See Graham, W. W. Brass and R. Snow 1989. Estimating maternal mortality: the sisterhood method. *Studies in Family Planning* 20(3):125-135

**Table CD.1: Family support for learning**

Percentage of children aged 0-59 months for whom household members are engaged in activities that promote learning and school readiness, Somalia, 2006

	Percentage of children aged 0-59 months					
	For whom household members engaged in four or more activities that promote learning and school readiness *	Mean number of activities household members engage in with the child	For whom the father engaged in one or more activities that promote learning and school readiness **	Mean number of activities the father engage in with the child	Living in a household without their natural father	Number of children aged 0-59 months
<b>Sex</b>						
Male	65.5	3.9	39.3	0.9	15.0	3275
Female	64.6	3.8	39.5	0.9	16.6	3030
<b>Zone</b>						
North West	69.0	3.9	29.5	0.5	16.9	1244
North East	78.9	4.4	55.9	1.5	17.3	666
Central South	61.9	3.7	39.7	0.9	15.2	4394
<b>Residence</b>						
Urban	67.2	4.0	45.1	1.2	19.6	2254
Rural	63.9	3.8	36.2	0.7	13.7	4051
<b>Age</b>						
0-23 months	46.9	3.2	27.8	0.6	12.3	2413
24-59 months	76.3	4.2	46.6	1.1	17.9	3892
<b>Mother's Education</b>						
None	64.0	3.8	38.7	0.8	14.8	3924
Koranic	65.5	3.8	40.3	1.0	16.1	1151
Primary	66.3	4.0	38.9	1.0	16.7	821
Secondary +	73.8	4.4	44.9	1.2	23.6	194
Non standard curriculum	71.2	4.1	44.6	0.9	23.3	194
<b>Fathers's education</b>						
None	66.0	3.8	46.1	1.1	0.0	1494
Koranic	62.3	3.7	39.0	0.8	0.0	1823
Primary	61.4	3.8	44.2	1.0	0.0	977
Secondary +	71.4	4.1	48.9	1.3	0.0	740
Non standard curriculum	71.1	4.1	48.9	1.1	0.0	146
Father not in household	66.5	3.9	15.6	0.4	100.0	995
Don't know/Missing	67.0	4.0	50.0	1.0	0.0	130
<b>Wealth index quintiles</b>						
Poorest	63.7	3.7	35.8	0.7	10.9	1266
Second	62.1	3.7	36.3	0.7	12.7	1294
Middle	63.8	3.8	38.1	0.8	15.4	1304
Fourth	66.6	3.9	42.7	1.1	19.6	1308
Richest	69.7	4.1	44.8	1.2	20.8	1132
<b>Total</b>	<b>65.1</b>	<b>3.8</b>	<b>39.4</b>	<b>0.9</b>	<b>15.8</b>	<b>6305</b>

\* MICS indicator 46

\*\* MICS indicator 47

Total includes 21 children missing information on mother's education who are not shown separately.

**Table ED.1: Early childhood education**

Percentage of children aged 36-59 months who are attending some form of organized early childhood education programme, Somalia, 2006

	Percentage of children aged 36-59 months currently attending early childhood education*	Number of children aged 36-59 months
<b>Sex</b>		
Male	2.3	1356
Female	2.2	1273
<b>Zone</b>		
North West	5.7	524
North East	2.1	274
Central South	1.3	1830
<b>Residence</b>		
Urban	4.6	940
Rural	1.0	1689
<b>Age of child</b>		
36-47 months	1.2	1307
48-59 months	3.3	1322
6 years***	na	na
<b>Mother's education</b>		
None	1.6	1642
Koranic	2.1	499
Primary	3.9	320
Secondary +	6.0	79
Non standard curriculum	7.0	78
<b>Wealth index quintiles</b>		
Poorest	0.5	565
Second	0.4	538
Middle	2.4	522
Fourth	2.7	529
Richest	5.8	475
<b>Total</b>	<b>2.3</b>	<b>2628</b>

**\* MICS indicator 52**

Total includes 10 children missing information on mother's education who are not shown separately.

**Table ED.2: Primary school entry**

Percentage of children of primary school entry age attending grade 1, Somalia, 2006

	Percentage of children of primary school entry age currently attending grade 1	Number of children of primary school entry age*
<b>Sex</b>		
Male	11.4	592
Female	5.7	547
<b>Zone</b>		
North West	22.4	264
North East	10.9	118
Central South	3.5	757
<b>Residence</b>		
Urban	15.5	401
Rural	5.0	738
<b>Age of child**</b>		
6	8.7	1139
<b>Mother's education</b>		
None	5.5	719
Koranic	6.1	196
Primary	20.3	144
Secondary +	(22.0)	48
Non Standard curriculum	(26.7)	29
<b>Wealth index quintiles</b>		
Poorest	1.6	234
Second	3.2	250
Middle	7.3	220
Fourth	10.1	218
Richest	22.7	216
<b>Total</b>	<b>8.7</b>	<b>1139</b>

**\* MICS indicator 54**

Table based on estimated age as of the beginning of the school year

Total includes 3 children missing information on mother's education who are not shown separately.

**Table ED.3: Primary school net attendance ratio**

Percentage of children of primary school age attending primary or secondary school (NAR), Somalia, 2006

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
<b>Zone</b>						
North West	52.7	1009	38.0	1057	45.2	2066
North East	28.5	410	23.6	415	26.1	825
Central South	13.3	2482	12.4	2301	12.9	4783
<b>Residence</b>						
Urban	45.2	1459	36.8	1417	41.1	2876
Rural	13.1	2442	11.1	2356	12.1	4798
<b>Age</b>						
6	13.3	592	7.4	547	10.5	1139
7	20.2	647	13.6	629	16.9	1276
8	22.8	443	22.3	413	22.6	856
9	27.2	627	23.2	573	25.3	1199
10	29.0	329	30.0	325	29.5	654
11	31.8	510	23.8	493	27.9	1003
12	31.3	403	28.6	355	30.0	758
13	32.9	352	26.5	438	29.4	789
<b>Mother's education</b>						
None	18.8	2464	14.2	2422	16.5	4887
Koranic	21.9	674	20.5	602	21.3	1276
Primary	52.2	491	44.0	465	48.2	956
Secondary	49.6	166	50.8	166	50.2	331
Non standard curriculum	29.3	93	25.1	105	27.1	198
<b>Wealth index quintiles</b>						
Poorest	4.8	831	4.1	833	4.5	1664
Second	8.0	783	5.8	747	6.9	1531
Middle	21.4	770	16.3	714	19.0	1484
Fourth	36.4	778	31.6	744	34.0	1521
Richest	58.0	739	48.3	735	53.2	1474
<b>Total</b>	25.1	3902	20.8	3773	23.0	7674

\* MICS indicator 55; MDG indicator 6

Table based on estimated age as of the beginning of the school year

Total includes 26 children missing information on mother's education who are not shown separately.

**Table ED.4: Secondary school net attendance ratio**

Percentage of children of secondary school age attending secondary school or higher (NAR), Somalia, 2006

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
<b>Zone</b>						
North West	16.1	452	5.6	425	11.0	877
North East	12.9	145	4.7	165	8.5	310
Central South	5.7	927	4.2	970	5.0	1898
<b>Residence</b>						
Urban	18.3	668	10.1	699	14.1	1367
Rural	2.6	857	0.2	861	1.4	1718
<b>Age</b>						
14	3.5	397	3.3	279	3.4	676
15	8.4	393	4.5	399	6.4	792
16	12.9	295	5.4	343	8.9	639
17	13.5	439	5.0	540	8.8	978
<b>Mother's education</b>						
None	4.2	548	3.4	435	3.9	983
Koranic	6.2	131	8.1	89	6.9	221
Primary	21.2	99	10.9	94	16.2	193
Secondary +	(31.1)	41	(26.7)	24	29.5	65
Non Standard Curriculum	(5.5)	27	(*)	19	(3.2)	46
Mother not in household	8.0	236	1.9	357	4.3	593
<b>Wealth index quintiles</b>						
Poorest	0.5	326	0.0	258	0.3	584
Second	0.9	250	0.2	249	0.5	499
Middle	2.2	295	0.0	316	1.1	611
Fourth	9.4	292	4.1	344	6.5	636
Richest	29.5	361	14.8	393	21.8	755
<b>Total</b>	<b>9.5</b>	<b>1524</b>	<b>4.6</b>	<b>1561</b>	<b>7.0</b>	<b>3085</b>

**\* MICS indicator 56**

Table based on estimated age as of the beginning of the school year

Total includes 4 children missing information on mother's education who are not shown separately.

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



**Table ED.4w: Secondary school age children attending primary school**

Percentage of children of secondary school age attending primary school, Somalia, 2006

	Male		Female		Total	
	Percent attending primary school	Number of children	Percent attending primary school	Number of children	Percent attending primary school	Number of children
<b>Zone</b>						
North West	35.3	452	26.7	425	31.1	877
North East	23.0	145	21.7	165	22.3	310
Central South	17.1	927	9.9	970	13.4	1898
<b>Residence</b>						
Urban	38.0	668	24.0	699	30.8	1367
Rural	11.4	857	9.0	861	10.2	1718
<b>Age</b>						
14	28.3	397	24.3	279	26.6	676
15	30.2	393	17.1	399	23.6	792
16	19.8	295	15.8	343	17.6	639
17	14.1	439	10.3	540	12.0	978
18						
<b>Mother's education</b>						
None	22.6	548	17.1	435	20.2	983
Koranic	29.2	131	25.2	89	27.6	221
Primary	42.6	99	38.5	94	40.6	193
Secondary +	(51.3)	41	(48.3)	24	50.2	65
Non Standard Curriculum	(36.3)	27	(*)	19	(30.7)	46
Mother not in household	23.2	236	11.2	357	16.0	593
<b>Wealth index quintiles</b>						
Poorest	5.3	326	1.1	258	3.5	584
Second	9.3	250	3.4	249	6.4	499
Middle	25.5	295	14.2	316	19.6	611
Fourth	29.9	292	20.1	344	24.6	636
Richest	41.1	361	30.6	393	35.6	755
<b>Total</b>	23.1	1524	15.7	1561	19.4	3085

Table based on estimated age as of the beginning of the school year

Total includes 4 children missing information on mother's education who are not shown separately.

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

**Table ED.5: Children reaching grade 5**

Percentage of children entering first grade of primary school who eventually reach grade 5, Somalia, 2006

	Percent attending 2 <sup>nd</sup> grade who were in 1 <sup>st</sup> grade last year	Percent attending 3 <sup>rd</sup> grade who were in 2 <sup>nd</sup> grade last year	Percent attending 4 <sup>th</sup> grade who were in 3 <sup>rd</sup> grade last year	Percent attending 5 <sup>th</sup> grade who were in 4 <sup>th</sup> grade last year	Percent who reach grade 5 of those who enter 1 <sup>st</sup> grade*
<b>Sex</b>					
Male	97.3	99.8	99.0	97.4	93.6
Female	98.9	97.5	95.9	95.8	88.7
<b>Zone</b>					
North West	98.3	100.0	99.5	98.3	96.1
North East	94.2	98.1	100.0	97.6	90.1
Central South	98.8	97.4	94.7	94.5	86.0
<b>Residence</b>					
Urban	99.1	98.8	99.6	99.3	96.9
Rural	96.7	98.7	93.5	90.5	80.7
<b>Mother's education</b>					
None	98.0	99.1	98.5	96.4	92.2
Koranic	100.0	99.3	100.0	98.7	98.0
Primary	97.1	100.0	96.9	97.7	91.9
Secondary +	100.0	100.0	100.0	100.0	100.0
Non Standard Curriculum	100.0	100.0	100.0	100.0	100.0
<b>Wealth index quintiles</b>					
Poorest	80.0	100.0	100.0	100.0	80.0
Second	97.8	100.0	88.6	71.2	61.7
Middle	100.0	98.4	92.9	93.8	85.8
Fourth	100.0	98.0	100.0	99.3	97.3
Richest	98.5	99.2	99.4	99.3	96.6
<b>Total</b>	98.0	98.8	97.8	96.7	91.6

\* MICS indicator 57; MDG indicator 7

**Table ED.6: Primary school completion**

Primary school completion rate and transition rate to secondary education, Somalia, 2006

	Net primary school completion rate*	Number of children of primary school completion age
<b>Sex</b>		
Male	4.4	352
Female	4.3	438
<b>Zone</b>		
North West	6.1	232
North East	6.2	84
Central South	3.2	473
<b>Residence</b>		
Urban	6.1	314
Rural	3.2	476
<b>Mother's education</b>		
None	3.1	535
Koranic	2.6	126
Primary	7.5	76
Secondary	(25.2)	30
Non Standard Curriculum	(*)	22
<b>Wealth index quintiles</b>		
Poorest	3.6	191
Second	0.8	141
Middle	2.9	138
Fourth	5.5	177
Richest	8.8	143
<b>Total</b>	4.3	789

**\* MICS indicator 59; MDG indicator 7b**

Total includes 1 children missing information on mother's education who are not shown separately.

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

**Table ED.7: Education gender parity**

Ratio of girls to boys attending primary education and ratio of girls to boys attending secondary education, Somalia, 2006

	Primary school net attendance ratio (NAR), girls	Primary school net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school NAR*	Secondary school net attendance ratio (NAR), girls	Secondary school net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school NAR*
<b>Zone</b>						
North West	38.0	52.7	0.72	5.6	16.1	0.35
North East	23.6	28.5	0.83	4.7	12.9	0.36
Central South	12.4	13.3	0.93	4.2	5.7	0.74
<b>Residence</b>						
Urban	36.8	45.2	0.82	10.1	18.3	0.55
Rural	11.1	13.1	0.85	0.2	2.6	0.08
<b>Mother's education</b>						
None	14.2	18.8	0.75	3.4	4.2	0.82
Koranic	20.5	21.9	0.94	8.1	6.2	1.31
Primary	44.0	52.2	0.84	10.9	21.2	0.51
Secondary	50.8	49.6	1.02	26.7	31.1	0.86
Non Standard Curriculum	25.1	29.3	0.86	0.0	5.5	0.00
Don't know/Missing	16.8	29.6	0.57	0.0	0.0	0.00
<b>Wealth index quintiles</b>						
Poorest	4.1	4.8	0.86	0.0	0.5	0.00
Second	5.8	8.0	0.72	0.2	0.9	0.24
Middle	16.3	21.4	0.76	0.0	2.2	0.00
Fourth	31.6	36.4	0.87	4.1	9.4	0.43
Richest	48.3	58.0	0.83	14.8	29.5	0.50
<b>Total</b>	20.8	25.1	0.83	4.6	9.5	0.49

\* MICS indicator 61; MDG indicator 9

Table based on estimated age as of the beginning of the school year

**Table ED.8: Adult literacy**

Percentage of women aged 15-24 years that are literate\*, Somalia, 2006

	Percentage literate*	Percentage not known**	Number of women aged 15-24 years
<b>Zone</b>			
North West	35.5	0.3	803
North East	32.4	0.4	344
Central South	19.3	0.5	1914
<b>Residence</b>			
Urban	44.9	0.5	1331
Rural	9.8	0.4	1730
<b>Educational Level</b>			
None	1.4	0.6	1550
Koranic	10.0	0.2	559
Primary	72.0	0.5	572
Secondary +	100.0	0.3	170
Non Standard Curriculum	58.5	0.0	149
Don't know/Missing	29.8	0.0	59
<b>Age</b>			
15-19	27.5	0.6	1706
20-24	21.9	0.3	1354
<b>Wealth index quintiles</b>			
Poorest	2.2	0.4	494
Second	6.0	0.4	549
Middle	11.8	0.4	608
Fourth	29.6	0.4	625
Richest	59.4	0.6	784
<b>Total</b>	<b>24.7</b>	<b>0.4</b>	<b>3060</b>

\* MICS indicator 60; MDG indicator 8

**Table CP.1: Birth registration**

Percent distribution of children aged 0-59 months by whether birth is registered and reasons for non-registration, Somalia, 2006

	Birth is registered*	Number of children aged 0-59 months	Birth is not registered because:							Total	Number of children aged 0-59 months without birth registration
			Costs too much	Must travel too far	Didn't know child should be registered	Doesn't know where to register	Other	Do not see the need to	Don't know		
<b>Sex</b>											
Male	3.3	3275	2.0	9.7	26.8	34.1	1.3	22.3	2.7	100	3180
Female	2.7	3030	1.8	10.1	28.1	32.6	2.0	21.4	3.0	100	2961
<b>Zone</b>											
North West Zone	6.6	1244	3.7	17.1	25.3	25.0	2.3	18.5	6.6	100	1166
North East Zone	3.3	666	4.3	17.6	23.9	29.9	0.2	19.3	3.3	100	649
Central South	1.9	4394	1.1	6.9	28.6	36.2	1.7	23.1	1.8	100	4326
<b>Residence</b>											
Urban	5.6	2254	3.9	2.9	26.1	33.4	1.1	28.6	3.3	100	2139
Rural	1.5	4051	0.9	13.7	28.2	33.3	1.9	18.2	2.6	100	4001
<b>Age</b>											
0-11 months	2.9	1326	2.0	8.6	27.0	34.9	1.9	21.2	3.3	100	1294
12-23 months	4.1	1086	2.3	11.3	27.8	30.0	2.0	23.3	2.3	100	1046
24-35 months	2.9	1264	1.9	10.9	27.2	32.9	1.8	22.1	2.3	100	1231
36-47 months	2.9	1307	2.0	9.1	28.1	33.9	1.5	21.4	2.8	100	1276
48-59 months	2.3	1322	1.4	10.1	27.1	34.6	1.0	21.4	3.4	100	1294
<b>Education</b>											
None	2.3	3924	1.9	10.1	27.4	34.7	1.5	20.3	3.1	100	3846
Koranic	2.1	1151	1.3	9.8	31.8	31.5	2.4	21.0	1.2	100	1131
Primary	5.3	821	2.4	9.7	23.3	28.9	1.8	29.6	3.2	100	782
Secondary +	10.8	194	4.1	7.6	21.7	28.2	0.0	32.1	5.5	100	175
Non Standard Curriculum	3.8	194	0.8	12.0	23.5	41.0	1.8	17.0	2.7	100	188
<b>Wealth index quintiles</b>											
Poorest	1.0	1266	0.6	13.0	36.2	29.0	1.9	15.5	2.8	100	1259
Second	1.0	1294	0.7	11.9	24.0	40.6	2.3	16.8	2.7	100	1283
Middle	1.8	1304	2.2	12.0	28.3	29.6	2.2	22.4	2.1	100	1284
Fourth	4.9	1308	2.6	8.3	26.3	34.9	1.4	22.1	3.2	100	1256
Richest	6.6	1132	3.7	3.4	21.5	32.7	0.2	34.4	3.4	100	1059
<b>Total</b>	<b>3.0</b>	<b>6305</b>	<b>1.9</b>	<b>9.9</b>	<b>27.4</b>	<b>33.4</b>	<b>1.6</b>	<b>21.8</b>	<b>2.8</b>	<b>100</b>	<b>6141</b>

\* MICS indicator 62

Total includes 20 children missing information on mother's education who are not shown separately.

**Table CP.2: Child labour**

Percentage of children aged 5-14 years who are involved in child labour activities by type of work, Somalia, 2006

	Working outside household		Household chores for 28+ hours/ week	Working for family business	Total child labour*	Number of children aged 5-14 years
	Paid work	Unpaid work				
<b>Sex</b>						
Male	0.5	1.5	16.2	38.1	44.5	5203
Female	1.2	1.8	31.3	35.1	53.6	5027
<b>Zone</b>						
North West	0.5	2.5	17.0	21.3	35.9	2742
North East	0.7	3.3	19.2	36.3	47.2	1113
Central Southern	1.1	0.9	27.3	43.3	54.9	6375
<b>Residence</b>						
Urban	0.7	1.3	20.6	22.4	36.1	3803
Rural	1.0	1.8	25.4	45.1	56.6	6426
<b>Age</b>						
5-11 years	0.5	1.5	18.4	36.0	44.8	7679
12-14 years	2.1	1.9	39.5	38.4	61.7	2550
<b>School participation</b>						
Yes	0.6	1.4	22.5	31.3	44.2	5007
No	1.1	1.8	24.8	41.7	53.5	5223
<b>Mother's education</b>						
None	1.0	1.7	23.8	38.8	50.8	6500
Koranic	0.6	0.9	26.9	41.3	53.5	1714
Primary	0.9	2.5	19.6	23.9	38.5	1293
Secondary +	0.0	0.8	20.1	24.3	34.3	430
Non standard curriculum	0.5	1.5	26.1	36.0	51.7	257
<b>Wealth index quintiles</b>						
Poorest	0.8	1.6	28.5	51.1	62.1	2208
Second	1.2	2.0	28.0	48.1	59.9	2027
Middle	1.3	2.1	23.1	37.2	50.7	1994
Fourth	0.8	1.9	20.8	26.3	39.0	2045
Richest	0.2	0.5	17.2	18.7	31.5	1955
<b>Total</b>	<b>0.9</b>	<b>1.6</b>	<b>23.6</b>	<b>36.6</b>	<b>49.0</b>	<b>10230</b>

**\* MICS indicator 71**

Total includes 36 children missing information on mother's education who are not shown separately.

**Table CP.3: Labourer students and student labourers**

Percentage of children aged 5-14 years who are labourer students and student labourers, Somalia, 2006

	Percentage of children in child labour*	Percentage of children attending school***	Number of children 5-14 years of age	Percentage of child labourers who are also attending school**	Number of child labourers aged 5-14	Percentage of students who are also involved in child labour****	Number of students aged 5-14
<b>Sex</b>							
Male	44.5	20.0	5203	50.2	2316	39.7	2927
Female	53.6	16.4	5027	39.1	2694	50.6	2079
<b>Zone</b>							
North West	35.9	36.4	2742	47.8	984	32.4	1452
North East	47.2	20.4	1113	52.7	525	47.3	585
Central South	54.9	10.0	6375	42.0	3501	49.5	2970
<b>Residence</b>							
Urban	36.1	32.4	3803	71.9	1375	37.0	2671
Rural	56.6	9.8	6426	33.7	3635	44.6	629
<b>Age</b>							
5-9 years	44.8	14.6	7679	42.0	3437	40.5	3561
10-14 years	61.7	29.0	2550	49.1	1573	53.4	1446
<b>Mother's education</b>							
None	50.8	13.0	6500	37.3	3302	46.7	2637
Koranic	53.5	16.6	1714	48.8	918	47.3	947
Primary	38.5	38.1	1293	68.7	497	37.9	900
Secondary +	34.3	40.9	430	75.6	148	32.2	346
Non standard curriculum	51.7	22.5	257	60.6	133	50.0	161
<b>Wealth index quintiles</b>							
Poorest	62.1	3.7	2208	26.3	1370	59.9	601
Second	59.9	5.6	2027	31.1	1215	58.5	645
Middle	50.7	15.2	1994	43.7	1011	48.5	912
Fourth	39.0	26.6	2045	66.0	798	41.1	1283
Richest	31.5	42.0	1955	82.7	616	32.5	1567
<b>Total</b>	<b>49.0</b>	<b>18.2</b>	<b>10230</b>	<b>44.2</b>	<b>5010</b>	<b>44.2</b>	<b>5007</b>

\*\* MICS indicator 72

\*\*\*\* MICS indicator 73

Total includes 15 children missing information on mother's education who are not shown separately.



**Table CP.4: Early marriage and polygyny**

Percentage of women aged 15-49 years in marriage or union before their 15th birthday, percentage of women aged 20-49 years married before their 18th birthday, percentage of women aged 15-19 years currently married, and the percentage of married women in a polygynous marriage, Somalia, 2006

	Percentage married before age 15*	Number of women aged 15-49 years	Percentage married before age 18*	Number of women aged 20-49 years	Percentage of women 15-19 married/in union**	Number of women aged 15-19 years	Percentage of women aged 15-49 years in polygynous marriage/union***	Number of women aged 15-49 years currently married/in union
<b>Zone</b>								
North West	3.0	1723	27.8	1269	13.0	454	16.7	943
North East	3.6	750	32.0	563	26.0	187	25.7	490
Central South	10.3	4291	55.6	3225	29.2	1066	24.4	2985
<b>Residence</b>								
Urban	7.1	2735	41.0	1969	17.4	767	21.0	1551
Rural	8.1	4028.7	49.2	3089.0	30.4	939.7	23.9	2866
<b>Age</b>								
15-19	4.9	1706	na	na	24.6	1706	13.2	419
20-24	8.4	1354	45.3	1354	na	na	14.3	879
25-29	6.8	1183	44.0	1183	na	na	21.8	980
30-34	10.8	822	49.1	822	na	na	25.4	717
35-39	10.0	798	49.9	798	na	na	26.6	686
40-44	8.7	580	46.1	580	na	na	32.6	493
45-49	8.0	320	38.8	320	na	na	37.0	244
<b>Education</b>								
None	8.7	3944	48.7	3155	31.9	789	23.9	2838
Koranic	7.3	1082	47.4	757	24.6	325	22.6	677
Primary	7.1	1040	42.1	654	16.8	387	19.3	564
Secondary +	4.4	320	24.8	224	6.4	96	16.1	133
Non Standard Curriculum	3.1	250	35.9	173	15.1	77	21.7	124
Don't know/Missng	4.1	128	40.1	96	15.8	32	25.7	81
<b>Wealth index quintiles</b>								
Poorest	9.0	1214	49.4	942	24.5	272	22.2	851
Second	8.8	1337	52.4	1064	32.1	273	24.6	977
Middle	7.4	1334	48.7	989	33.9	345	23.3	909
Fourth	7.0	1373	44.5	1005	23.6	368	22.5	882
Richest	6.7	1506	35.5	1057	13.7	449	21.4	797
<b>Total</b>	<b>7.7</b>	<b>6764</b>	<b>46.0</b>	<b>5058</b>	<b>24.6</b>	<b>1706</b>	<b>22.9</b>	<b>4417</b>

\* MICS indicator 67

\*\* MICS indicator 68

\*\*\* MICS indicator 70

**Table CP.5: Spousal age difference**

Percent distribution of currently married/in union women aged 15-19 and 20-24 years according to the age difference with their husband or partner, Somalia, 2006

	Percentage of currently married/in union women aged 15-19 whose husband or partner is:					Number of women aged 15- 19 years currently married/ in union	Percentage of currently married/in union women aged 20-24 years whose husband or partner is:					Number of women aged 20- 24 years currently married/ in union	
	Younger	0-4 years older	5-9 years older	10+ years older*	Husband/ partner's age unknown		Total	Younger	0-4 years older	5-9 years older	10+ years older*		Husband/ partner's age unknown
<b>Zone</b>													
North West	0.0	36.6	25.4	23.6	14.4	100	2.2	33.7	25.0	20.1	19.1	100	162
North East	1.0	23.0	32.1	33.8	10.2	100	2.2	16.6	36.2	38.2	6.8	100	107
Central South	0.4	29.8	30.7	32.0	7.1	100	2.1	29.8	31.1	30.9	6.0	100	610
<b>Residence</b>													
Urban	0.9	28.9	29.8	32.1	8.4	100	0.9	26.3	33.9	29.7	9.2	100	300
Rural	0.2	30.5	30.3	30.5	8.5	100	2.8	30.3	29.0	29.8	8.2	100	579
<b>Age</b>													
15-19	0.4	30.0	30.1	31.0	8.5	100	na	na	na	na	na	na	na
20-24	na	na	na	na	na	na	2.1	28.9	30.6	29.8	8.5	100	879
<b>Education</b>													
None	0.7	31.8	27.2	33.4	7.0	100	2.0	29.4	30.9	28.3	9.4	100	541
Koranic	0.0	34.6	27.1	32.0	6.3	100	1.7	23.3	29.0	37.6	8.3	100	155
Primary or above	0.0	20.6	47.0	23.0	9.4	100	2.0	32.4	29.1	29.8	6.8	100	136
<b>Wealth index quintiles</b>													
Poorest	0.0	25.7	29.7	34.5	10.0	100	4.3	34.6	24.5	22.4	14.2	100	143
Second	0.0	32.6	38.4	23.6	5.4	100	3.3	30.7	26.5	34.4	5.0	100	212
Middle	0.0	30.0	22.7	34.8	12.5	100	0.5	28.3	30.9	32.1	8.2	100	190
Fourth	1.9	28.5	29.5	33.7	6.4	100	2.7	24.4	37.4	28.1	7.5	100	170
Richest	0.0	32.8	33.9	26.7	6.7	100	0.0	26.9	34.0	29.5	9.6	100	164
<b>Total</b>	0.4	30.0	30.1	31.0	8.5	100	2.1	28.9	30.6	29.8	8.5	100	879

\* MICS indicator 69

Total includes 15 women missing information on education who are not shown separately.

**Table CP.6: Female genital mutilation/cutting (FGM/C)**

Percentage of women aged 15-49 years who have had any form of female genital mutilation/cutting (FGM/C), type of FGM/C among those who have had FGM/C, the percentage who have had the extreme form of FGM/C (infibulation), and the percent distribution among women who have heard of FGM/C according to attitudes towards whether the practice of FGM/C should be continued, Somalia, 2006

	Number of women				Percentage of women with FGM/C who:					Percent distribution of women who believe the practice of FGM/C should:				
	Had any form of FGM/C*	aged 15-49 years	Had flesh removed	Were nicked	Were sewn closed	Form of FGM/C not determined	Total	Had an extreme form of FGM/C**	Number of women with FGM/C	Continue ***	Be discontinued	Depends on situation	Don't know	Total
<b>Zone</b>														
North West	94.4	1723	5.7	1.1	91.6	1.6	100	90.2	1626	32.3	65.9	0.5	1.4	100
North East	96.1	750	2.9	1.7	93.2	2.1	100	89.5	736	53.1	44.5	1.4	1.1	100
Central South	99.2	4291	21.0	1.4	72.2	5.5	100	69.3	4259	79.5	17.5	2.2	0.8	100
<b>Residence</b>														
Urban	97.1	2735	13.7	2.0	80.1	4.3	100	77.2	2656	53.8	42.5	2.2	1.5	100
Rural	98.4	4029	16.3	0.9	78.7	4.1	100	76.4	3965	71.8	26.3	1.2	0.6	100
<b>Age</b>														
15-19	96.7	1706	16.6	2.8	76.0	4.6	100	73.0	1650	60.4	35.8	1.9	1.9	100
20-24	97.9	1354	16.2	1.0	79.0	3.8	100	76.5	1325	62.4	35.7	1.3	0.6	100
25-29	97.9	1183	14.7	1.1	79.3	4.9	100	76.9	1158	66.0	31.3	1.7	1.0	100
30-34	98.8	822	14.4	0.7	81.4	3.5	100	78.0	812	66.3	30.5	2.2	1.0	100
35-39	98.9	798	10.3	0.6	85.2	3.9	100	83.4	789	69.3	29.3	1.2	0.1	100
40-44	97.9	580	15.9	0.4	79.5	4.2	100	76.9	568	69.7	28.4	1.4	0.4	100
45-49	99.1	320	19.1	1.2	76.7	2.9	100	76.1	317	64.3	33.5	1.8	0.4	100
<b>Education</b>														
None	98.0	3944	15.5	1.1	78.9	4.4	100	76.6	3867	68.6	28.9	1.6	1.0	100
Koranic	98.7	1082	16.7	1.6	78.1	3.7	100	74.8	1068	67.5	29.8	1.8	0.9	100
Primary	96.6	1040	11.7	1.5	83.2	3.6	100	81.2	1005	53.4	44.2	1.4	0.9	100
Secondary +	96.3	320	18.6	4.2	75.1	2.0	100	71.4	308	47.0	49.5	2.0	1.5	100
Non standard curriculum	98.9	250	13.6	0.0	79.5	6.9	100	75.6	247	55.4	41.7	2.0	0.9	100
Don't know/Missing	98.3	128	18.0	0.0	78.3	3.7	100	76.5	126	68.1	29.2	1.8	0.8	100
<b>FGM/C experience</b>														
No FGM/C	na	na	na	na	na	na	na	na	na	18.5	79.0	0.0	2.5	100
Had FGM/C	na	na	na	na	na	na	na	na	na	65.5	31.8	1.7	0.9	100
<b>Wealth index quintiles</b>														
Poorest	98.4	1214	18.3	0.8	76.7	4.3	100	74.5	1195	77.9	19.8	1.6	0.6	100
Second	99.1	1337	19.4	0.9	72.7	7.0	100	69.9	1325	77.6	20.5	1.4	0.5	100
Middle	98.4	1334	13.6	1.3	82.5	2.6	100	80.0	1313	67.8	30.1	1.3	0.8	100
Fourth	97.5	1373	9.2	1.2	86.7	2.9	100	84.1	1338	56.1	41.5	1.2	1.3	100
Richest	96.2	1506	16.0	2.3	77.6	4.1	100	74.9	1449	47.0	48.8	2.7	1.6	100
<b>Total</b>	<b>97.9</b>	<b>6764</b>	<b>15.2</b>	<b>1.3</b>	<b>79.3</b>	<b>4.2</b>	<b>100</b>	<b>76.7</b>	<b>6621</b>	<b>64.5</b>	<b>32.8</b>	<b>1.6</b>	<b>1.0</b>	<b>100</b>

\* MICS indicator 63 \*\* MICS indicator 64 \*\*\* MICS indicator 66

**Table CP.7: Female genital mutilation/cutting (FGM/C) among daughters**

Percentage of women with at least one living daughter who has had female genital mutilation/cutting (FGM/C), and the percentage by type of FGM/C of the daughters, Somalia, 2006

	Daughter had any form of FGM/C*	Number of women aged 15-49 years with at least one living daughter	Percentage of women whose daughters:				Total	Daughter had an extreme form of FGM/C	Number of women aged 15-49 years with at least one living daughter who had FGM/C
			Had flesh removed	Were nicked	Were sewn closed	Form of FGM/C not determined			
<b>Zone</b>									
North West	45.3	807	28.6	8.0	52.8	10.6	100.0	51.8	365
North East	37.2	395	7.1	4.6	79.6	8.7	100.0	75.3	147
Central South	47.6	2514	26.5	4.2	63.8	5.5	100.0	59.9	1197
<b>Residence</b>									
Urban	47.7	1356	30.1	7.8	53.3	8.9	100.0	49.2	647
Rural	45.0	2360	22.3	3.4	68.7	5.6	100.0	65.8	1062
<b>Age of woman</b>									
15-19	0.0	156	0.0	0.0	0.0	0.0	0.0	.	0
20-24	3.5	591	23.6	0.0	60.0	16.4	100.0	(*)	21
25-29	21.2	828	29.1	3.2	61.3	6.3	100.0	56.2	176
30-34	50.5	654	26.8	5.5	59.9	7.7	100.0	55.3	330
35-39	71.4	689	21.9	5.6	66.8	5.7	100.0	64.1	492
40-44	84.3	516	24.6	5.6	61.8	8.0	100.0	58.6	435
45-49	90.5	283	28.4	4.1	62.3	5.2	100.0	60.2	256
<b>Had any form of FGM</b>									
No FGM/C	39.4	54	25.8	4.6	42.1	27.5	100.0	(*)	21
Had any FGM/C	46.1	3662	25.3	5.1	63.1	6.6	100.0	59.7	1687
<b>Form of FGM</b>									
Flesh removed	45.7	546	65.2	5.2	25.0	4.6	100.0	21.9	249
Nicked	(*)	27	(*)	(*)	(*)	(*)	(*)	(*)	9
Sewn closed	46.5	2942	17.9	4.9	71.8	5.5	100.0	68.3	1368
Form not determined	41.1	147	25.6	7.2	29.5	37.6	100.0	26.7	60
<b>Extreme form of FGM/C</b>									
Extreme	44.3	806	51.9	5.6	32.2	10.3	100.0	23.4	357
Not extreme	46.6	2856	18.1	4.9	71.4	5.6	100.0	69.5	1331
<b>Education</b>									
None	47.1	2380	25.7	3.6	64.4	6.3	100.0	61.3	1121
Koranic	43.7	563	23.9	7.5	59.3	9.4	100.0	54.8	246
Primary+	45.8	596	26.5	9.0	59.1	5.4	100.0	56.1	273
Non Standard Curriculum	42.0	107	20.0	2.7	66.2	11.2	100.0	(59.9)	45
<b>Wealth index quintiles</b>									
Poorest	49.1	722	25.8	3.0	65.7	5.5	100.0	62.9	354
Second	44.0	791	21.8	5.3	68.0	5.0	100.0	64.2	348
Middle	43.7	783	15.8	3.3	73.1	7.8	100.0	70.8	342
Fourth	45.7	760	28.3	5.1	58.9	7.6	100.0	55.6	347
Richest	48.0	660	35.3	9.0	47.2	8.5	100.0	42.7	317
<b>Total</b>	<b>46.0</b>	<b>3716</b>	<b>25.3</b>	<b>5.1</b>	<b>62.8</b>	<b>6.8</b>	<b>100.0</b>	<b>59.5</b>	<b>1709</b>

**\*MICS indicator 65**

Total includes 23 women missing information on education who are not shown separately.

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

**Table CP.7A: Age at circumcision among daughters**

Percentage of women with at least one living daughter who has had female genital mutilation/cutting (FGM/C) by age at circumcision, Somalia, 2006

	Zone			Residence		Total
	North West	North East	Central South	Urban	Non Urban	
<b>Age of daughter</b>						
0-4	4.1	4.5	6.3	7.3	4.7	5.7
5	5.0	3.9	15.1	12.9	11.3	11.9
6	10.0	16.5	20.2	17.4	17.7	17.6
7	16.9	20.0	20.2	21.5	18.2	19.4
8	21.0	19.7	17.3	17.9	18.6	18.3
9	17.0	12.6	9.4	11.0	11.5	11.3
10+	16.7	14.7	7.3	6.7	12.0	10.0
Don't know/Missing	9.3	8.0	4.2	5.2	6.0	5.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	365	147	1197	674	1062	1709

**Table CP.8: Attitudes toward domestic violence**

Percentage of ever-married women aged 15-49 years who believe a husband is justified in beating his wife/partner in various circumstances, Somalia, 2006

	Percentage of women aged 15-49 years who believe a husband is justified in beating his wife/partner:						Number of women aged 15-49 years
	When she goes out without telling him	When she neglects the children	When she argues with him	When she refuses sex with him	When she burns the food	For any of these reasons*	
<b>Zone</b>							
North West	44.6	56.0	50.9	60.3	30.3	72.6	1073
North East	32.9	40.2	28.8	48.6	10.4	64.8	571
Central South	59.0	59.0	56.0	68.3	31.7	78.6	3403
<b>Residence</b>							
Urban	42.2	47.6	44.2	55.5	24.4	67.9	1844
Rural	59.2	61.2	56.2	69.5	31.6	80.2	3203
<b>Age</b>							
15-19	55.0	51.3	54.2	63.3	29.6	74.8	478
20-24	54.1	58.8	52.3	66.6	28.5	77.0	991
25-29	52.7	57.0	52.6	64.9	29.0	76.7	1086
30-34	52.1	56.2	51.7	65.8	30.8	75.2	807
35-39	53.2	55.6	51.0	62.3	28.8	76.2	788
40-44	52.1	55.5	50.9	63.1	27.6	74.2	579
45-49	50.9	56.1	48.7	61.3	27.7	73.2	318
<b>Marital/Union status</b>							
Currently married	54.2	57.3	52.8	65.6	29.6	77.0	4417
Formerly married	44.7	48.4	45.0	56.0	24.2	66.9	630
<b>Education</b>							
None	56.9	61.0	56.5	68.6	32.2	79.3	3209
Koranic	48.6	48.9	45.9	60.7	24.3	70.6	776
Primary	46.6	47.6	42.8	54.9	24.2	70.4	654
Secondary +	33.0	38.8	31.1	44.9	19.9	59.9	167
Non standard curriculum	40.9	45.6	46.9	51.9	19.5	64.3	152
Don't know/Missing	56.0	63.8	51.4	69.8	21.9	80.6	90
<b>Wealth index quintiles</b>							
Poorest	62.9	66.2	56.7	73.6	35.7	84.5	937
Second	62.1	64.5	62.4	72.9	34.4	82.6	1098
Middle	57.8	59.6	56.9	68.5	30.8	79.6	1055
Fourth	43.2	46.7	43.0	55.6	22.9	66.8	1021
Richest	37.7	43.2	38.5	50.2	20.4	64.5	936
<b>Total</b>	53.0	56.2	51.9	64.4	29.0	75.7	5047

\* MICS indicator 100 - but limited to ever married women

**Table CP.10: Children's living arrangements and orphanhood**

Percent distribution of children aged 0-17 years according to living arrangements, percentage of children aged 0-17 years in households not living with a biological parent and percentage of children who are orphans, Somalia, 2006

	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*	One or both parents dead**	Number of children
		Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead					
<b>Sex</b>														
Male	74.5	0.6	1.0	5.1	0.8	7.7	5.7	1.9	1.1	1.6	100.	7.6	9.3	9668
Female	71.5	0.9	1.0	6.4	1.1	8.1	5.8	1.6	0.9	2.7	100.	9.4	9.7	9174
<b>Zone</b>														
North West	70.3	0.7	0.8	7.0	1.1	7.9	7.2	1.1	1.8	2.3	100.	9.6	11.6	4612
North East	69.7	0.8	1.4	6.9	0.7	9.9	6.4	1.4	0.5	2.3	100.	9.8	9.8	2019
Central South	74.7	0.8	1.0	5.1	1.0	7.6	5.1	2.1	0.8	2.0	100.	7.8	8.6	12210
<b>Residence</b>														
Urban	68.1	1.0	1.5	6.3	1.1	10.7	6.4	2.0	0.7	2.2	100.	9.8	10.8	7074
Rural	76.0	0.6	0.7	5.4	0.9	6.2	5.3	1.6	1.2	2.0	100	7.6	8.7	11768
<b>Age</b>														
0-4 years	82.9	0.5	0.4	3.3	0.3	8.1	2.4	1.0	0.3	0.9	100.	4.5	3.9	6506
5-9 years	74.5	0.7	1.1	6.2	0.9	7.4	5.3	2.0	0.8	1.2	100.	8.9	8.9	5826
10-14 years	66.5	1.0	1.4	7.2	1.3	8.1	8.8	2.5	1.9	1.3	100.	10.9	14.6	4404
15-17 years	52.6	1.1	1.9	9.0	2.4	8.1	10.7	1.9	2.0	10.3	100.	14.4	18.0	2107
<b>Wealth index quintiles</b>														
Poorest	78.6	0.5	0.6	4.7	0.7	5.2	5.4	1.2	1.3	1.9	100.	6.5	8.4	3912
Second	76.8	0.3	0.8	5.1	1.0	5.6	5.3	1.8	1.3	2.0	100.	7.3	8.8	3698
Middle	72.6	0.8	0.8	5.4	0.9	8.3	6.4	2.0	0.9	1.8	100.	7.9	9.9	3760
Fourth	69.3	1.3	1.4	6.4	1.5	9.1	6.3	1.7	0.7	2.5	100.	10.6	11.2	3824
Richest	67.7	0.8	1.5	7.2	0.7	11.5	5.2	2.2	0.9	2.3	100.	10.2	9.1	3647
<b>Total</b>	<b>73.1</b>	<b>0.8</b>	<b>1.0</b>	<b>5.8</b>	<b>1.0</b>	<b>7.9</b>	<b>5.7</b>	<b>1.8</b>	<b>1.0</b>	<b>2.1</b>	<b>100.</b>	<b>8.5</b>	<b>9.5</b>	<b>18842</b>

\* MICS indicator 78

\*\* MICS indicator 75

**Table CP.11: School attendance of orphaned and vulnerable children**

School attendance of children aged 10-14 years by orphanhood and vulnerability, Somalia, 2006

	Percent of children whose mother and father have died	School attendance rate of children whose mother and father have died	Percent of children whom both parents are alive and child is living with at least one parent	School attendance rate of children of whom both parents are alive and child is living with at least one parent	Double orphans to non-orphans school attendance ratio*	School attendance of children who are orphaned	Percent of children who are not orphans	School attendance of children who are not orphans	Orphans vs non-orphans school attendance ratio	Total number of children aged 10-14 years
<b>Sex</b>										
Male	1.1	29.2	78.1	30.2	0.97	35.1	85.6	30.6	1.15	2220
Female	1.6	22.7	76.0	27.9	0.81	25.1	85.3	28.3	0.89	2183
<b>Zone</b>										
North West	1.2	51.5	73.6	54.0	0.95	47.5	84.7	53.8	0.88	1249
North East	1.3	34.8	71.4	29.7	1.17	38.6	83.0	30.2	1.28	470
Central South	1.4	13.3	79.7	18.3	0.73	19.4	86.2	18.2	1.06	2684
<b>Residence</b>										
Urban	1.9	33.3	74.3	52.9	0.63	50.1	83.4	52.5	0.96	1697
Rural	0.9	15.2	78.8	15.0	1.01	14.3	86.7	15.6	0.92	2706
<b>Wealth index quintiles</b>										
Poorest	0.5	30.1	80.0	6.0	5.03	7.9	87.1	6.8	1.17	981
Second	1.6	13.4	77.4	9.7	1.38	6.1	85.6	10.1	0.61	851
Middle	1.0	5.7	79.0	21.6	0.26	25.5	85.7	22.0	1.16	836
Fourth	2.3	9.8	74.0	46.9	0.21	42.0	83.4	46.1	0.91	883
Richest	1.3	80.2	74.6	67.1	1.2	66.2	85.2	66.0	1.0	852
<b>Total</b>	1.3	25.4	77.1	29.1	0.87	30.1	85.4	29.5	1.02	4404

\* MICS indicator 77; MDG indicator 20 Note; this has been calculated by orphan status only, and does not include those made vulnerable by AIDS



**Table CP.12: Malnutrition among orphans and vulnerable children**

Percent of children aged 0-4 years who are moderately or severely underweight, stunted or wasted by orphanhood, Somalia, 2006

Status	Percentage of children aged 0-4 years who are moderately or severely:			Number of children aged 0-4 years
	Underweight	Stunted	Wasted	
Orphaned	39.9	38.4	16.3	198
Not orphaned	35.4	37.8	10.8	5226
Total	35.6	37.8	11.0	5424
Ratio OVC to non-OVC*	1.13	1.02	1.52	.

\* MICS indicator 79 Note; this has been calculated by orphan status only, and does not include those made vulnerable by AIDS

**Table HA.1: Knowledge of preventing HIV transmission**

Percentage of women aged 15-49 years who know the main ways of preventing HIV transmission, Somalia, 2006

	Percentage who know transmission can be prevented by:							Number of women
	Heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Abstaining from sex	Knows all three ways	Knows at least one way	Doesn't know any way	
<b>Zone</b>								
North West	82.0	58.3	22.7	43.6	11.8	70.5	29.5	1723
North East	65.8	41.7	13.2	23.2	6.0	46.7	53.3	750
Central South	58.2	25.5	12.2	14.8	2.6	35.4	64.6	4291
<b>Residence</b>								
Urban	87.5	50.2	25.4	32.3	8.5	65.6	34.4	2735
Rural	49.9	25.8	7.9	16.7	3.2	32.1	67.9	4029
<b>Age</b>								
15-19	66.7	35.9	13.4	22.0	4.6	45.3	54.7	1706
20-24	66.9	35.3	16.2	22.5	5.8	46.4	53.6	1354
25-29	65.2	37.1	15.0	24.1	5.2	47.4	52.6	1183
30-34	61.9	33.8	15.4	22.6	5.1	43.9	56.1	822
35-39	66.5	37.1	16.1	22.9	5.6	46.7	53.3	798
40-44	58.8	33.0	15.6	23.0	6.9	40.6	59.4	580
45-49	64.8	36.5	13.0	29.2	4.4	48.4	51.6	320
<b>Education</b>								
None	54.0	28.5	11.6	19.4	4.1	36.6	63.4	3944
Koranic	70.8	34.2	10.6	21.0	3.5	45.4	54.6	1082
Primary	87.7	53.0	23.1	32.1	8.6	65.8	34.2	1040
Secondary +	97.6	61.9	35.0	37.4	12.3	78.3	21.7	320
Non Standard Curriculum	82.1	48.2	27.2	31.0	7.6	64.1	35.9	250
Don't know/Missing	59.9	37.6	15.1	26.8	7.8	44.7	55.3	128
<b>Wealth index quintiles</b>								
Poorest	40.6	17.8	4.4	13.1	1.5	23.1	76.9	1214
Second	46.2	25.4	7.0	17.3	3.0	31.2	68.8	1337
Middle	61.1	33.3	11.3	20.7	4.0	41.0	59.0	1334
Fourth	78.7	43.2	20.9	28.9	7.4	56.4	43.6	1373
Richest	92.8	54.4	28.4	32.9	9.7	70.8	29.2	1506
<b>Total</b>	<b>65.1</b>	<b>35.7</b>	<b>15.0</b>	<b>23.1</b>	<b>5.3</b>	<b>45.6</b>	<b>54.4</b>	<b>6764</b>

**Table HA.2: Identifying misconceptions about HIV/AIDS**

Percentage of women aged 15-49 years who correctly identify misconceptions about HIV/AIDS, Somalia, 2006

	Percent who know that:			Reject two most common misconceptions and know a healthy-looking person can be infected	Percent who know that:	
	HIV cannot be transmitted by:		Option 3: HIV cannot be transmitted by sharing food		Number of women	
	Option 1: Supernatural means	Option 2: Mosquito bites				A healthy looking person can be infected
<b>Zone</b>						
North West	39.4	37.8	55.6	14.9	56.1	1723
North East	37.3	30.9	41.9	16.4	38.9	750
Central South	34.1	28.4	24.5	11.6	32.1	4291
<b>Residence</b>						
Urban	52.8	49.8	47.8	21.7	62.4	2735
Rural	24.3	18.4	25.2	7.1	23.1	4029
<b>Age</b>						
15-19	39.1	33.1	35.3	15.0	40.1	1706
20-24	36.1	32.1	35.4	12.8	42.3	1354
25-29	37.3	31.1	35.9	14.1	38.6	1183
30-34	32.6	30.8	31.6	11.0	37.7	822
35-39	35.6	31.3	34.0	14.1	38.1	798
40-44	28.6	25.5	30.9	9.8	31.0	580
45-49	33.5	26.1	34.1	7.6	40.2	320
<b>Education</b>						
None	27.5	23.7	26.4	8.9	28.3	3944
Koranic	36.9	27.1	31.3	9.6	39.8	1082
Primary	55.8	48.7	54.3	24.9	63.0	1040
Secondary +	61.4	69.4	69.2	32.7	79.7	320
Non Standard Curriculum	51.7	42.9	44.3	19.2	52.8	250
Don't know/Missing	25.6	29.4	36.3	12.0	39.1	128
<b>Wealth index quintiles</b>						
Poorest	17.2	11.9	17.6	3.7	15.6	1214
Second	21.9	18.0	23.3	6.6	21.4	1337
Middle	33.3	25.2	30.6	11.1	30.5	1334
Fourth	43.3	35.6	42.7	15.0	48.0	1373
Richest	58.7	59.2	53.4	26.0	72.8	1506
<b>Total</b>	<b>35.8</b>	<b>31.1</b>	<b>34.4</b>	<b>13.0</b>	<b>39.0</b>	<b>6764</b>

**Table HA.3: Comprehensive knowledge of HIV/AIDS transmission**

Percentage of women aged 15-49 years who have comprehensive knowledge of HIV/AIDS transmission, Somalia, 2006

	Know 2 ways to prevent HIV transmission	Reject two most common misconceptions and know a healthy- looking person can be infected	Have comprehensive knowledge (identify 2 prevention methods and 3 misconceptions)*	Number of women
<b>Zone</b>				
North West	18.3	14.9	5.1	1723
North East	11.0	16.4	4.0	750
Central South	7.4	11.6	3.0	4291
<b>Residence</b>				
Urban	17.3	21.7	6.5	2735
Rural	6.0	7.1	1.7	4029
<b>Age</b>				
15-19	9.4	15.0	3.3	1706
15-24	11.3	12.8	4.1	1354
20-24	10.2	14.0	3.7	3060
25-29	10.7	14.1	4.1	1183
30-34	10.8	11.0	3.4	822
35-39	12.2	14.1	4.1	798
40-44	11.4	9.8	3.1	580
45-49	7.7	7.6	2.0	320
<b>Education</b>				
None	8.2	8.9	2.5	3944
Koranic	6.4	9.6	1.7	1082
Primary	16.7	24.9	7.2	1040
Secondary +	25.4	32.7	10.3	320
Non Standard Curriculum	20.7	19.2	7.3	250
Don't know/Missing	13.7	12.0	4.3	128
<b>Wealth index quintiles</b>				
Poorest	3.6	3.7	1.1	1214
Second	5.6	6.6	1.7	1337
Middle	8.8	11.1	3.1	1334
Fourth	13.5	15.0	3.6	1373
Richest	19.6	26.0	8.0	1506
<b>Total</b>	<b>10.6</b>	<b>13.0</b>	<b>3.6</b>	<b>6764</b>

\* MICS indicator 82; MDG indicator 19b

**Table HA.4: Knowledge of mother-to-child HIV transmission**

Percentage of women aged 15-49 years who correctly identify means of HIV transmission from mother to child, Somalia, 2007

	Know AIDS can be transmitted from mother to child	Percent who know AIDS can be transmitted:				Did not know any specific way	Number of women
		During pregnancy	At delivery	Through breastmilk	All three ways*		
<b>Zone</b>							
North West	79.1	70.5	71.7	73.7	62.3	2.9	1723
North East	54.6	45.0	49.2	50.2	40.5	11.2	750
Central South	43.9	34.6	34.8	40.1	27.9	14.3	4291
<b>Residence</b>							
Urban	76.8	65.1	64.9	70.7	54.5	10.7	2735
Rural	38.6	31.2	32.8	35.6	26.9	11.3	4029
<b>Age</b>							
15-19	55.3	44.7	45.8	50.7	37.3	11.4	1706
20-24	55.2	46.1	45.1	50.6	37.8	11.7	1354
25-29	54.4	44.4	47.3	50.6	39.0	10.9	1183
30-34	52.9	46.0	46.9	49.2	39.9	9.0	822
35-39	55.0	47.0	47.4	51.1	40.5	11.5	798
40-44	47.5	39.4	41.8	42.9	34.1	11.4	580
45-49	54.1	44.1	43.4	49.3	35.6	10.7	320
<b>Education</b>							
None	42.3	34.9	35.0	38.3	29.0	11.7	3944
Koranic	56.5	45.6	48.5	52.3	39.7	14.3	1082
Primary	80.7	68.2	70.5	75.5	59.4	7.1	1040
Secondary +	93.4	81.1	82.9	87.6	69.9	4.2	320
Non Standard Curriculum	70.7	59.7	55.8	67.2	47.8	11.4	250
Don't know/Missing	49.2	37.8	41.7	46.1	31.3	10.7	128
<b>Wealth index quintiles</b>							
Poorest	27.8	22.6	23.7	25.3	19.5	12.8	1214
Second	37.2	29.8	30.8	33.6	24.6	9.0	1337
Middle	48.4	38.5	40.5	45.1	33.6	12.7	1334
Fourth	66.0	56.2	56.9	62.0	48.7	12.7	1373
Richest	84.3	71.6	71.5	77.1	59.2	8.5	1506
<b>Total</b>	<b>54.1</b>	<b>44.9</b>	<b>45.8</b>	<b>49.8</b>	<b>38.0</b>	<b>11.0</b>	<b>6764</b>

\* MICS indicator 89

**Table HA.5: Attitudes toward people living with HIV/AIDS**

Percentage of women aged 15-49 years who have heard of AIDS who express a discriminatory attitude towards people living with HIV/AIDS, Somalia, 2006

	Percent of women who:						Number of women who have heard of AIDS
	Would not care for a family member who was sick with AIDS	If a family member had HIV would want to keep it a secret	Believe that a teacher with HIV should not be allowed to work	Would not buy food from a person with HIV/AIDS	Agree with at least one discriminatory statement	Agree with none of the discriminatory statements*	
<b>Zone</b>							
North West	40.2	42.6	70.5	82.7	98.1	1.9	1412
North East	51.9	20.5	76.3	81.4	95.6	4.4	494
Central South	41.5	37.4	57.7	65.8	92.5	7.5	2498
<b>Residence</b>							
Urban	39.2	44.1	58.9	68.1	96.1	3.9	2393
Rural	45.8	29.0	69.8	78.8	92.9	7.1	2011
<b>Age</b>							
15-19	41.3	39.6	63.5	69.1	94.2	5.8	1139
20-24	40.0	35.0	61.7	73.6	93.8	6.2	905
25-29	41.2	39.0	65.3	75.2	95.9	4.1	772
30-34	48.1	36.6	65.6	73.1	94.2	5.8	508
35-39	43.1	36.7	61.9	74.2	94.6	5.4	531
40-44	41.2	36.3	62.1	74.1	95.2	4.8	342
45-49	45.8	31.1	73.9	77.7	95.9	4.1	208
<b>Education</b>							
None	44.2	32.9	64.3	75.0	92.7	7.3	2132
Koranic	47.0	31.0	70.7	76.0	95.0	5.0	766
Primary	41.1	43.4	62.3	70.9	97.3	2.7	913
Secondary +	27.9	54.9	51.8	61.0	96.7	3.3	312
Non Standard Curriculum	34.3	48.4	59.7	67.8	96.1	3.9	205
Don't know/Missing	31.3	41.5	63.0	72.4	99.5	0.5	77
<b>Wealth index quintiles</b>							
Poorest	45.5	27.1	67.9	73.5	88.7	11.3	493
Second	47.3	26.4	70.6	78.2	93.8	6.2	618
Middle	43.1	35.9	65.7	78.0	93.6	6.4	815
Fourth	45.0	34.9	64.6	73.5	95.0	5.0	1081
Richest	36.2	48.1	57.9	67.1	97.4	2.6	1397
<b>Total</b>	<b>42.2</b>	<b>37.2</b>	<b>63.9</b>	<b>73.0</b>	<b>94.6</b>	<b>5.4</b>	<b>4404</b>

\* MICS indicator 86

**Table HA.6: Knowledge of a facility for HIV testing**

Percentage of women aged 15-49 years who know where to get an HIV test, percentage of women who have been tested and, of those tested the percentage who have been told the result, Somalia, 2006

	Know a place to get tested*	Have been tested**	Number of women	If tested, have been told result	Number of women who have been tested for HIV
<b>Zone</b>					
North West	34.6	6.0	1723	75.5	103
North East	18.8	3.2	750	(95.1)	24
Central South	8.1	2.4	4291	64.5	103
<b>Residence</b>					
Urban	27.5	5.5	2735	72.8	151
Rural	8.2	2.0	4029	72.1	79
<b>Age</b>					
15-19	17.0	3.5	1706	71.5	60
20-24	16.2	3.5	1354	77.0	48
25-29	16.9	3.1	1183	(81.3)	37
30-34	13.7	2.9	822	(*)	24
35-39	17.0	4.6	798	(60.5)	37
40-44	15.1	2.6	580	(*)	15
45-49	12.5	2.8	320	(*)	9
<b>Education</b>					
None	11.5	2.4	3944	67.7	96
Koranic	10.8	2.6	1082	(65.1)	28
Primary	27.9	5.7	1040	(78.7)	59
Secondary +	44.6	8.7	320	(78.3)	28
Non Standard Curriculum	22.5	4.2	250	(*)	11
<b>Wealth index quintiles</b>					
Poorest	5.7	1.5	1214	(*)	18
Second	7.3	1.2	1337	(*)	17
Middle	10.3	2.8	1334	(49.0)	37
Fourth	20.4	4.5	1373	80.0	62
Richest	33.3	6.3	1506	82.4	95
<b>Total</b>	16.0	3.4	6764.0	72.6	230

\* MICS indicator 87

\*\* MICS indicator 88

Total includes 9 children missing information on mother's education who are not shown separately.

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

## Appendix A. Sample Design

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

The primary objective of the sample design for the Somali Multiple Indicator Cluster Survey was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for the three zones: North West, North East and Central South, of the country. Urban and rural areas in each of the three zones were defined as the sampling domains.

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 Somali MICS was calculated as 6000 households. For the calculation of the sample size, the key indicator used was the polio coverage among children aged 12 – 23 months. The following formula was used to estimate the required sample size for these indicators:

$$n = \frac{[4 (r) (1-r) (f) (1.1)]}{[(0.12r)^2 (p) (n_h)]}$$

where

- n is the required sample size, expressed as number of households
- 4 is a factor to achieve the 95 per cent level of confidence
- r is the predicted or anticipated prevalence (coverage rate) of the indicator
- 1.1 is the factor necessary to raise the sample size by 10 per cent for non-response
- f is the shortened symbol for deff (design effect)
- 0.12r is the margin of error to be tolerated at the 95 per cent level of confidence, defined as 12 per cent of r (relative sampling error of r)
- p is the proportion of the total population upon which the indicator, r, is based
- n<sub>h</sub> is the average household size.

For the calculation, r (polio coverage) was assumed to be 33 percent. The value of deff (design effect) was taken as a default of 1.75, p (percentage of children aged 0-4 years in the total population) was taken as 3.6 percent, and n<sub>h</sub> (average household size) was taken as 6 members per household.

The resulting number of households from this exercise was 5776 households. The average cluster size in the Somali MICS was determined as 24 households, based on a number of considerations, including the budget available, and the time that would be needed per team to complete one cluster. Dividing the total number of households by the number of households per cluster, it was calculated that the selection of a total number of 250 clusters would be needed. Of these 130 clusters were allocated to the Central South Zone and 60 clusters in the North West and North East Zone respectively.

In each region, the clusters (primary sampling units) were distributed to urban and rural domains, proportional to the size of urban and rural populations in that region.



## Sampling Frame and Selection of Clusters

Whilst perfect sampling frames are rarely encountered in practice anywhere, Somalia presents a particular challenge. Without a published census for more than 40 years and without a central statistical authority collecting data on a regular basis, Somalia lacks the basic tenets that a conventional cluster sampling approach is built on. However, in recent years, UN agencies have made progress towards compiling population estimates and collating settlement data. From drawing on these sources and engaging with local partners it was possible for UNICEF to create a sample design which made efforts to achieve a nationally representative sample giving Somalia the opportunity to partake in the MICS3.

The design follows a 4 stage-sample approach. The first stage is the selection of the districts in each of the 18 regions of the country selected using probability proportional to size (pps)<sup>14</sup>. The second stage is the selection of the secondary sampling units which are defined as permanent and temporary settlements. The third stage is the selection of the cluster(s) within the settlement and the fourth stage is the selection of the households to be interviewed.

Once the districts had been selected great efforts went into compiling a complete list of permanent and temporary settlements within these districts. The main source was the WHO immunisation campaign data, this data was later backed up by the UNDP settlement survey for at least two out of the three zones. Other sources also contributed such as FAO data on water points which could act as proxy for surrounding nomadic areas and temporary settlements. Finally lists were shown to the NGO partners implementing the survey and UNICEF staff on the ground for additional contributions to recent movement of internally displaced persons and nomads. The settlement lists were then sorted into urban and non urban. The first two stages of sampling were thus completed by selecting the required number of clusters from each of the 3 zones by urban and rural areas separately.

## Mapping and Listing Activities

For settlements over the estimated size of 150 households some form of segmentation through sketch mapping was necessary. For several district capitals it was possible to use maps from UN Habitat to assist the personnel deployed in sketch mapping. However for most of the larger non-urban settlements there were no maps available. The most important aspect of the sketch mapping was to divide the settlements into roughly equal sizes by estimating the number of households and to clearly delineate the segments using identifiable boundaries.

Once sketch maps were prepared survey coordinators were then in a position to randomly select the cluster(s) where household would be selected. It must be added at this point that finding people trained in cartographic techniques is rare in Somalia. Thus the quality of the maps varied significantly across the country and resources and time also did not allow for a full household count.

<sup>14</sup> It should be noted that the decision to distribute an equal number of clusters to the two northern zones of the country was to avoid political disputes over population figures. From thereon however the pps method was adhered to.

## Selection of Households

For the final stage of sampling, the Somali MICS had no other option than to use the method used in MICS2 of the Expanded Program for Immunization (EPI) random walk method; the expense of household/dwelling listing would simply be too considerable.

Whilst the EPI method is quick and approximately self-weighting, it is recognised that this is not a probability sample, and so cannot ensure objectivity of household selection. However with an experienced team it is argued that the EPI method can still produce near accurate results. In order to try and avoid the subjectivity involved in selecting households some measures were put in place. For example instead of relying on an arbitrary decision regarding the central point of a cluster, supervisors selected at least three or four possible starting points and then randomly choose one of them. Moreover only supervisors were able to select and number the households, not interviewers. Significant time was spent training supervisors on how to select households in order to avoid some of the criticisms typically directed towards this method.

For clusters falling in nomadic areas (the temporary settlements) the survey teams were instructed to interview the first 24 households that they came across. Typically nomads do not move in large numbers, therefore in order to ensure representation of nomads in the sample it was necessary to assume a more purposive method of sampling for this group.

## Calculation of Sample Weights

The Somalia Multiple Indicator Cluster Survey sample is not self-weighted. Essentially, by allocating equal numbers of households to each of the zones in the North, different sampling fractions were used in each zone since the size of the zones varied. For this reason, sample weights were calculated at the regional level and these were used in the subsequent analyses of the survey data.

The major component of the weight is the reciprocal of the sampling fraction employed in selecting the number of sample households in that particular sampling domain:

$$W_h = 1 / f_h$$

The term  $f_h$ , the sampling fraction at the  $h$ -th stratum, is the product of probabilities of selection at each sampling domain:

$$f_h = P_{1h} * P_{2h}$$

where  $P_{ih}$  is the probability of selection of the sampling unit in the  $i$ -th stage for the  $h$ -th sampling domain.

A second component which has to be taken into account in the calculation of sample weights is the level of non-response for the household and individual interviews. The adjustment for household non-response is equal to the inverse value of:

$$RR = \text{Number of interviewed households} / \text{Number of occupied households listed}$$

After the completion of fieldwork, response rates were calculated for each sampling domain. These were used to adjust the sample weights calculated for each cluster. Response rates in the Somali Multiple Indicator Cluster Survey are shown in Table HH.1 in this report.

Similarly, the adjustment for non-response at the individual level (women and under-5 children) is equal to the inverse value of:

$$RR = \text{Completed women's (or under-5's) questionnaires} / \text{Eligible women (or under-5s)}$$

Numbers of eligible women and under-5 children were obtained from the household listing in the Household Questionnaire in households where interviews were completed.

The unadjusted weights for the households were calculated by multiplying the above factors for each enumeration area. These weights were then standardized (or normalized), one purpose of which is to make the sum of the interviewed sample units equal the total sample size at the national level. Normalization is performed by multiplying the aforementioned unadjusted weights by the ratio of the number of completed households to the total unadjusted weighted number of households. A similar standardization procedure was followed in obtaining standardized weights for the women's and under-5's questionnaires. Adjusted (normalized) weights varied between 0.3 and 2.5 in the 250 clusters.

Sample weights were appended to all data sets and analyses were performed by weighting each household, woman or under-5 with these sample weights.

## Appendix B. List of Personnel Involved in the Survey

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Coordinator	Abdikariim Hassan Ismail
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	A/hakin Muumin Cige
	Nimco H. muumin
	Jawhara Mahamed Tube
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	Mutafe Mahamed Daahir
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	Saynab Hassan Ahmed
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	Aniisa Ahmed Aden
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	Ahmed Omar Warsame
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Editor	Fatuma Mohammed Abdi-aziz
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Editor	Ahmed Ali Farah
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Editor	Ahmed Haji Ali
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Sool/Sanaag Regions	
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<b>Central South Zone</b>	
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## Appendix C. Estimates of Sampling Errors

The sample of respondents selected in the Somali 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 all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey results.

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. 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
- 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. 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. For any given statistic calculated from the survey, the value of that statistics will fall within a range of plus or minus two times the standard error ( $p + 2.se$  or  $p - 2.se$ ) 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 14 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 total, for the regions, and for urban and rural areas. Three of the selected indicators are based on households, 7 are based on household members, 11 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. Tables SE.2 to SE.7 show the calculated sampling errors.

**Table SE.1: Indicators selected for sampling error calculations**

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Somalia, 2006

MICS Indicator	Base Population	
HOUSEHOLDS		
30	Household availability of insecticide treated nets	All households
-	Household availability of bed nets	All households
41	Iodized salt consumption	All households
HOUSEHOLD MEMBERS		
11	Use of improved drinking water sources	All household members
12	Use of improved sanitation facilities	All household members
55	Net primary school attendance rate	Children of primary school age
56	Net secondary school attendance rate	Children of secondary school age
59	Primary completion rate	Children of primary school completion age
71	Child labour	Children aged 5-14 years
75	Prevalence of orphans	Children aged under 18
WOMEN		
4	Skilled attendant at delivery	Women aged 15-49 years with a live birth in the last 2 years
20	Antenatal care	Women aged 15-49 years with a live birth in the last 2 years
21	Contraceptive prevalence	Women aged 15-49 currently married/in union
60	Adult literacy	Women aged 15-24 years
63	Prevalence of female genital mutilation/cutting (FGM/C)	Women aged 15-49 years
67	Marriage before age 18	Women aged 20-49 years
70	Polygyny	Women aged 15-49 years currently married or in union
82	Comprehensive knowledge about HIV prevention among young people	Women aged 15-24 years
86	Attitude towards people with HIV/AIDS	Women aged 15-49 years
88	Women who have been tested for HIV	Women aged 15-49 years
89	Knowledge of mother- to-child transmission of HIV	Women aged 15-49 years
UNDER-5s		
6	Underweight prevalence	Children under age 5
25	Tuberculosis immunization coverage	Children aged 12-23 months
26	Polio immunization coverage	Children aged 12-23 months
27	Immunization coverage for DPT	Children aged 12-23 months
28	Measles immunization coverage	Children aged 12-23 months
31	Fully immunized children	Children aged 12-23 months
-	Acute respiratory infection in last two weeks	Children under age 5
22	Antibiotic treatment of suspected pneumonia	Children under age 5 with suspected pneumonia in the last 2 weeks
-	Diarrhoea in last two weeks	Children under age 5
35	Received ORT or increased fluids and continued feeding	Children under age 5 with diarrhoea in the last 2 weeks
37	Under-fives sleeping under insecticide treated nets	Children under age 5
-	Fever in last two weeks	Children under age 5
39	Antimalarial treatment	Children under age 5 with fever in the last 2 weeks
46	Support for learning	Children under age 5
62	Birth registration	Children under age 5

**Table SE.2: Sampling errors: Total sample**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Somalia, 2006

Table	Value ( <i>r</i> )	Standard error ( <i>se</i> )	Coefficient of variation ( <i>se/r</i> )	Design effect ( <i>deff</i> )	Square root of design effect ( <i>deft</i> )	Weighted count	Unweighted count	Confidence limits		
								<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>	
HOUSEHOLDS										
Household availability of ITNs	CH.11	0.122	0.007	0.058	2.831	1.683	5969	5969	0.107	0.136
Percentage of households with at least one mosquito net	CH.11	0.221	0.009	0.041	2.833	1.683	5969	5969	0.203	0.239
Iodized salt consumption	NU.5	0.013	0.002	0.134	1.304	1.142	5503	5525	0.010	0.016
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.291	0.017	0.060	8.791	2.965	33959	5969	0.257	0.326
Use of improved sanitation facilities	EN.5	0.373	0.013	0.034	4.051	2.013	33959	5969	0.348	0.399
Net primary school attendance rate	ED.3	0.230	0.011	0.049	5.378	2.319	7674	7614	0.207	0.252
Net secondary school attendance rate	ED.4	0.070	0.007	0.104	2.507	1.583	3085	3051	0.056	0.085
Primary completion rate	ED.6	0.043	0.007	0.151	0.812	0.901	789	788	0.030	0.057
Child labour	CP.2	0.490	0.010	0.021	4.397	2.097	10230	10158	0.469	0.511
Prevalence of orphans	CP.10	0.095	0.005	0.049	4.661	2.159	18842	18620	0.086	0.104
WOMEN										
Skilled attendant at delivery	RH.5	0.330	0.011	0.035	1.373	1.172	2325	2326	0.307	0.353
Antenatal care	RH.3	0.261	0.010	0.039	1.270	1.127	2325	2326	0.241	0.282
Contraceptive prevalence	RH.1	0.147	0.006	0.043	1.391	1.179	4417	4400	0.135	0.160
Adult literacy	ED.8	0.250	0.012	0.049	2.457	1.567	3060	3069	0.226	0.275
Prevalence of female genital mutilation/cutting (FGM/C)	CP.6	0.979	0.002	0.002	1.447	1.203	6764	6764	0.975	0.983
Marriage before age 18	CP.4	0.460	0.009	0.020	1.644	1.282	5058	5069	0.442	0.478
Polygyny	CP.4	0.229	0.007	0.031	1.248	1.117	4417	4400	0.215	0.243
Comprehensive knowledge about HIV prevention among young people	HA.3	0.036	0.003	0.080	1.651	1.285	6764	6764	0.031	0.042
Attitude towards people with HIV/AIDS	HA.5	0.054	0.004	0.068	1.157	1.076	4404	4431	0.046	0.061
Women who have been tested for HIV	HA.6	0.034	0.002	0.070	1.174	1.084	6764	6764	0.029	0.039
Knowledge of mother- to-child transmission of HIV	HA.4	0.380	0.009	0.024	2.379	1.542	6764	6764	0.362	0.399
UNDER-5s										
Underweight prevalence	NU.1	0.356	0.009	0.025	1.854	1.362	5424	5367	0.338	0.373
Tuberculosis immunization coverage	CH.2	0.299	0.018	0.060	1.695	1.302	1079	1089	0.263	0.335
Polio immunization coverage	CH.2	0.386	0.017	0.043	1.247	1.117	1055	1064	0.353	0.420
Immunization coverage for DPT	CH.2	0.142	0.013	0.091	1.500	1.225	1078	1089	0.116	0.168
Measles immunization coverage	CH.2	0.294	0.017	0.059	1.571	1.253	1063	1073	0.259	0.329
Fully immunized children	CH.2	0.117	0.012	0.103	1.523	1.234	1075	1087	0.093	0.141
Acute respiratory infection in last two weeks	CH.6	0.148	0.006	0.042	1.901	1.379	6305	6305	0.136	0.161
Antibiotic treatment of suspected pneumonia	CH.7	0.324	0.021	0.064	1.638	1.280	935	838	0.282	0.365
Diarrhoea in last two weeks	CH.4	0.212	0.006	0.029	1.428	1.195	6305	6305	0.199	0.224
Received ORT or increased fluids and continued feeding	CH.5	0.068	0.007	0.103	0.949	0.974	1334	1232	0.054	0.081
Under-fives sleeping under insecticide treated nets	CH.12	0.092	0.008	0.083	4.443	2.108	6305	6305	0.077	0.107
Fever in last two weeks	CH.13	0.218	0.007	0.033	1.935	1.391	6305	6305	0.204	0.233
Antimalarial treatment	CH.13	0.029	0.005	0.158	0.942	0.970	1376	1288	0.020	0.038
Support for learning	CD.1	0.651	0.009	0.014	2.276	1.509	6305	6305	0.633	0.669
Birth registration	CP.1	0.030	0.003	0.088	1.509	1.228	6305	6305	0.025	0.035

**Table SE.3: Sampling errors: Urban**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Somalia, 2006

	Table	Value ( <i>r</i> )	Standard error ( <i>se</i> )	Coefficient of variation ( <i>se/r</i> )	Design effect ( <i>deff</i> )	Square root of design effect ( <i>deff</i> )	Weighted count	Unweighted count	Confidence limits	
									<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
HOUSEHOLDS										
Household availability of ITNs	CH.11	0.164	0.012	0.075	2.451	1.565	2113	2222	0.140	0.189
Percentage of households with at least one mosquito net	CH.11	0.269	0.015	0.056	2.588	1.609	2113	2222	0.239	0.299
Iodized salt consumption	NU.5	0.018	0.002	0.089	0.316	0.562	2030	2128	0.015	0.022
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.583	0.029	0.049	7.516	2.742	12945	2222	0.526	0.641
Use of improved sanitation facilities	EN.5	0.775	0.020	0.025	4.863	2.205	12945	2222	0.736	0.814
Net primary school attendance rate	ED.3	0.411	0.018	0.045	4.134	2.033	2876	2950	0.374	0.447
Net secondary school attendance rate	ED.4	0.141	0.016	0.110	2.774	1.666	1367	1390	0.110	0.172
Primary completion rate	ED.6	0.061	0.012	0.189	0.746	0.864	314	322	0.038	0.084
Child labour	CP.2	0.361	0.016	0.044	4.195	2.048	3803	3901	0.330	0.393
Prevalence of orphans	CP.10	0.108	0.008	0.072	4.535	2.129	7074	7214	0.092	0.123
WOMEN										
Skilled attendant at delivery	RH.5	0.650	0.024	0.037	2.205	1.485	852	868	0.602	0.698
Antenatal care	RH.3	0.455	0.020	0.043	1.360	1.166	852	868	0.416	0.495
Contraceptive prevalence	RH.1	0.172	0.011	0.066	1.447	1.203	1551	1587	0.149	0.195
Adult literacy	ED.8	0.449	0.020	0.046	2.319	1.523	1331	1366	0.408	0.490
Prevalence of female genital mutilation/cutting (FGM/C)	CP.6	0.971	0.004	0.005	1.935	1.391	2735	2779	0.962	0.980
Marriage before age 18	CP.4	0.410	0.013	0.032	1.435	1.198	1969	2005	0.384	0.436
Polygyny	CP.4	0.210	0.008	0.040	0.664	0.815	1551	1587	0.193	0.227
Comprehensive knowledge about HIV prevention among young people	HA.3	0.065	0.006	0.089	1.512	1.230	2735	2779	0.053	0.076
Attitude towards people with HIV/AIDS	HA.5	0.039	0.004	0.105	1.096	1.047	2393	2445	0.031	0.047
Women who have been tested for HIV	HA.6	0.055	0.004	0.073	0.858	0.926	2735	2779	0.047	0.063
Knowledge of mother- to-child transmission of HIV	HA.4	0.545	0.015	0.028	2.616	1.617	2735	2779	0.514	0.575
UNDER-5s										
Underweight prevalence	NU.1	0.228	0.012	0.054	1.696	1.302	1992	2001	0.203	0.252
Tuberculosis immunization coverage	CH.2	0.470	0.035	0.075	2.064	1.437	406	419	0.399	0.540
Polio immunization coverage	CH.2	0.538	0.024	0.045	0.961	0.980	393	404	0.490	0.587
Immunization coverage for DPT	CH.2	0.264	0.027	0.102	1.556	1.247	406	418	0.210	0.317
Measles immunization coverage	CH.2	0.404	0.033	0.083	1.875	1.369	394	406	0.337	0.470
Fully immunized children	CH.2	0.219	0.025	0.115	1.529	1.237	402	415	0.169	0.269
Acute respiratory infection in last two weeks	CH.6	0.139	0.009	0.067	1.682	1.297	2254	2317	0.120	0.157
Antibiotic treatment of suspected pneumonia	CH.7	0.490	0.034	0.070	1.319	1.148	313	280	0.421	0.559
Diarrhoea in last two weeks	CH.4	0.169	0.010	0.057	1.545	1.243	2254	2317	0.149	0.188
Received ORT or increased fluids and continued feeding	CH.5	0.088	0.013	0.147	0.748	0.865	380	360	0.062	0.113
Under-fives sleeping under insecticide treated nets	CH.12	0.146	0.016	0.108	4.676	2.162	2254	2317	0.115	0.178
Fever in last two weeks	CH.13	0.158	0.010	0.061	1.628	1.276	2254	2317	0.139	0.177
Antimalarial treatment	CH.13	0.070	0.013	0.191	0.918	0.958	356	338	0.043	0.096
Support for learning	CD.1	0.672	0.017	0.025	2.948	1.717	2254	2317	0.639	0.706
Birth registration	CP.1	0.056	0.006	0.099	1.355	1.164	2254	2317	0.045	0.068

**Table SE.4: Sampling errors: Rural**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Somalia, 2006

	Table	Value ( <i>r</i> )	Standard error ( <i>se</i> )	Coefficient of variation ( <i>se/r</i> )	Design effect ( <i>deff</i> )	Square root of design effect ( <i>deff</i> )	Weighted count	Unweighted count	Confidence limits	
									<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
HOUSEHOLDS										
Household availability of ITNs	CH.11	0.098	0.009	0.089	3.209	1.791	3856	3747	0.081	0.116
Percentage of households with at least one mosquito net	CH.11	0.010	0.003	0.265	2.351	1.533	3472	3397	0.005	0.015
Iodized salt consumption	NU.5	0.195	0.011	0.058	3.031	1.741	3856	3747	0.172	0.217
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.112	0.021	0.192	94.294	9.711	21014	20292	0.069	0.155
Use of improved sanitation facilities	EN.5	0.126	0.016	0.125	45.738	6.763	21014	20292	0.094	0.157
Net primary school attendance rate	ED.3	0.121	0.014	0.115	8.530	2.921	4798	4664	0.093	0.149
Net secondary school attendance rate	ED.4	0.014	0.003	0.203	0.983	0.991	1718	1661	0.008	0.020
Primary completion rate	ED.6	0.032	0.008	0.242	0.900	0.949	476	466	0.016	0.047
Child labour	CP.2	0.567	0.012	0.021	3.304	1.818	6054	5874	0.544	0.591
Prevalence of orphans	CP.10	0.083	0.006	0.066	4.782	2.187	12324	11935	0.072	0.094
WOMEN										
Skilled attendant at delivery	RH.5	0.145	0.011	0.074	1.371	1.171	1472	1458	0.124	0.167
Antenatal care	RH.3	0.149	0.011	0.073	1.354	1.164	1472	1458	0.128	0.171
Contraceptive prevalence	RH.1	0.134	0.007	0.056	1.349	1.162	2866	2813	0.119	0.149
Adult literacy	ED.8	0.098	0.012	0.121	2.697	1.642	1730	1703	0.074	0.121
Prevalence of female genital mutilation/cutting (FGM/C)	CP.6	0.984	0.002	0.002	0.820	0.905	4029	3985	0.981	0.988
Marriage before age 18	CP.4	0.524	0.021	0.040	1.348	1.161	790	782	0.483	0.566
Polygyny	CP.4	0.239	0.010	0.041	1.514	1.231	2866	2813	0.219	0.258
Comprehensive knowledge about HIV prevention among young people	HA.3	0.017	0.003	0.168	1.978	1.406	4029	3985	0.011	0.023
Attitude towards people with HIV/AIDS	HA.5	0.071	0.006	0.089	1.214	1.102	2011	1986	0.058	0.084
Women who have been tested for HIV	HA.6	0.020	0.003	0.151	1.822	1.350	4029	3985	0.014	0.026
Knowledge of mother-to-child transmission of HIV	HA.4	0.269	0.012	0.043	2.694	1.641	4029	3985	0.246	0.292
UNDER-5s										
Underweight prevalence	NU.1	0.430	0.012	0.028	1.968	1.403	3432	3366	0.406	0.454
Tuberculosis immunization coverage	CH.2	0.195	0.019	0.097	1.551	1.245	677	675	0.157	0.233
Polio immunization coverage	CH.2	0.290	0.021	0.072	1.430	1.196	677	675	0.248	0.332
Immunization coverage for DPT	CH.2	0.068	0.013	0.185	1.675	1.294	677	675	0.043	0.093
Measles immunization coverage	CH.2	0.227	0.019	0.084	1.400	1.183	677	675	0.189	0.265
Fully immunized children	CH.2	0.056	0.012	0.207	1.720	1.312	677	675	0.033	0.080
Acute respiratory infection in last two weeks	CH.6	0.154	0.008	0.053	2.006	1.416	4051	3988	0.137	0.170
Antibiotic treatment of suspected pneumonia	CH.7	0.240	0.023	0.094	1.557	1.248	622	558	0.195	0.285
Diarrhoea in last two weeks	CH.4	0.235	0.008	0.033	1.366	1.169	4051	3988	0.220	0.251
Received ORT or increased fluids and continued feeding	CH.5	0.060	0.008	0.139	1.064	1.031	954	872	0.043	0.076
Under-fives sleeping under insecticide treated nets	CH.12	0.062	0.008	0.133	4.623	2.150	4051	3988	0.045	0.078
Fever in last two weeks	CH.13	0.252	0.010	0.039	2.026	1.423	4051	3988	0.232	0.271
Antimalarial treatment	CH.13	0.014	0.004	0.277	1.043	1.021	1020	950	0.006	0.022
Support for learning	CD.1	0.639	0.011	0.017	1.923	1.387	4051	3988	0.618	0.660
Birth registration	CP.1	0.015	0.003	0.172	1.836	1.355	4051	3988	0.010	0.021

**Table SE.5: Sampling errors: North West**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Somalia, 2006

Table	Value ( <i>r</i> )	Standard error ( <i>se</i> )	Coefficient of variation ( <i>se/r</i> )	Design effect ( <i>deff</i> )	Square root of design effect ( <i>deft</i> )	Weighted count	Unweighted count	Confidence limits		
								<i>r - 2se</i>	<i>r + 2se</i>	
HOUSEHOLDS										
Household availability of ITNs	CH.11	0.091	0.008	0.091	1.168	1.081	1455	1411	0.075	0.108
Percentage of households with at least one mosquito net	CH.11	0.283	0.017	0.061	2.074	1.440	1455	1411	0.249	0.318
Iodized salt consumption	NU.5	0.007	0.002	0.311	0.903	0.950	1374	1336	0.003	0.011
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.403	0.041	0.103	10.093	3.177	8616	1411	0.320	0.486
Use of improved sanitation facilities	EN.5	0.400	0.028	0.070	4.636	2.153	8616	1411	0.344	0.456
Net primary school attendance rate	ED.3	0.452	0.027	0.060	6.021	2.454	2066	2006	0.397	0.506
Net secondary school attendance rate	ED.4	0.110	0.015	0.138	2.052	1.433	877	868	0.080	0.141
Primary completion rate	ED.6	0.061	0.015	0.245	0.884	0.940	232	228	0.031	0.091
Child labour	CP.2	0.359	0.019	0.054	4.269	2.066	2742	2655	0.320	0.397
Prevalence of orphans	CP.10	0.116	0.010	0.090	4.787	2.188	4612	4467	0.095	0.137
WOMEN										
Skilled attendant at delivery	RH.5	0.413	0.026	0.063	1.192	1.092	496	432	0.361	0.465
Antenatal care	RH.3	0.318	0.023	0.071	1.022	1.011	496	432	0.273	0.364
Contraceptive prevalence	RH.1	0.256	0.020	0.079	1.787	1.337	943	830	0.215	0.296
Adult literacy	ED.8	0.355	0.029	0.081	2.634	1.623	803	723	0.297	0.413
Prevalence of female genital mutilation/cutting (FGM/C)	CP.6	0.944	0.007	0.007	1.425	1.194	1723	1541	0.930	0.958
Marriage before age 18	CP.4	0.278	0.017	0.060	1.572	1.254	1269	1135	0.244	0.311
Polygyny	CP.4	0.167	0.011	0.068	0.766	0.875	943	830	0.144	0.189
Comprehensive knowledge about HIV prevention among young people	HA.3	0.051	0.006	0.125	1.291	1.136	1723	1541	0.038	0.063
Attitude towards people with HIV/AIDS	HA.5	0.019	0.004	0.236	1.369	1.170	1412	1273	0.010	0.028
Women who have been tested for HIV	HA.6	0.060	0.007	0.118	1.369	1.170	1723	1541	0.045	0.074
Knowledge of mother- to-child transmission of HIV	HA.4	0.623	0.024	0.038	3.705	1.925	1723	1541	0.575	0.670
UNDER-5s										
Underweight prevalence	NU.1	0.182	0.018	0.100	1.888	1.374	878	853	0.145	0.218
Tuberculosis immunization coverage	CH.2	0.367	0.038	0.104	1.509	1.229	250	240	0.290	0.444
Polio immunization coverage	CH.2	0.351	0.034	0.098	1.201	1.096	243	233	0.282	0.420
Immunization coverage for DPT	CH.2	0.048	0.013	0.263	0.833	0.913	247	238	0.023	0.074
Measles immunization coverage	CH.2	0.332	0.034	0.102	1.211	1.101	246	236	0.264	0.399
Fully immunized children	CH.2	0.033	0.011	0.339	0.937	0.968	250	240	0.011	0.055
Acute respiratory infection in last two weeks	CH.6	0.066	0.011	0.164	2.288	1.512	1244	1204	0.044	0.088
Antibiotic treatment of suspected pneumonia	CH.7	0.277	0.046	0.166	0.784	0.886	82	75	0.185	0.370
Diarrhoea in last two weeks	CH.4	0.131	0.012	0.089	1.435	1.198	1244	1204	0.108	0.154
Received ORT or increased fluids and continued feeding	CH.5	0.159	0.029	0.184	1.009	1.005	163	158	0.101	0.218
Under-fives sleeping under insecticide treated nets	CH.12	0.075	0.012	0.156	2.361	1.537	1244	1204	0.052	0.098
Fever in last two weeks	CH.13	0.094	0.010	0.108	1.451	1.204	1244	1204	0.074	0.115
Antimalarial treatment	CH.13	0.016	0.011	0.697	0.870	0.933	117	112	0.000	0.038
Support for learning	CD.1	0.690	0.019	0.028	2.061	1.436	1244	1204	0.652	0.728
Birth registration	CP.1	0.066	0.011	0.158	2.149	1.466	1244	1204	0.045	0.088

**Table SE.6: Sampling errors: North East**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Somalia, 2006

	Table	Value ( <i>r</i> )	Standard error ( <i>se</i> )	Coefficient of variation ( <i>se/r</i> )	Design effect ( <i>deff</i> )	Square root of design effect ( <i>deft</i> )	Weighted count	Unweighted count	Confidence limits	
									<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
HOUSEHOLDS										
Household availability of ITNs	CH.11	0.126	0.017	0.136	3.844	1.961	687	1440	0.092	0.161
Percentage of households with at least one mosquito net	CH.11	0.359	0.026	0.071	4.096	2.024	687	1440	0.307	0.410
Iodized salt consumption	NU.5	0.012	0.004	0.341	1.955	1.398	642	1347	0.004	0.021
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.243	0.032	0.131	7.886	2.808	3535	1440	0.180	0.307
Use of improved sanitation facilities	EN.5	0.437	0.034	0.078	6.810	2.610	3535	1440	0.369	0.505
Net primary school attendance rate	ED.3	0.261	0.031	0.117	8.344	2.889	825	1721	0.200	0.322
Net secondary school attendance rate	ED.4	0.085	0.014	0.169	1.744	1.321	310	657	0.056	0.114
Primary completion rate	ED.6	0.062	0.017	0.274	0.869	0.932	84	177	0.028	0.096
Child labour	CP.2	0.472	0.024	0.052	5.559	2.358	1113	2321	0.423	0.521
Prevalence of orphans	CP.10	0.098	0.010	0.099	4.525	2.127	2019	4226	0.078	0.117
WOMEN										
Skilled attendant at delivery	RH.5	0.368	0.022	0.060	1.231	1.110	269	584	0.324	0.413
Antenatal care	RH.3	0.256	0.022	0.087	1.509	1.228	269	584	0.212	0.301
Contraceptive prevalence	RH.1	0.120	0.011	0.094	1.283	1.133	490	1063	0.097	0.142
Adult literacy	ED.8	0.324	0.032	0.099	3.516	1.875	344	754	0.260	0.388
Prevalence of female genital mutilation/ cutting (FGM/C)	CP.6	0.981	0.004	0.004	1.654	1.286	750	1638	0.973	0.990
Marriage before age 18	CP.4	0.320	0.015	0.046	1.246	1.116	563	1228	0.291	0.350
Polygyny	CP.4	0.257	0.015	0.057	1.197	1.094	490	1063	0.227	0.286
Comprehensive knowledge about HIV prevention among young people	HA.3	0.040	0.011	0.268	4.877	2.208	750	1638	0.019	0.061
Attitude towards people with HIV/AIDS	HA.5	0.044	0.007	0.157	1.244	1.115	494	1094	0.030	0.058
Women who have been tested for HIV	HA.6	0.032	0.008	0.252	3.421	1.850	750	1638	0.016	0.048
Knowledge of mother- to-child transmission of HIV	HA.4	0.405	0.022	0.053	3.162	1.778	750	1638	0.362	0.448
UNDER-5s										
Underweight prevalence	NU.1	0.296	0.019	0.066	2.101	1.450	543	1161	0.257	0.335
Tuberculosis immunization coverage	CH.2	0.186	0.023	0.125	0.930	0.965	123	263	0.140	0.233
Polio immunization coverage	CH.2	0.237	0.032	0.136	1.458	1.207	120	256	0.173	0.301
Immunization coverage for DPT	CH.2	0.064	0.019	0.302	1.645	1.283	124	264	0.026	0.103
Measles immunization coverage	CH.2	0.159	0.021	0.130	0.821	0.906	121	259	0.118	0.200
Fully immunized children	CH.2	0.052	0.015	0.292	1.218	1.104	124	264	0.022	0.082
Acute respiratory infection in last two weeks	CH.6	0.063	0.009	0.144	1.973	1.405	666	1418	0.045	0.081
Antibiotic treatment of suspected pneumonia	CH.7	0.261	0.055	0.211	1.375	1.173	42	88	0.151	0.372
Diarrhoea in last two weeks	CH.4	0.114	0.011	0.097	1.714	1.309	666	1418	0.092	0.136
Received ORT or increased fluids and continued feeding	CH.5	0.134	0.029	0.217	1.150	1.072	76	158	0.076	0.193
Under-fives sleeping under insecticide treated nets	CH.12	0.073	0.020	0.273	8.251	2.872	666	1418	0.033	0.112
Fever in last two weeks	CH.13	0.145	0.016	0.110	2.878	1.697	666	1418	0.113	0.176
Antimalarial treatment	CH.13	0.049	0.016	0.334	1.128	1.062	96	198	0.016	0.081
Support for learning	CD.1	0.789	0.018	0.023	2.911	1.706	666	1418	0.752	0.826
Birth registration	CP.1	0.033	0.007	0.198	1.886	1.373	666	1418	0.020	0.046



**Table SE.7: Sampling errors: Central South**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Somalia, 2006

	Table	Value ( <i>r</i> )	Standard error ( <i>se</i> )	Coefficient of variation ( <i>se/r</i> )	Design effect ( <i>deff</i> )	Square root of design effect ( <i>deft</i> )	Weighted count	Unweighted count	Confidence limits	
									<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
HOUSEHOLDS										
Household availability of ITNs	CH.11	0.132	0.010	0.077	2.818	1.679	3827	3118	0.112	0.153
Percentage of households with at least one mosquito net	CH.11	0.173	0.012	0.067	2.938	1.714	3827	3118	0.149	0.196
Iodized salt consumption	NU.5	0.015	0.002	0.161	1.155	1.075	3487	2842	0.010	0.020
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.255	0.021	0.082	7.192	2.682	21809	3118	0.213	0.297
Use of improved sanitation facilities	EN.5	0.353	0.015	0.043	3.184	1.784	21809	3118	0.322	0.383
Net primary school attendance rate	ED.3	0.129	0.012	0.090	4.663	2.159	4783	3887	0.105	0.152
Net secondary school attendance rate	ED.4	0.050	0.009	0.188	2.807	1.676	1898	1526	0.031	0.068
Primary completion rate	ED.6	0.032	0.007	0.232	0.673	0.820	473	383	0.017	0.046
Child labour	CP.2	0.549	0.014	0.025	4.015	2.004	6375	5182	0.521	0.577
Prevalence of orphans	CP.10	0.086	0.006	0.067	4.154	2.038	12210	9927	0.075	0.098
WOMEN										
Skilled attendant at delivery	RH.5	0.297	0.014	0.048	1.262	1.123	1560	1310	0.269	0.326
Antenatal care	RH.3	0.244	0.013	0.052	1.162	1.078	1560	1310	0.219	0.270
Contraceptive prevalence	RH.1	0.117	0.006	0.054	0.981	0.990	2985	2507	0.105	0.130
Adult literacy	ED.8	0.193	0.014	0.070	1.866	1.366	1914	1592	0.166	0.220
Prevalence of female genital mutilation/cutting (FGM/C)	CP.6	0.992	0.001	0.001	0.862	0.929	4291	3585	0.990	0.995
Marriage before age 18	CP.4	0.556	0.012	0.021	1.468	1.212	3225	2706	0.533	0.580
Polygyny	CP.4	0.244	0.009	0.039	1.214	1.102	2985	2507	0.225	0.263
Comprehensive knowledge about HIV prevention among young people	HA.3	0.030	0.003	0.110	1.338	1.157	4291	3585	0.024	0.037
Attitude towards people with HIV/AIDS	HA.5	0.075	0.006	0.075	0.945	0.972	2498	2064	0.064	0.087
Women who have been tested for HIV	HA.6	0.024	0.002	0.087	0.661	0.813	4291	3585	0.020	0.028
Knowledge of mother- to-child transmission of HIV	HA.4	0.279	0.010	0.035	1.722	1.312	4291	3585	0.259	0.299
UNDER-5s										
Underweight prevalence	NU.1	0.402	0.011	0.027	1.614	1.270	4003	3353	0.380	0.423
Tuberculosis immunization coverage	CH.2	0.295	0.024	0.080	1.575	1.255	705	586	0.248	0.342
Polio immunization coverage	CH.2	0.424	0.022	0.051	1.111	1.054	692	575	0.381	0.468
Immunization coverage for DPT	CH.2	0.188	0.019	0.100	1.352	1.163	706	587	0.150	0.225
Measles immunization coverage	CH.2	0.305	0.024	0.078	1.520	1.233	696	578	0.258	0.352
Fully immunized children	CH.2	0.159	0.018	0.111	1.357	1.165	702	583	0.124	0.194
Acute respiratory infection in last two weeks	CH.6	0.185	0.008	0.044	1.597	1.264	4394	3683	0.168	0.201
Antibiotic treatment of suspected pneumonia	CH.7	0.331	0.023	0.070	1.637	1.279	811	675	0.285	0.378
Diarrhoea in last two weeks	CH.4	0.249	0.008	0.031	1.209	1.099	4394	3683	0.233	0.265
Received ORT or increased fluids and continued feeding	CH.5	0.049	0.007	0.143	0.966	0.983	1095	916	0.035	0.063
Under-fives sleeping under insecticide treated nets	CH.12	0.100	0.010	0.101	4.168	2.042	4394	3683	0.080	0.120
Fever in last two weeks	CH.13	0.265	0.010	0.036	1.717	1.310	4394	3683	0.246	0.284
Antimalarial treatment	CH.13	0.028	0.005	0.179	0.906	0.952	1163	978	0.018	0.038
Support for learning	CD.1	0.619	0.011	0.018	2.044	1.430	4394	3683	0.596	0.641
Birth registration	CP.1	0.019	0.002	0.110	0.863	0.929	4394	3683	0.015	0.023

## Appendix D. Data Quality Tables

**Table DQ.1: Age distribution of household population**

Single-year age distribution of household population by sex (weighted), Somalia, 2006

	Males		Females		Males	
	Number	Percent	Number	Percent	Number	
0	701	4.1	657	3.9	43	75
1	606	3.6	516	3.0	44	45
2	673	4.0	638	3.8	45	269
3	696	4.1	666	3.9	46	60
4	704	4.1	650	3.8	47	32
5	611	3.6	601	3.5	48	82
6	691	4.1	653	3.8	49	22
7	592	3.5	547	3.2	50	315
8	647	3.8	629	3.7	51	49
9	443	2.6	413	2.4	52	61
10	627	3.7	573	3.4	53	26
11	329	1.9	325	1.9	54	34
12	510	3.0	493	2.9	55	127
13	403	2.4	355	2.1	56	47
14	352	2.1	438	2.6	57	26
15	397	2.3	279	1.6	58	35
16	393	2.3	399	2.4	59	19
17	295	1.7	343	2.0	60	304
18	439	2.6	540	3.2	61	30
19	231	1.4	303	1.8	62	41
20	482	2.8	521	3.1	63	23
21	140	0.8	204	1.2	64	18
22	223	1.3	322	1.9	65	94
23	162	1.0	229	1.4	66	23
24	165	1.0	181	1.1	67	24
25	333	2.0	440	2.6	68	21
26	136	0.8	210	1.2	69	11
27	150	0.9	188	1.1	70	135
28	173	1.0	294	1.7	71	12
29	96	0.6	133	0.8	72	15
30	429	2.5	438	2.6	73	8
31	89	0.5	102	0.6	74	11
32	136	0.8	173	1.0	75	21
33	67	0.4	92	0.5	76	9
34	66	0.4	70	0.4	77	7
35	315	1.9	332	2.0	78	8
36	95	0.6	151	0.9	79	0
37	73	0.4	98	0.6	80+	88
38	131	0.8	182	1.1	DK/Missing	240
39	63	0.4	86	0.5		
40	460	2.7	365	2.2	Total	16988
41	73	0.4	78	0.5		
42	125	0.7	102	0.6		

**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 (weighted), by five-year age group, Somalia, 2006

Age	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
	Number	Number	Percent	
10-14	2183	na	na	na
15-19	1863	1705	25.2	91.5
20-24	1457	1351	20.0	92.7
25-29	1265	1187	17.5	93.8
30-34	875	822	12.1	94.0
35-39	850	796	11.8	93.7
40-44	630	582	8.6	92.3
45-49	347	329	4.9	94.7
50-54	502	na	na	na
15-49	7287	6772	100.0	92.9

**Table DQ.3: Age distribution of eligible and interviewed under-5s**

Household population of children age 0-4, children whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed (weighted), by five-year age group, Somalia, 2006

Age	Household population of children age 0-7	Interviewed children age 0-4		Percentage of eligible children interviewed
	Number	Number	Percent	
0	1346	1328	21.1	98.7
1	1111	1097	17.4	98.7
2	1264	1252	19.9	99.1
3	1340	1329	21.1	99.2
4	1312	1299	20.6	99.0
5	1237	na	na	na
6	1307	na	na	na
7	1117	na	na	na
0-4	6373	6305	100.0	98.9

**Table DQ.4: Age distribution of under-5 children**

Age distribution of under-5 children by 3-month groups (weighted), Somalia, 2006

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Age in months						
0-2	167	5.1	146	4.8	314	5.0
3-5	200	6.1	168	5.5	368	5.8
6-8	208	6.4	215	7.1	423	6.7
9-11	108	3.3	115	3.8	223	3.5
12-14	199	6.1	177	5.9	377	6.0
15-17	177	5.4	161	5.3	338	5.4
18-20	151	4.6	113	3.7	264	4.2
21-23	50	1.5	58	1.9	108	1.7
24-26	228	7.0	211	7.0	439	7.0
27-29	227	6.9	183	6.0	410	6.5
30-32	127	3.9	143	4.7	270	4.3
33-35	77	2.3	68	2.2	145	2.3
36-38	224	6.9	196	6.5	421	6.7
39-41	232	7.1	232	7.7	464	7.4
42-44	139	4.2	144	4.7	283	4.5
45-47	70	2.1	70	2.3	140	2.2
48-50	225	6.9	196	6.5	421	6.7
51-53	263	8.0	224	7.4	487	7.7
54-56	141	4.3	139	4.6	281	4.4
57-59	62	1.9	70	2.3	133	2.1
Total	3275	100.0	3030	100.0	6305	100.0

**Table DQ.5: Heaping on ages and periods**

Age and period ratios at boundaries of eligibility by type of information collected (weighted), Somalia, 2006

	Age and period ratios*			Eligibility boundary (lower-upper)	Module or questionnaire
	Males	Females	Total		
Age in household questionnaire					
1	0.9	0.9	0.9		
2	1.0	1.1	1.0	Lower	Child discipline and child disability
3	1.0	1.0	1.0		
4	1.1	1.0	1.0	Upper	Under-5 questionnaire
5	0.9	0.9	0.9	Lower	Child labour and education
6	1.1	1.1	1.1		
8	1.2	1.2	1.2		
9	0.8	0.8	0.8	Upper	Child disability
10	1.3	1.3	1.3		
13	1.0	0.8	0.9		
14	0.9	1.2	1.1	Upper	Child labour and child discipline
15	1.0	0.7	0.9	Lower	Women's questionnaire
16	1.1	1.2	1.1		
17	0.8	0.8	0.8	Upper	Orphaned and vulnerable children
18	0.9	0.9	0.9		
23	0.9	0.9	0.9		
24	0.8	0.6	0.7	Upper	Education
25	1.6	1.6	1.6		
48	1.8	1.3	1.6		
49	0.2	0.4	0.2	Upper	Women's questionnaire
50	2.4	1.9	2.2		

**Table DQ.6: Completeness of reporting**

Percentage of observations missing information for selected questions and indicators (weighted), Somalia, 2006

Questionnaire and Subject	Reference group	Percent with missing information*	Number of cases
<b>Household</b>			
Salt testing	All households surveyed	0.5	5969
<b>Women</b>			
Date of Birth	All women age 15-49		
Month only		65.8	6764
Month and year missing		0.0	6764
Date of first marriage/union	All ever married women age 15-49		
Month only		55.7	5047
Month and year missing		1.7	5047
Age at first marriage/union	All ever married women age 15-49	0.7	5047
<b>Under-5</b>			
Date of Birth	All under five children surveyed		
Month only		2.7	6305
Month and year missing		0.0	6305
Anthropometry	All under five children surveyed		
Height		6.6	6305
Weight		7.1	6305
Height or Weight		7.4	6305

\* Includes "Don't know" responses

**Table DQ.7: 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 (weighted), Somalia, 2006

Age	Mother in the household				Mother not in the household			Total	Number of children aged 0-4 years
	Mother interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed		
0	96.9	0.3	0.7	0.1	0.0	2.0	0.0	100.0	1358
1	94.1	0.5	0.2	0.1	0.0	4.8	0.1	100.0	1122
2	91.7	0.3	0.7	0.0	0.2	6.9	0.2	100.0	1311
3	91.3	0.5	0.9	0.1	0.1	6.5	0.3	100.0	1361
4	88.7	0.2	0.9	0.2	0.5	8.7	0.6	100.0	1354
Total	92.5	0.4	0.7	0.1	0.2	5.8	0.2	100.0	6506



**Table D0.8: School attendance by single age**

Distribution of household population age 5-24 by educational level and grade attended in the current year (weighted), Somalia, 2006

Age	Primary school												Secondary school					Total	Number		
	Grade						Grade						Higher	Koranic	Non standard curriculum	Don't know	Not attending school				
	1	2	3	4	5	6	1	2	3	4	5	6									
5	4.7	7.2	1.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.9	0.4	0.7	17.2	100	1212
6	2.3	7.1	2.6	1.5	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.2	0.8	0.3	11.0	100	1344
7	1.8	10.0	6.7	1.4	0.7	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	65.3	1.1	1.0	10.5	100	1139
8	0.8	9.9	11.7	5.4	1.7	0.2	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	58.8	0.8	0.0	9.7	100	1276
9	1.3	8.3	11.5	8.6	2.9	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	52.6	1.4	0.1	10.4	100	856
10	1.2	5.5	11.8	9.0	7.6	2.0	1.3	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	47.8	1.0	0.2	11.1	100	1199
11	0.4	3.9	9.4	7.7	9.9	5.7	3.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	44.4	1.8	0.6	11.8	100	654
12	0.5	4.5	8.2	6.8	8.6	6.2	3.2	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.0	42.3	1.1	0.4	13.8	100	1003
13	0.2	2.3	4.1	7.6	6.7	8.3	5.4	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	39.6	1.7	1.3	15.5	100	758
14	0.2	1.2	4.5	4.9	6.5	6.3	6.4	0.8	0.8	0.8	0.7	0.0	0.2	0.2	0.2	29.4	3.4	0.5	23.7	100	789
15	0.0	0.7	3.2	4.4	5.0	3.7	6.5	2.0	1.8	0.5	0.7	0.0	0.0	0.0	0.0	25.6	2.3	1.2	26.7	100	676
16	0.0	1.1	1.5	4.1	4.9	3.3	5.3	3.7	2.9	0.8	0.9	0.1	0.4	0.4	0.4	22.0	3.7	0.9	30.8	100	792
17	0.0	0.5	1.9	1.8	4.0	2.6	2.6	3.0	4.0	2.7	2.8	0.0	0.5	0.5	0.5	17.5	3.0	0.1	40.7	100	639
18	0.0	0.7	0.8	2.4	2.1	2.4	2.1	2.9	2.3	4.2	2.4	0.0	0.6	0.6	0.6	13.9	3.1	1.1	50.3	100	978
19	0.0	0.0	1.4	0.4	0.9	1.2	0.5	2.5	3.6	4.2	4.6	0.0	1.6	1.6	1.6	13.5	2.0	1.2	53.3	100	534
20	0.0	0.1	0.6	0.2	0.7	1.3	0.9	1.3	2.1	2.1	3.0	0.0	1.8	1.8	1.8	14.5	2.4	0.3	66.5	100	1003
21	0.0	0.0	0.0	0.6	1.6	0.3	0.5	0.6	4.0	1.4	5.8	0.0	3.8	3.8	3.8	10.6	3.8	0.8	64.2	100	344
22	0.0	0.0	0.0	0.0	0.0	0.5	1.3	0.9	1.1	3.3	1.7	0.0	2.2	2.2	2.2	12.7	2.9	0.0	71.6	100	545
23	0.0	0.9	0.2	0.0	1.7	0.2	1.7	0.2	0.4	2.1	3.9	0.0	2.0	2.0	2.0	7.5	3.5	0.2	73.5	100	391
24	0.0	0.0	0.6	0.6	0.0	0.7	1.3	1.0	0.0	0.4	3.4	0.0	2.4	2.4	2.4	11.8	2.1	0.6	69.5	100	346

**Table DQ.9: Sex ratio at birth among children ever born and living**

Sex ratio at birth among children ever born, children living, and deceased children, by age of women (weighted), Somalia, 2006

	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 deceased sons	Number of deceased daughters	Sex ratio	
<b>Age</b>										
15-19	227	200	1.1	191	186	1.0	36	14	2.6	1706
20-24	971	939	1.0	862	843	1.0	108	95	1.1	1354
25-29	1926	1760	1.1	1666	1529	1.1	261	231	1.1	1183
30-34	1997	1814	1.1	1660	1527	1.1	336	287	1.2	822
35-39	2549	2228	1.1	2089	1881	1.1	461	347	1.3	798
40-44	2130	1815	1.2	1728	1497	1.2	402	318	1.3	580
45-49	1162	1057	1.1	917	853	1.1	245	205	1.2	320
Total	10962	9814	1.1	9114	8316	1.1	1849	1498	1.2	6764

**Table DQ.10: Distribution of women by time since last birth**

Distribution of women aged 15-49 with at least one live birth, by months since last birth (weighted), Somalia, 2007

	Months since last birth				
	Number	Percent	Number	Percent	
0	77	3.2	12	85	3.6
1	110	4.6	13	132	5.6
2	132	5.6	14	155	6.5
3	119	5.0	15	115	4.9
4	119	5.0	16	97	4.1
5	130	5.5	17	89	3.8
6	138	5.8	18	64	2.7
7	198	8.4	19	100	4.2
8	110	4.6	20	67	2.8
9	76	3.2	21	18	0.8
10	81	3.4	22	23	1.0
11	62	2.6	23	65	2.7
12	85	3.6	24	2	0.1
		Total		2371	100

Typical data quality issues: Months since last birth may be heaped on periods of 6 months, 12 months, 24 months etc. In particular, the heaping on 24 months is problematic, since some women had a birth in the last 2 years, but did not declare them so.

## Appendix E. MICS Indicators: Numerators and Denominators

INDICATOR	NUMERATOR	DENOMINATOR
1 Under-five mortality rate	Probability of dying by exact age 5 years	
2 Infant mortality rate	Probability of dying by exact age 1 year	
3 Maternal mortality ratio	Number of deaths of women from pregnancy-related causes in a given year	Number of live births in the year (expressed per 100,000 births)
4 Skilled attendant at delivery	Number of women aged 15-49 years with a birth in the 2 years preceding the survey that were attended during childbirth by skilled health personnel	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
5 Institutional deliveries	Number of women aged 15-49 years with a birth in the 2 years preceding the survey that delivered in a health facility	Total number of women surveyed aged 15-49 years with a birth in 2 years preceding the survey
6 Underweight prevalence	Number of children under age five that fall below minus two standard deviations from the median weight for age of the NCHS/WHO standard (moderate and severe); number that fall below minus three standard deviations (severe)	Total number of children under age five that were weighed
7 Stunting prevalence	Number of children under age five that fall below minus two standard deviations from the median height for age of the NCHS/WHO standard (moderate and severe); number that fall below minus three standard deviations (severe)	Total number of children under age five measured
8 Wasting prevalence	Number of children under age five that fall below minus two standard deviations from the median weight for height of the NCHS/WHO standard (moderate and severe); number that fall below minus three standard deviations (severe)	Total number of children under age five weighed and measured
9 Low-birth weight infants	Number of last live births in the 2 years preceding the survey weighing below 2,500 grams	Total number of last live births in the 2 years preceding the survey
10 Infants weighed at birth	Number of last live births in the 2 years preceding the survey that were weighed at birth	Total number of last live births in the 2 years preceding the survey
11 Use of improved drinking water sources	Number of household members living in households using improved sources of drinking water	Total number of household members in households surveyed
12 Use of improved sanitation facilities	Number of household members using improved sanitation facilities	Total number of household members in households surveyed
13 Water treatment	Number of household members using water that has been treated	Total number of household members in households surveyed
14 Disposal of child's faeces	Number of children under age three whose (last) stools were disposed of safely	Total number of children under age three surveyed
15 Exclusive breastfeeding rate	Number of infants aged 0-5 months that are exclusively breastfed	Total number of infants aged 0-5 months surveyed

INDICATOR	NUMERATOR	DENOMINATOR
16	Continued breastfeeding rate	Total number of children aged 12-15 months, and 20-23 months, that are currently breastfeeding
17	Timely complementary feeding rate	Total number of infants aged 6-9 months that are receiving breastmilk and complementary foods
18	Frequency of complementary feeding	Total number of infants aged 6-11 months surveyed
19	Adequately fed infants	Total number of infants aged 0-11 months surveyed
20	Antenatal care	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
21	Contraceptive prevalence	Total number of women aged 15-49 years that are currently married or in union
22	Antibiotic treatment of suspected pneumonia	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
23	Care-seeking for suspected pneumonia	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
24	Solid fuels	Total number of residents in households surveyed
25	Tuberculosis immunization coverage	Total number of children aged 12-23 months surveyed
26	Polio immunization coverage	Total number of children aged 12-23 months surveyed
27	Immunization coverage for diphtheria, pertussis and tetanus (DPT)	Total number of children aged 12-23 months surveyed
28	Measles immunization coverage	Total number of children aged 12-23 months surveyed
31	Fully immunized children	Total number of children aged 12-23 months surveyed
32	Neonatal tetanus protection	Total number of women surveyed aged 15-49 years with a birth in the year preceding the survey

INDICATOR	NUMERATOR	DENOMINATOR
33	Use of oral rehydration therapy (ORT)	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
34	Home management of diarrhoea	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
35	Received ORT or increased fluids and continued feeding	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
36	Household availability of insecticide-treated nets (ITNs)	Total number of households surveyed
37	Under-fives sleeping under insecticide-treated nets	Total number of children aged 0-59 months surveyed
38	Under-fives sleeping under mosquito nets	Total number of children aged 0-59 months surveyed
39	Antimalarial treatment (under-fives)	Total number of children aged 0-59 months reported to have had fever in the previous 2 weeks
40	Intermittent preventive malaria treatment (pregnant women)	Total number of women that have had a live birth within the 2 years preceding the survey
41	Iodized salt consumption	Total number of households surveyed
42	Vitamin A supplementation (under-fives)	Total number of children aged 6-59 months surveyed
43	Vitamin A supplementation (post-partum mothers)	Total number of women that had a live birth in the 2 years preceding the survey
44	Content of antenatal care	Total number of women with a live birth in the 2 years preceding the survey
45	Timely initiation of breastfeeding	Total number of women with a live birth in the 2 years preceding the survey
46	Support for learning	Total number of children aged 0-59 months surveyed
47	Father's support for learning	Total number of children aged 0-59 months
52	Pre-school attendance	Total number of children aged 36-59 months surveyed
53	School readiness	Total number of children in the first grade surveyed

INDICATOR	NUMERATOR	DENOMINATOR
54	Net intake rate in primary education	Total number of children of primary- school entry age surveyed
55	Net primary school attendance rate	Total number of children of primary- school age surveyed
56	Net secondary school attendance rate	Total number of children of secondary-school age surveyed
57	Children reaching grade five	Total number of children that were in the last grade of primary school during the previous school year that attend secondary school
58	Transition rate to secondary school	Total number of children that were in the last grade of primary school during the previous school year that attend secondary school
59	Primary completion rate	Total number of children (of any age) attending the last grade of primary school (excluding repeaters)
60	Adult literacy rate	Total number of women aged 15-24 years that are able to read a short simple statement about everyday life
61	Gender parity index	Proportion of girls in primary and secondary education
62	Birth registration	Number of children aged 0-59 months whose births are reported registered
63	Prevalence of female genital mutilation/cutting (FGM/C)	Number of women aged 15-49 years that reported undergoing any form of genital mutilation/cutting
64	Prevalence of extreme form of FGM/C	Number of women aged 15-49 years that reported undergoing an extreme form of genital mutilation/cutting (such as infibulation)
65	Prevalence of FGM/C among daughters	Number of women aged 15-49 years that reported that at least one daughter had undergone female genital mutilation/cutting
66	Approval for FGM/C	Number of women aged 15-49 years favouring the continuation of female genital mutilation/cutting
67	Marriage before age 15 and age 18	Number of women that were first married or in union by the exact age of 15 and the exact age of 18, by age groups
68	Young women aged 15-19 years currently married or in union	Number of women aged 15-19 years currently married or in union
69	Spousal age difference	Number of women married/in union aged 15-19 years and 20-24 years with a difference in age of 10 or more years between them and their current spouse
70	Polygyny	Number of women in a polygynous union
71	Child labour	Number of children aged 5-14 years that are involved in child labour
72	Labourer students	Number of children aged 5-14 years involved in child labour activities that attend school

INDICATOR	NUMERATOR	DENOMINATOR
73 Student labourers	Number of children aged 5-14 years attending school that are involved in child labour activities	Total number of children aged 5-14 years attending school
75 Prevalence of orphans	Number of children under age 18 with at least one dead parent	Total number of children under age 18 surveyed
77 School attendance of orphans versus non-orphans	Proportion of double orphans (both mother and father dead) aged 10-14 years attending school	Proportion of children aged 10-14 years, both of whose parents are alive, that are living with at least one parent and are attending school
78 Children's living arrangements	Number of children aged 0-17 years not living with a biological parent	Total number of children aged 0-17 years surveyed
79 Malnutrition among children orphaned	Proportion of orphaned children under age five that are moderately or severely underweight, of all orphaned children under age five that are weighed	Proportion of children not classified as orphaned under age five that are moderately or severely underweight, of all children not classified as orphaned under age five that are weighed
82 Comprehensive knowledge about HIV prevention among young people	Number of women aged 15-24 years that correctly identify two ways of avoiding HIV infection and reject three common misconceptions about HIV transmission	Total number of women aged 15-24 years surveyed
86 Attitude towards people with HIV/AIDS	Number of women expressing acceptance on all four questions about people with HIV or AIDS	Total number of women surveyed
87 Women who know where to be tested for HIV	Number of women that state knowledge of a place to be tested	Total number of women surveyed
88 Women who have been tested for HIV	Number of women that report being tested for HIV	Total number of women surveyed
89 Knowledge of mother-to-child transmission of HIV	Number of women that correctly identify all three means of vertical transmission	Total number of women surveyed
98 Unmet need for family planning	Number of women that are currently married or in union that are fecund and want to space their births or limit the number of children they have and that are not currently using contraception	Total number of women interviewed that are currently married or in union
99 Demand satisfied for family planning	Number of women currently married or in union that are currently using contraception	Number of women currently married or in union that have an unmet need for contraception or that are currently using contraception
100 Attitudes towards domestic violence	Number of married women that consider 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 surveyed
101 Child disability	Number of children aged 2-9 years with at least one of nine reported disabilities: (1) delay in sitting, standing or walking, (2) difficulty seeing, either in the daytime or at night, (3) appears to have difficulty hearing, (4) difficulty in understanding instructions, (5) difficulty walking or moving arms or has weakness or stiffness of limbs, (6) has fits, becomes rigid, loses consciousness, (7) does not learn to do things like other children his/her age, (8) cannot speak or cannot be understood in words, (9) appears mentally backward, dull or slow	Total number of children aged 2-9 surveyed





# Appendix F. Questionnaires

## HOUSEHOLD QUESTIONNAIRE

⇒ We are from (*country-specific affiliation*). We are working on a project concerned with family health and education. I would like to talk to you about this. The interview will take about (60) minutes. All the information we obtain will remain strictly confidential and your answers will never be identified. During this time I would like to speak with the household head and all mothers or others who take care of children in the household.

May I start now? *If permission is given, begin the interview.*

HOUSEHOLD INFORMATION PANEL HH	
HH1. Cluster number: _____	HH2. Household number: _____
HH3. Interviewer name and number: Name..... _____	HH4. Supervisor name and number: Name..... _____
HH5. Day/Month/Year of interview: ..... / .. / ..	
HH6. Area: Urban .....1 Rural Sedentary .....21 Nomadic .....22	HH7. Region: Zone 1: Somaliland .....1 Zone 2: Puntland .....2 Zone 3: Central South .....3
HH 8. Name of head of household:	
<i>After all questionnaires for the household have been completed, fill in the following information:</i>	
HH9. Result of HH interview: Completed .....1 Not at home .....2 Refused .....3  Other ( <i>specify</i> ) ..... 6	HH10. Respondent to HH questionnaire: Name:.....  Line No: _____  HH11. Total number of household members: _____
HH12. No.of women eligible for interview: _____	HH13. No.of women questionnaires completed: _____
HH14. No.of children under age 5: _____	HH15. No.of under-5 questionnaires completed: _____
Interviewer/supervisor notes: <i>Use this space to record notes about the interview with this household, such as call-back times, incomplete individual interview forms, number of attempts to re-visit, etc.</i>	
HH16. Data entry clerk: _____	

## HOUSEHOLD LISTING FORM

HL

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? (THESE MAY INCLUDE CHILDREN IN SCHOOL OR AT WORK). If yes, complete listing.

Then, ask questions starting with HL5 for each person at a time. Add a continuation sheet if there are more than 15 household members. Tick here if continuation sheet used 

HL1. Line no.	HL2. Name	HL3. WHAT IS THE RELATION- SHIP OF (name) TO THE HEAD OF THE HOUSE- HOLD?	HL4. (name) Is (name) MALE OR FEMALE?  1 MALE 2 FEM.	HL5. HOW OLD IS (name)?  HOW OLD WAS (name) ON HIS/HER LAST BIRTHDAY?  Record in completed years  98=DK*	HL6. Circle Line no. if woman is age 15-49	Eligible for:		HL7. For each child age 5-14: WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record Line no. of mother/ caretaker	HL8. For each child under 5: WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record Line no. of mother/ caretaker	HL9. (name's) NATURAL MOTHER ALIVE?  1 YES 2 NO⇒ HL11 8 DK⇒ HL11	HL10. If alive: (name's) NATURAL MOTHER LIVE IN THIS HOUSEHOLD?  Record Line no. of mother or 00 for 'no'	HL11. (name's) NATURAL FATHER ALIVE?  1 YES 2 NO⇒ 8 DK⇒ NEXT LINE	HL12. If alive: (name's) NATURAL FATHER LIVE IN THIS HOUSEHOLD?  Record Line no. of father or 00 for 'no'
						WOMEN'S INTERVIEW	CHILD LABOUR MODULE						
LINE	NAME	REL.	M F	AGE	15-49	MOTHER	MOTHER	MOTHER	MOTHER	Y N DK	MOTHER	Y N DK	FATHER
01		0 1	1 2	___	01	___	___	___	___	1 2 8	___	1 2 8	___
02		___	1 2	___	02	___	___	___	___	1 2 8	___	1 2 8	___
03		___	1 2	___	03	___	___	___	___	1 2 8	___	1 2 8	___
04		___	1 2	___	04	___	___	___	___	1 2 8	___	1 2 8	___
05		___	1 2	___	05	___	___	___	___	1 2 8	___	1 2 8	___
06		___	1 2	___	06	___	___	___	___	1 2 8	___	1 2 8	___
07		___	1 2	___	07	___	___	___	___	1 2 8	___	1 2 8	___
08		___	1 2	___	08	___	___	___	___	1 2 8	___	1 2 8	___

HL1. Line no.	HL2. Name	HL3. WHAT IS THE RELATION- SHIP OF (name) TO THE HEAD OF THE HOUSE- HOLD?	HL4. HL4. Is (name) MALE OR FEMALE?  1 MALE 2 FEM.	HL5. HOW OLD IS (name)?  HOW OLD WAS (name) ON HIS/HER LAST BIRTHDAY?  Record in completed years  98=DK*	HL6. Circle Line no. if woman is age 15-49	HL7. For each child age 5-14: WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record Line no. of mother/ caretaker	HL8. For each child under 5: WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record Line no. of mother/ caretaker	HL9. Is (name's) NATURAL MOTHER ALIVE?  1 YES 2 NO⇒ HL11 8 DK⇒ HL11	HL10. If alive: DOES (name's) NATURAL MOTHER LIVE IN THIS HOUSEHOLD?  Record Line no. of mother or 00 for 'no'	HL11. Is (name's) NATURAL FATHER ALIVE?  1 YES 2 NO⇒ NEXT LINE 8 DK⇒ NEXT LINE	HL12. If alive: DOES (name's) NATURAL FATHER LIVE IN THIS HOUSEHOLD?  Record Line no. of father or 00 for 'no'
LINE	NAME	REL.	M F	AGE	15-49	MOTHER	MOTHER	Y N DK	MOTHER	Y N DK	FATHER
09			1 2		09			1 2 8		1 2 8	
10			1 2		10			1 2 8		1 2 8	
11			1 2		11			1 2 8		1 2 8	
12			1 2		12			1 2 8		1 2 8	
13			1 2		13			1 2 8		1 2 8	
14			1 2		14			1 2 8		1 2 8	
15			1 2		15			1 2 8		1 2 8	
ARE THERE ANY OTHER PERSONS LIVING HERE - EVEN IF THEY ARE NOT MEMBERS OF YOUR FAMILY OR DO NOT HAVE PARENTS LIVING IN THIS HOUSEHOLD? INCLUDING CHILDREN AT WORK OR AT SCHOOL? If yes, insert child's name and complete form. Then, complete the totals below.											
						Women 15-49	Children 5-14	Under-5s			
Totals											

HL1. Line no.	HL2. Name	HL3. WHAT IS THE RELATION- SHIP OF (name) TO THE HEAD OF THE HOUSE- HOLD?	HL4. Is (name) MALE OR FEMALE?  1 MALE 2 FEM.	HL5. HOW OLD IS (name)?  HOW OLD WAS (name) ON HIS/HER LAST BIRTHDAY?  Record in completed years  98=DK*	HL6. Circle Line no. if woman is age 15-49	HL7. For each child age 5-14: WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record Line no. of mother/ caretaker	HL8. For each child under 5: WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record Line no. of mother/ caretaker	HL9. Is (name's) NATURAL MOTHER ALIVE?  1 YES 2 NO⇒ HL11 8 DK⇒ HL11	HL10. If alive: DOES (name's) NATURAL MOTHER LIVE IN THIS HOUSEHOLD?  Record Line no. of mother or 00 for 'no'	HL11. Is (name's) NATURAL FATHER ALIVE?  1 YES 2 NO⇒ NEXT LINE 8 DK⇒ NEXT LINE	HL12. If alive: DOTS (name's) NATURAL FATHER LIVE IN THIS HOUSEHOLD?  Record Line no. of father or 00 for 'no'				
LINE	NAME	REL.	M	F	AGE	MOTHER	MOTHER	Y	N	DK	MOTHER	Y	N	DK	FATHER
* See instructions: to be used only for elderly household members (code meaning "do not know/over age 50").															
Now for each woman age 15-49 years, write her name and line number and other identifying information in the information panel of the Women's Questionnaire.															
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 the Questionnaire for Children Under Five.															
You should now have a separate questionnaire for each eligible woman and each child under five in the household.															

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

- 01 = Head
- 02 = Wife or Husband
- 03 = Son or Daughter
- 04 = Son or Daughter In-Law
- 05 = Grandchild
- 06 = Parent
- 07 = Parent-In-Law
- 08 = Brother or Sister
- 09 = Brother or Sister-In-Law
- 10 = Uncle/Aunt
- 11 = Niece/Nephew By Blood
- 12 = Niece/Nephew By Marriage
- 13 = Other Relative
- 14 = Adopted/Foster/Stepchild
- 15 = Not Related
- 98 = Don't Know

EDUCATION MODULEED		For household members age 5 and above				For household members age 5-24 years			
ED1. Line no.	ED1A. Name	ED2. Has (name) ever attended school or preschool?	ED3. What is the highest level of school (name) attended? What is the highest grade (name) completed at this level?	ED4. During the (2005-2006) school year, did (name) attend school or preschool at any time?	ED6. During that school year, which level and grade was (name) attending?	ED7. Did (name) attend school or preschool at any time during the previous school year, that is (2004-2005)?	ED8. During that previous school year, which level and grade did (name) attend?	LEVEL	GRADE
LINE	YES NO	LEVEL	GRADE	YES NO	LEVEL	GRADE	Y N DK	LEVEL	GRADE
01	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
02	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
03	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
04	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
05	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
06	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
07	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
08	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
09	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
10	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
11	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
12	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
13	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
14	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___
15	1	2⇒NEXT LINE	0 1 2 3 4 6 8	1 2	0 1 2 3 4 6 8	___	1 2 8	0 1 2 3 4 6 8	___



<p>WS5B. WHAT DO YOU USUALLY DO TO PREVENT CONTAMINATION WHILE HANDLING WATER AND WATER STORAGE CONTAINERS?</p> <p><i>Anything else?</i></p> <p>Record all items mentioned.</p>	<p>Wash hands before collecting water .....A  Store drinking water in a clean container with cover ..... B  Use a separate clean cup with a long handle for taking water out of the container .....C  Keep animals away from the container .....D</p> <p>Others (<i>Specify</i>) .....X  DK..... Z</p>																						
<p>WS5. DO YOU TREAT YOUR WATER IN ANY WAY TO MAKE IT SAFER TO DRINK?</p>	<p>Yes.....1  No .....2  DK.....8</p>	<p>2⇒WS6A  8⇒WS6A</p>																					
<p>WS6. WHAT DO YOU USUALLY DO TO THE WATER TO MAKE IT SAFER TO DRINK?</p> <p><i>Anything else?</i></p> <p>Record all items mentioned.</p>	<p>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</p> <p>Other (<i>specify</i>) ..... X  DK..... Z</p>																						
<p>WS6A. DOES YOUR MAIN DRINKING WATER SOURCE GIVE YOU A RELIABLE SUPPLY?</p>	<p>Yes, almost never problems .....1  Occasional problems, but less than weekly.....2  Weekly problems .....3  Daily problems .....4  Seasonal supply .....5</p> <p>DK.....8</p>																						
<p>WS7. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE?</p> <p><i>If "flush" or "pour flush", probe:  WHERE DOES IT FLUSH TO?</i></p> <p><i>If necessary, ask permission to observe the facility.</i></p>	<p>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 to unknown place/not sure/DK where...15</p> <p>Ventilated Improved Pit latrine (VIP) .....21  Pit latrine with slab .....22  Pit latrine without slab / open pit .....23</p> <p>No facilities or bush or field .....95</p> <p>Other (<i>specify</i>) ..... 96</p>	<p>95⇒WS9A</p>																					
<p>WS8. DO YOU SHARE THIS FACILITY WITH OTHER HOUSEHOLDS?</p>	<p>Yes.....1  No .....2</p>	<p>2⇒WS9A</p>																					
<p>WS9. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY?</p>	<p>No. of households (if less than 10).....  Ten or more households .....10  DK.....98</p>																						
<p>WS9A. DO YOU USUALLY WASH YOUR HANDS USING SOAP AT ANY OF THE FOLLOWING TIMES?</p> <p>Before eating?  Before feeding babies?  After defecation?  After cleaning babies bottoms?  Before cooking food?  After eating?</p>	<table border="0"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>Before eating</td> <td>.....1</td> <td>2</td> </tr> <tr> <td>Before feeding babies?</td> <td>.....1</td> <td>2</td> </tr> <tr> <td>After defecation?</td> <td>.....1</td> <td>2</td> </tr> <tr> <td>After cleaning babies bottoms?</td> <td>.....1</td> <td>2</td> </tr> <tr> <td>Before cooking food?</td> <td>.....1</td> <td>2</td> </tr> <tr> <td>After eating?</td> <td>.....1</td> <td>2</td> </tr> </tbody> </table>		Yes	No	Before eating	.....1	2	Before feeding babies?	.....1	2	After defecation?	.....1	2	After cleaning babies bottoms?	.....1	2	Before cooking food?	.....1	2	After eating?	.....1	2	
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HOUSEHOLD CHARACTERISTICS MODULE		HC
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	No. of rooms .....	
HC3. Main material of the dwelling floor: <i>Record observation.</i>	Natural floor Earth/sand ..... 11 Rudimentary floor Wood planks ..... 21 Palm/grass ..... 22 Finished floor Vinyl or asphalt strips ..... 32 Ceramic tiles ..... 33 Cement ..... 34 Carpet ..... 35 Other ( <i>specify</i> ) ..... 96	
HC4. Main material of the roof. <i>Record observation.</i>	Natural roofing No Roof ..... 11 Thatch/palm leaf ..... 12 Mud & grass ..... 13 Rudimentary Roofing Rustic mat ..... 21 Palm/grass ..... 22 Wood planks ..... 23 Sacking/ plastic sheets ..... 24 Finished roofing Metal ..... 31 Wood ..... 32 cement fiber/corrugated cement ..... 33 Cement ..... 35 Roofing shingles ..... 36 Other ( <i>specify</i> ) ..... 96	
HC5. Main material of the walls. <i>Record observation.</i>	Natural walls No walls ..... 11 palm/trunks/sticks ..... 12 Mud ..... 13 Rudimentary walls Sticks with mud ..... 21 Stone with mud ..... 22 Uncovered adobe ..... 23 Plywood ..... 24 Carton/tin/plastic/sacking ..... 25 Reused wood ..... 26 Cloth / matting ..... 27 Finished walls Cement ..... 31 Stone with lime/cement ..... 32 Bricks ..... 33 Cement blocks ..... 34 Covered adobe ..... 35 Wood planks/shingles ..... 36 Other ( <i>specify</i> ) ..... 96	
HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD MAINLY USE FOR COOKING?	Electricity ..... 01 Liquid Propane Gas (LPG) ..... 02 Kerosene ..... 05 Charcoal ..... 07 Wood ..... 08 Straw/shrubs/grass ..... 09 Animal dung ..... 10 Agricultural crop residue ..... 11 Other ( <i>specify</i> ) ..... 96	01⇒HC8 02⇒HC8

HC7. IN THIS HOUSEHOLD, IS FOOD COOKED ON AN OPEN FIRE, AN OPEN STOVE OR A CLOSED STOVE?  <i>Probe for type.</i>	Open fire.....1 Open stove.....2 Closed stove.....3  Other ( <i>specify</i> ).....6	3⇒HC8  6⇒HC8																																	
HC7A. DOES THE FIRE/STOVE HAVE A CHIMNEY OR A HOOD?	Yes.....1 No.....2																																		
HC8. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS?	In the house.....1 In a separate building.....2 Outdoors.....3 Other ( <i>specify</i> ).....6																																		
HC9. DOES YOUR HOUSEHOLD HAVE: A BED? ELECTRICITY? A RADIO? A TELEVISION? A MOBILE TELEPHONE? A NON-MOBILE TELEPHONE? A REFRIGERATOR? A VCD / DVD PLAYER? A FAN? A SATELLITE DISH?	<table style="width:100%; border:none;"> <thead> <tr> <th></th> <th style="text-align:center;">Yes</th> <th style="text-align:center;">No</th> </tr> </thead> <tbody> <tr><td>Bed.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Electricity.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Radio.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Television.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Mobile Telephone.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Non-Mobile Telephone.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Refrigerator.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>VCD / DVD player.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>A fan.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>A satellite dish.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> </tbody> </table>		Yes	No	Bed.....	1	2	Electricity.....	1	2	Radio.....	1	2	Television.....	1	2	Mobile Telephone.....	1	2	Non-Mobile Telephone.....	1	2	Refrigerator.....	1	2	VCD / DVD player.....	1	2	A fan.....	1	2	A satellite dish.....	1	2	
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HC10. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN: A WATCH? A BICYCLE? A DONKEY- CART? A CAR OR TRUCK (BIG CAR)? A CLOCK? A SEWING MACHINE?	<table style="width:100%; border:none;"> <thead> <tr> <th></th> <th style="text-align:center;">Yes</th> <th style="text-align:center;">No</th> </tr> </thead> <tbody> <tr><td>Watch.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Bicycle.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Animal drawn-cart.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Car/Truck.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>CLOCK.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> <tr><td>Sewing machine.....</td><td style="text-align:center;">1</td><td style="text-align:center;">2</td></tr> </tbody> </table>		Yes	No	Watch.....	1	2	Bicycle.....	1	2	Animal drawn-cart.....	1	2	Car/Truck.....	1	2	CLOCK.....	1	2	Sewing machine.....	1	2													
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HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?	Yes.....1 No.....2	2⇒HC13																																	
HC12. HOW MANY HECTARES OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN?  If more than 97, record '97'. If unknown, record '98'.	Hectares.....__ __																																		
HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OR FARM ANIMALS?	Yes.....1 No.....2	2⇒NEXT MODULE																																	
HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE?  CAMELS?  MILK COWS OR BULLS?  HORSES, DONKEYS, OR MULES?  GOATS?  SHEEP?  CHICKENS?  If none, record '00'. If more than 97, record '97'. If unknown, record '98'.	Camels.....__ __  Milk cows or bulls.....__ __  Horses, donkeys, or mules.....__ __  Goats.....__ __  Sheep.....__ __  Chickens.....__ __																																		

## CHILD LABOUR MODULE

CL

To be administered to mother/caretaker of each child in the household age 5 through 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.

LINE NO.	NAME	CL3.		CL4.		CL5.			CL6.		CL7.		CL8.		CL9.	
		PAID	UNPAID	NO	NO. HOURS	PAID	UNPAID	NO	YES	NO	NO. HOURS	YES	NO	YES	NO	NO. HOURS
01		1	2	3			1	2	3	1	2		1	2		
02		1	2	3			1	2	3	1	2		1	2		
03		1	2	3			1	2	3	1	2		1	2		
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12		1	2	3			1	2	3	1	2		1	2		
13		1	2	3			1	2	3	1	2		1	2		
14		1	2	3			1	2	3	1	2		1	2		
15		1	2	3			1	2	3	1	2		1	2		

INSECTICIDE TREATED NET MODULE		ITN
<p>TN1A WHAT DO YOU IN YOUR HOUSHOLD TO PROTECT AGAINST MALARIA?</p> <p>CIRCLE ALL RESPONSES MENTIONED</p>	<p>Sleep under a mosquito net .....A            Keep environment clean .....B            Drink Clean water .....C            Drain/treat stagnant water.....D            Burn dung/leaves/etc.....E            Use a spray .....F            Shake cloth to chase out mosquitoes.....G</p> <p>Other (specify) _____ X</p> <p>Nothing.....Y            Don't know ..... Z</p>	
<p>TN1. DOES YOUR HOUSEHOLD HAVE ANY MOSQUITO NETS THAT CAN BE USED WHILE SLEEPING?</p>	<p>Yes.....1            No .....2</p>	2⇒NEXT MODULE
<p>TN2. HOW MANY MOSQUITO NETS DOES YOUR HOUSEHOLD HAVE?            If 7 or more nets, record '7'.</p>	<p>Number of nets.....__</p>	
<p>TN3. IS THE NET (ARE ANY OF THE NETS) ANY OF THE FOLLOWING TYPES:</p> <p><i>Read each type name, show picture card/net /label and circle codes for Yes or No for each type</i></p> <p>TN3L. LONG-LASTING TREATED NETS:</p> <p>TN3P. PRE- TREATED NETS:</p> <p>TN3O. OTHER NETS:</p>	<p>Y NDK</p> <p>Long-lasting treated nets: ..... 1 2 8</p> <p>Pre- Treated nets: ..... 1 2 8</p> <p>Other nets: ..... 1 2 8</p>	
<p>TN4. Check TN3 for brand of net(s). Go through the above list in order until one box is checked and follow instructions:</p> <p>1. <input type="checkbox"/> Long-lasting treated net mentioned?⇒ Go to TN3A</p> <p>2. <input type="checkbox"/> Pre-treated net mentioned?⇒ Go to TN6</p> <p>3. <input type="checkbox"/> OTHER NET MENTIONED?⇒ CONTINUE WITH TN5</p> <p>4. <input type="checkbox"/> IF TYPE OF NET IS UNKNOWN CONTINUE WITH TN5</p>		
<p>TN5. WHEN YOU GOT THE (MOST RECENT) NET, WAS IT ALREADY TREATED WITH AN INSECTICIDE TO KILL OR REPEL MOSQUITOES?</p>	<p>Yes.....1            No .....2            DK/not sure.....8</p>	
<p>TN6. HOW MANY MONTHS AGO WAS THE (MOST RECENT) NET OBTAINED?            If less than 1 month ago, record '00'.            If answer is "12 months" or "1 year", probe to determine if net was obtained exactly 12 months ago or earlier or later.</p>	<p>Months ago.....__ __</p> <p>More than 24 months ago .....95            Not sure .....98</p>	
<p>TN7. SINCE YOU GOT THE NET(S) HAS IT (HAVE ANY OF THESE NETS) EVER BEEN SOAKED OR DIPPED IN A LIQUID TO KILL/ REPEL MOSQUITOES?</p>	<p>Yes.....1            No.....2            DK.....8</p>	2⇒TN3A 8⇒TN3A

<p>TN8. HOW LONG AGO WAS THE MOST RECENT SOAKING/ DIPPING DONE? <i>If less than 1 month, record '00'.</i> <i>If answer is "12 months" or "1 year", probe to determine if net was treated exactly 12 months ago or earlier or later.</i></p>	<p>Months ago.....__ __</p> <p>More than 24 months ago .....95</p> <p>Not sure .....98</p>	
<p>TN3A. WHERE DID YOU GET THE <i>(name of net highest in the list of nets available in the household, in TN3)</i> MOSQUITO NET?</p> <p><i>Ask question in relation to the most effective mosquito net available in the household (Check TN3). If there is more than one net in the same category, ask question referring to the most recently obtained net.</i></p>	<p>Public sector</p> <p>Govt. hospital .....11</p> <p>Govt. health centre.....12</p> <p>Govt. health post.....13</p> <p>Village health worker .....14</p> <p>Other public <i>(specify)</i> .....16</p> <p>Private medical sector</p> <p>Private hospital/clinic.....21</p> <p>Private physician.....22</p> <p>Private pharmacy .....23</p> <p>MCH .....24</p> <p>Other private medical <i>(specify)</i> .....26</p> <p>Other source</p> <p>Relative or friend.....31</p> <p>Shop .....32</p> <p>Traditional practitioner .....33</p> <p>Other <i>(specify)</i> .....96</p> <p>DK.....98</p>	
<p>TN3B. HOW MUCH DID YOU PAY FOR THE <i>(name of net highest in the list of nets available in the household, in TN3)</i> MOSQUITO NET?</p> <p><i>Ask question in relation to the most effective mosquito net available in the household (Check TN3). If there is more than one net in the same category, ask question referring to the most recently obtained net.</i></p>	<p>Local currency .....__ __ __</p> <p>Free .....9996</p> <p>DK.....9998</p>	

MATERNAL MORTALITY MODULE							MM	
Administer to each adult household member. Copy name and line number of each adult (age 15 or over) in the household. If one of these adults is not at home, another adult may respond for him/her. Indicate this by placing a '1' in MM3, and insert line number of proxy respondent in MM4. For household members below age 15, leave rows blank								
MM1. Line no.	MM2. Name	MM3. Is this a proxy report? 1 YES ⇒MM4 2 NO ⇒MM5	MM4. Line no. of proxy respondent (from household listing H11)	MM5. How many sisters (born to the same mother) have you ever had? If '0' go to the next line 98= DON'T KNOW	MM6. How many of these sisters have ever been married? If '0' go to the next line 98= DON'T KNOW	MM7. How many of these ever married sisters are alive now? If all are alive go to the next line 98= DON'T KNOW	MM8. How many of these ever married sisters have died? (Check that this number and the number given in MM7 total MM6) 98= DON'T KNOW	MM9. How many of these dead sisters died while pregnant, or during childbirth, or during the six weeks after the end of pregnancy? 98= DON'T KNOW
LINE	NAME	Y N	LINE					
01		1	--					
02		1	--					
03		1	--					
04		1	--					
05		1	--					
06		1	--					
07		1	--					
08		1	--					
09		1	--					
10		1	--					
11		1	--					
12		1	--					
13		1	--					
14		1	--					
15		1	--					

SALT IODIZATION MODULE		SI
<p>SI1. WE WOULD LIKE TO CHECK WHETHER THE SALT USED IN YOUR HOUSEHOLD IS IODIZED. MAY I SEE A SAMPLE OF THE SALT USED TO COOK THE MAIN MEAL EATEN BY MEMBERS OF YOUR HOUSEHOLD LAST NIGHT?</p> <p><i>Once you have examined the salt, circle number that corresponds to test outcome.</i></p>	<p>Not iodized 0 PPM .....1  Less than 15 PPM .....2  15 PPM or more .....3</p> <p>No salt in home .....6  Salt not tested.....7</p>	

SI2. Does any eligible woman age 15-49 reside in the household?  
Check household listing, column HL6. 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.

SI3. Does any child under the age of 5 reside in the household?  
Check household listing, column HL8. 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. ⇒ End the interview by thanking the respondent for his/her cooperation. Gather together all questionnaires for this household and tally the number of interviews completed on the cover page.

## QUESTIONNAIRE FOR INDIVIDUAL WOMEN

WOMEN'S INFORMATION PANEL		WM
<p><i>This module is to be administered to all women age 15 through 49 (see column HL6 of HH listing). Fill in one form for each eligible woman Fill in the cluster and household number, and the name and line number of the woman in the space below. Fill in your name, number and the date.</i></p>		
WM1. Cluster number:  _____	WM2. Household number:  _____	
WM3. Woman's Name:  _____	WM4. Woman's Line Number:  _____	
WM5. Interviewer name and number:  _____	WM6. Day/Month/Year of interview:  ____ / ____ / _____	
WM7. Result of women's interview	Completed.....1 Not at home .....2 Refused .....3 Partly completed .....4 Incapacitated .....5 Other (specify) ..... 6	

Repeat greeting if not already read to this woman:

WE ARE FROM (**country-specific affiliation**). WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT (60) MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED. ALSO, YOU ARE NOT OBLIGED TO ANSWER ANY QUESTION YOU DON'T WANT TO, AND YOU MAY WITHDRAW FROM THE INTERVIEW AT ANY TIME. MAY I START NOW?

*If permission is given, begin the interview. If the woman does not agree to continue, thank her, complete WM7, and go to the next interview.  
Discuss this result with your supervisor for a future revisit.*

WM8. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth: Month ..... DK month.....98  Year ..... DK year .....9998	
WM9. HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?	Age (in completed years) ..... _____	
WM10. HAVE YOU EVER ATTENDED SCHOOL?	Yes.....1 No.....2	2⇒WM14
WM11. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED: PRIMARY, SECONDARY, OR HIGHER?	Primary .....1 Secondary .....2 Higher .....3 Koranic.....4 Non-formal curriculum.....5	3⇒WM14 4⇒WM14 5⇒WM14
WM12. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL?	Grade..... _____	
WM14. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME.  <i>Show sentences to respondent. If respondent cannot read whole sentence, probe: CAN YOU READ PART OF THE SENTENCE TO ME?</i>  <i>Example sentences for literacy test:</i>  1. <i>The child is reading a book.</i> 2. <i>The rains came late this year.</i> 3. <i>Parents must care for their children.</i> 4. <i>Farming is hard work.</i>	Cannot read at all .....1 Able to read only parts of sentence .....2 Able to read whole sentence.....3 Blind/mute, visually/speech impaired.....5	



MARRIAGE/UNION MODULE		MA
MA1. ARE YOU CURRENTLY MARRIED?	Yes, currently married.....1 No, not in marital union.....3	3⇒MA3
MA2. HOW OLD WAS YOUR HUSBAND/PARTNER ON HIS LAST BIRTHDAY?	Age in years.....__ __ DK.....98	
MA2A. BESIDES YOURSELF, DOES YOUR HUSBAND/PARTNER HAVE ANY OTHER WIVES?	Yes.....1 No.....2 DK.....98	2⇒MA5 98⇒MA5
MA2B. HOW MANY OTHER WIVES DOES HE HAVE?	Number..... __ __ DK.....98	⇒MA5 98⇒MA5
MA3. HAVE YOU EVER BEEN MARRIED?	Yes, formerly married.....1 No.....3	⇒FGM MODULE
MA4. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED OR DIVORCED?	Widowed.....1 Divorced.....2	
MA5. HAVE YOU BEEN MARRIED ONLY ONCE OR MORE THAN ONCE?	Only once.....1 More than once .....2	
MA6. IN WHAT MONTH AND YEAR DID YOU <u>FIRST</u> MARRY?	Month.....__ __ DK month.....98 Year.....__ __ __ __ DK year.....9998	
MA7. Check MA6:		
<input type="checkbox"/> Both month and year of marriage/union known? ⇒ Go to Next Module		
<input type="checkbox"/> Either month or year of marriage/union not known? ⇒ Continue with MA8		
MA8. HOW OLD WERE YOU WHEN YOU MARRIED YOUR FIRST HUSBAND?	Age in years.....__ __	

CHILD MORTALITY MODULE		CM
<p><i>This module is to be administered to all ever-married women age 15-49. All questions refer only to LIVE births.</i></p>		
<p>CM1. NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH?</p> <p><i>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?</i></p>	<p>Yes.....1 No.....2</p>	2⇒ BH13 IN THE BIRTH HISTORY MODULE
<p>CM3. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH  WHO ARE NOW LIVING WITH YOU?</p>	<p>Yes.....1 No.....2</p>	2⇒CM5
<p>CM4. HOW MANY SONS LIVE WITH YOU?  HOW MANY DAUGHTERS LIVE WITH YOU?</p>	<p>Sons at home ..... _ _ Daughters at home ..... _ _</p>	
<p>CM5. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH  WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?</p>	<p>Yes.....1 No.....2</p>	2⇒CM7
<p>CM6. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU?  HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p>	<p>Sons elsewhere..... _ _ Daughters elsewhere ..... _ _</p>	
<p>CM7. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT  LATER DIED?</p>	<p>Yes.....1 No.....2</p>	2⇒CM9
<p>CM8. HOW MANY BOYS HAVE DIED?  HOW MANY GIRLS HAVE DIED?</p>	<p>Boys dead ..... _ _ Girls dead ..... _ _</p>	
<p>CM9. <i>Sum answers to CM4, CM6, and CM8.</i></p>	<p>Sum..... _ _</p>	
<p>CM10. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (<i>total number</i>) BIRTHS DURING YOUR LIFE. IS THIS CORRECT?</p> <p><input type="checkbox"/> Yes. ⇒ Go to CM10A</p> <p><input type="checkbox"/> No. ⇒ Check responses and make corrections before proceeding to CM10a</p>		
<p>CM10A. Check CM9</p> <p><input type="checkbox"/> One or more births ⇒ Go to birth history module</p> <p><input type="checkbox"/> No births ⇒ Go to BH13 in the birth history module</p>		

**BIRTH HISTORY MODULE**

**BH**

Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.

Record names of all the births in BH1. Record twins and triplets on separate lines

L N	BH1	BH2	BH3	BH4	BH5	BH6	BH7	BH8	BH9			BH10
									If alive		If dead	
WHAT NAME WAS GIVEN TO YOUR (First/next) BABY? (name)	WERE ANY OF THESE BIRTHS TWINS?	IS (name) A BOY OR A GIRL?	IN WHAT MONTH AND YEAR WAS (name) BORN? Probe: What is his/her birthday?	IS (name) STILL ALIVE?	HOW OLD WAS (name) AT HIS/HER LAST BIRTHDAY? Record age in completed years	IS (name) ALIVE WITH YOU?	Record household line number of child (record '00' if child not listed in household)	HOW OLD WAS (name) WHEN HE/SHE DIED? If '1 YR', probe: HOW MANY MONTHS OLD WAS (Name)? Record days if less than 1 month; months if less than two years; or years.				
01	Sing 1	Boy 1	M	Y 1		Y 1		Days 1				
	Multi 2	Girl 2	Y	N 2	Go to BH9	N 2	Go to next birth	Months 2				
02	Sing 1	Boy 1	M	Y 1		Y 1		Days 1		Y 1		
	Multi 2	Girl 2	Y	N 2	Go to BH9	N 2	⇒BH10	Months 2		N 2		
03	Sing 1	Boy 1	M	Y 1		Y 1		Days 1		Y 1		
	Multi 2	Girl 2	Y	N 2	Go to BH9	N 2	⇒BH10	Months 2		N 2		
04	Sing 1	Boy 1	M	Y 1		Y 1		Days 1		Y 1		
	Multi 2	Girl 2	Y	N 2	Go to BH9	N 2	⇒BH10	Months 2		N 2		
05	Sing 1	Boy 1	M	Y 1		Y 1		Days 1		Y 1		
	Multi 2	Girl 2	Y	N 2	Go to BH9	N 2	⇒BH10	Months 2		N 2		
06	Sing 1	Boy 1	M	Y 1		Y 1		Days 1		Y 1		
	Multi 2	Girl 2	Y	N 2	Go to BH9	N 2	⇒BH10	Months 2		N 2		
07	Sing 1	Boy 1	M	Y 1		Y 1		Days 1		Y 1		
	Multi 2	Girl 2	Y	N 2	Go to BH9	N 2	⇒BH10	Months 2		N 2		
08	Sing 1	Boy 1	M	Y 1		Y 1		Days 1		Y 1		
	Multi 2	Girl 2	Y	N 2	Go to BH9	N 2	⇒BH10	Months 2		N 2		

LN	BH1	BH2	BH3	BH4		BH5		BH6	BH7		BH8		BH9			BH10
				IS (name)	Probe: What is his/her birthday?	IS (name)	IS (name)		IS (name)	IS (name)	IS (name)	IS (name)	IS (name)	IS (name)	IS (name)	
WHAT NAME WAS GIVEN TO YOUR (First/next) BABY? (name)	WERE ANY OF THESE BIRTHS TWINS?	IS (name) A BOY OR A GIRL?	IN WHAT MONTH AND YEAR WAS (name) BORN?	IS (name) STILL ALIVE?	HOW OLD WAS (name) AT HIS/HER LAST BIRTHDAY?	Record age in completed years	IS (name) LIVIN G WITH YOU?	Record household line number of child (record '00' if child not listed in household)	HOW OLD WAS (name) WHEN HE/SHE DIED?	If '1 YR', probe: HOW MANY MONTHS OLD WAS (Name)?	Record days if less than 1 month; months if less than two years; or years.	WHERE THERE ANY OTHER LIVE BIRTHS BETWEEN (name of previous birth) AND (name)				
	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
09	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				
10	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				
11	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				
12	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				
13	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				
14	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				
15	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				
16	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				
17	Sing 1	Boy 1	M	Y 1	Y 1		Y 1		Y 1	Days 1	Months 2	Years 3	Y 1			
	Multi 2	Girl 2	Y	N 2	Go to BH9		N 2	⇒BH10	N 2	Years 3		N 2				

QUESTIONNAIRE FOR INDIVIDUAL WOMEN

BH 11 Have you had any live births since the birth of Name (Name of last birth)? YES.....1 NO.....2																		
BH 11A SUM OF TOTAL BIRTHS ___ ___ ___ TOTAL STILL ALIVE ___ ___ ___ TOTAL LIVING WITH MOTHER ___ ___ ___																		
BH11B. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL ( <i>total number</i> ) BIRTHS DURING YOUR LIFE. IS THIS CORRECT? <input type="checkbox"/> Yes. ⇒ Go to BH11C <input type="checkbox"/> No. ⇒ Check responses and make corrections before proceeding to BH11C																		
BH11C. OF THESE (TOTAL NUMBER) BIRTHS, (NUMBER) ARE STILL ALIVE. IS THIS CORRECT? <input type="checkbox"/> Yes. ⇒ Go to BH11D <input type="checkbox"/> No. ⇒ Check responses and make corrections before proceeding to BH11D																		
BH11D. OF THESE (NUMBER) STILL ALIVE, (NUMBER) ARE LIVING WITH YOU. IS THIS CORRECT? <input type="checkbox"/> Yes. ⇒ Go to BH12 <input type="checkbox"/> No. ⇒ Check responses and make corrections before proceeding to BH12																		
BH12.:Compare CM9 with number of births in history above and mark:  <input type="checkbox"/> Numbers are same ..... <input type="checkbox"/> <input type="checkbox"/> Numbers are different ..... <input type="checkbox"/> ⇒ Probe and reconcile  <table style="width: 100%; border: none;"> <tr> <td style="width: 15%; border: none;">Check</td> <td style="width: 45%; border: none;">For each birth:</td> <td style="width: 40%; border: none;">Year of birth is recorded.....</td> <td style="width: 10%; border: none;"><input type="checkbox"/></td> </tr> <tr> <td></td> <td style="border: none;">For each living child:</td> <td style="border: none;">Current age is recorded.....</td> <td style="border: none;"><input type="checkbox"/></td> </tr> <tr> <td></td> <td style="border: none;">For each dead child:</td> <td style="border: none;">Age of death is recorded.....</td> <td style="border: none;"><input type="checkbox"/></td> </tr> <tr> <td></td> <td style="border: none;">For age at death 12 months or 1 year:</td> <td style="border: none;">Probe to determine exact number of months.....</td> <td style="border: none;"><input type="checkbox"/></td> </tr> </table>			Check	For each birth:	Year of birth is recorded.....	<input type="checkbox"/>		For each living child:	Current age is recorded.....	<input type="checkbox"/>		For each dead child:	Age of death is recorded.....	<input type="checkbox"/>		For age at death 12 months or 1 year:	Probe to determine exact number of months.....	<input type="checkbox"/>
Check	For each birth:	Year of birth is recorded.....	<input type="checkbox"/>															
	For each living child:	Current age is recorded.....	<input type="checkbox"/>															
	For each dead child:	Age of death is recorded.....	<input type="checkbox"/>															
	For age at death 12 months or 1 year:	Probe to determine exact number of months.....	<input type="checkbox"/>															
BH13. SOME PREGNANCIES END BEFORE FULL TERM AS A MISCARRIAGE, WHILE OTHERS MAY RESULT IN A STILLBIRTH. HAVE YOU HAD A MISCARRIAGE?	Yes.....1 No.....2	2⇒ BH15																
BH14. IN ALL HOW MANY PREGNANCIES DID YOU HAVE THAT ENDED IN A MISCARRIAGE?	..... DK.....98																	
BH15. HAVE YOU HAD A STILL BIRTH?	Yes.....1 No.....2	2⇒ BH17																
BH16. IN ALL HOW MANY PREGNANCIES DID YOU HAVE THAT ENDED IN A STILLBIRTH	..... DK.....98																	

TETANUS TOXOID MODULE		TT
<i>This module is to be administered to all ever-married women with a live birth in the 2 years preceding date of interview.</i>		
TT1. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED?  <i>If a card is presented, use it to assist with answers to the following questions.</i>	Yes (card seen) .....1 Yes (card not seen).....2 No .....3  DK.....8	
TT2. WHEN YOU WERE PREGNANT WITH YOUR LAST CHILD, DID YOU RECEIVE ANY INJECTION TO PREVENT HIM OR HER FROM GETTING TETANUS, THAT IS CONVULSIONS AFTER BIRTH (AN ANTI-TETANUS SHOT, AN INJECTION AT THE TOP OF THE ARM OR SHOULDER)?	Yes.....1 No.....2  DK.....8	2⇒TT5 8⇒TT5
TT3. <i>If yes:</i> HOW MANY TIMES DID YOU RECEIVE THIS ANTI-TETANUS INJECTION DURING YOUR LAST PREGNANCY?	No. of times .....  DK.....98	98⇒TT5
TT4. <i>How many TT doses during last pregnancy were reported in TT3?</i>		
<input type="checkbox"/> <i>At least two TT injections during last pregnancy. ⇒ Go to Next Module</i> <input type="checkbox"/> <i>Fewer than two TT injections during last pregnancy. ⇒ Continue with TT5</i>		
TT5. DID YOU RECEIVE ANY TETANUS TOXOID INJECTION AT ANY TIME BEFORE YOUR LAST PREGNANCY?	Yes.....1 No.....2  DK.....8	2⇒NEXT MODULE 8⇒NEXT MODULE
TT6. HOW MANY TIMES DID YOU RECEIVE IT?	No. of times .....  DK.....98	
TT7. IN WHAT MONTH AND YEAR DID YOU RECEIVE THE LAST ANTI-TETANUS INJECTION BEFORE THAT LAST PREGNANCY?  <i>Skip to next module only if year of injection is given. Otherwise, continue with TT8.</i>	Month..... DK month.....98  Year ..... DK year.....9998	⇒NEXT MODULE ↓TT8
TT8. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST ANTI-TETANUS INJECTION BEFORE THAT LAST PREGNANCY?	Years ago.....  DK.....9998	

MATERNAL AND NEWBORN HEALTH MODULE		MN
<p><i>This module is to be administered to all ever-married women with a live birth in the 2 years preceding date of interview. Check child birth history and record name of last-born child here _____. Use this child's name in the following questions, where indicated.</i></p>		
<p>MN2. DID YOU SEE ANYONE FOR ANTENATAL CARE WHEN YOU WHERE PREGNANT WITH (name)?</p> <p><i>If yes: WHOM DID YOU SEE? ANYONE ELSE?</i></p> <p><i>Probe for the type of person seen and circle all answers given.</i></p>	<p>Health professional:</p> <p>Doctor .....  Gov't doctor ..... A  Private doctor.....D  Nurse..... B  Midwife ..... C</p> <p>Other person  Traditional birth attendant.....F  Relative/friend.....H</p> <p>Other (specify) ..... X  No one..... Y</p>	Y⇒MN4B
MN2A. How many months pregnant were you when you first received antenatal care for this pregnancy?	Month..... DK month.....98	
MN2B. How many times did you receive antenatal care for this pregnancy?	Number of times ..... DK.....98	
MN2C. WHICH TYPE OF HEALTH FACILITY DID YOU GO TO, TO GET THIS ANTENATAL CARE?	Hospital ..... A MCH..... B Midwife ..... C	
<p>MN3. AS PART OF YOUR ANTENATAL CARE, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE?</p> <p>MN3A. WERE YOU WEIGHED? <span style="float:right">Yes    No</span></p> <p>MN3B. WAS YOUR BLOOD PRESSURE MEASURED?</p> <p>MN3C. DID YOU GIVE A URINE SAMPLE?</p> <p>MN3D. DID YOU GIVE A BLOOD SAMPLE?</p>	<p>Weight.....1    2</p> <p>Blood pressure .....1    2</p> <p>Urine sample.....1    2</p> <p>Blood sample.....1    2</p>	<b>Go to MN6A</b>
<p>MN4B. What are the reasons for not seeing anyone?</p> <p><i>If more than one reason is mentioned, circle each one.</i></p>	<p><i>Did not feel the need to see anyone .....A</i></p> <p><i>Not convinced by the assistance ..... B</i></p> <p><i>Financially not capable to see anyone..... C</i></p> <p><i>Difficulty in reaching the ANC center .....D</i></p> <p><i>Non-availability of medicaments ..... E</i></p> <p><i>Other (specify).....X</i></p> <p><i>DK.....Z</i></p>	
MN6A. DURING THIS PREGNANCY, DID YOU TAKE ANY MEDICINE IN ORDER TO PREVENT YOU FROM GETTING MALARIA?	Yes.....1 No.....2 DK.....8	2⇒MN6E 8⇒MN6E
<p>MN6B. WHICH MEDICINES DID YOU TAKE TO PREVENT MALARIA?</p> <p><i>Circle all medicines taken. If type of medicine is not determined, show typical anti-malarial to respondent.</i></p>	SP/Fansidar.....A Chloroquine.....B	
	Other (specify) ..... X DK.....Z	

MN6C. Check MN6B for medicine taken:	
<input type="checkbox"/> SP/Fansidar taken. ⇒ Continue with MN6D	<input type="checkbox"/> SP/Fansidar not taken. ⇒ Go to MN6E
MN6D. HOW MANY TIMES DID YOU TAKE SP/FANSIDAR DURING THIS PREGNANCY TO PREVENT MALARIA?	Number of times.....
MN6E. DURING THIS PREGNANCY, DID YOU REGULARLY SLEEP UNDER A MOSQUITO NET?	Yes.....1 No.....2
MN7. WHO ASSISTED WITH THE DELIVERY OF YOUR LAST CHILD (name)?  ANYONE ELSE?  <i>Probe for the type of person assisting and circle all answers given.</i>	Health professional: Doctor ..... Gov't doctor .....A Private doctor.....D Nurse.....B Midwife .....C  Other person Traditional birth attendant.....F Relative/friend/neighbour .....H  Other (specify) .....X No one.....Y
MN8A. WAS (NAME) DELIVERED BY CAESARIAN SECTION?	Yes.....1 No .....2  DK.....98
MN8. WHERE DID YOU GIVE BIRTH TO (name)?  <i>If source is hospital, health center, or clinic, write the name of the place below. Probe to identify the type of source and circle the appropriate code.</i>  _____  <i>(Name of place)</i>	Home Your home .....11 Midwife's home.....13 Other home/relative.....12 Public sector Govt. hospital .....21 Govt. clinic/health center .....22 Other public (specify) .....26  Private Medical Sector Private hospital.....31 Private clinic/midwives clinic .....32  Other private medical (specify) .....36 Other (specify) .....96



<p>MN8B. IF DURING YOUR PREGNANCY YOU NEEDED EMERGENCY OBSTETRIC CARE WHERE WOULD YOU HAVE GONE</p>	<p>Home  Your home ..... 11  Midwife's home.....13  Other home/relative.....12  Public sector  Govt. hospital .....21  Govt. clinic/health center .....22  Other public (specify).....26  Private Medical Sector  Private hospital.....31  Private clinic/midwives clinic .....32  Other private  medical (specify) .....36  Other (specify) .....96</p>	
<p>MN9. WHEN YOUR LAST CHILD (name) WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?</p>	<p>Very large..... 1  Larger than average.....2  Average.....3  Smaller than average .....4  Very small.....5  DK.....8</p>	
<p>MN10. WAS (name) WEIGHED AT BIRTH?</p>	<p>Yes..... 1  No..... 2  DK.....8</p>	<p>2⇒MN11A  8⇒MN11A</p>
<p>MN11. HOW MUCH DID (name) WEIGH?  Record weight from health card, if available.</p>	<p>From card ..... 1 (kilograms) _ . _ _ _  From recall..... 2 (kilograms) _ . _ _ _  DK.....99998</p>	
<p>MN11A. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE 40 DAYS PERIOD AFTER THE DELIVERY OF (name). DID YOU SEE ANYONE FOR A CHECK-UP ON YOUR HEALTH?  If 'Yes' ask: WHOM DID YOU SEE?  ANYONE ELSE?</p>	<p>Doctor  Gov't doctor ..... A  Private doctor ..... B  Nurse..... C  Midwife ..... D  Other (specify) ..... X  No one..... Y</p>	<p>Y⇒  MN11C</p>
<p>MN11B. WHERE DID YOU RECEIVE YOUR POST-NATAL CHECKUP?  Probe for the type of health facility seen and circle all answers</p>	<p>Hospital ..... A  MCH..... B  Midwife clinic ..... C  Doctor's clinic..... D  Other ..... X</p>	<p>MN11G</p>

<p>MN11C. WHAT WAS THE MAIN REASON FOR NOT RECEIVING A POST-NATAL CHECKUP?</p>	<p>No complications .....1  Able to manage from experience .....2  Unaware of importance of check-up .....3  Service not available .....4  Costs too much .....5  Too busy .....6  Husband too busy .....7    Other (specify) .....96  DK.....8</p>																																											
<p>MN11G. IN THE FIRST 40 DAYS AFTER YOUR LAST BIRTH [THE BIRTH OF <b>name</b>], DID YOU RECEIVE A VITAMIN A DOSE LIKE THIS?</p> <p><i>Show 200,000 IU capsule or dispenser.</i></p>	<p>Yes.....1  No.....2  DK.....8</p>																																											
<p>MN12. DID YOU EVER BREASTFEED (<b>name</b>)?</p>	<p>Yes.....1  No.....2</p>	2⇒ MN14A																																										
<p>MN13. HOW LONG AFTER BIRTH DID YOU FIRST PUT (<b>name</b>) TO THE BREAST?</p> <p><i>If less than 1 hour, record '00' hours.  If less than 24 hours, record hours.  Otherwise, record days.</i></p>	<p>Immediately .....000    Hours .....1 ___  or  Days.....2 ___    Don't know/remember .....998</p>																																											
<p>Now I would like to talk about some specific health problems related to birth some women have. I will ask you about the time after your last delivery and in the 40 days following it.</p> <p>MN14A. DID YOU HAVE FEVER?  MN14B. DID YOU HAVE TROUBLE CONTROLLING YOUR URINE?    DID YOU SUFFER FROM ANY OF THE FOLLOWING?</p> <p>MN14C. URINARY TRACT INFECTION?  MN14D. MASTITIS?  MN14E. OFFENSIVE DISCHARGE?  MN14H. TEAR/INJURY TO THE GENITAL AREA?  MN14F. WOUND INFECTION?  MN14G. HEMORRHAGE?  MN14I. POST DELIVERY DEPRESSION?</p> <p>MN14J. DID YOU SUFFER FROM ANY OTHER PROBLEMS? (SPECIFY)</p>	<table border="0"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>MN14A. FEVER?.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MN14B. URINE TROUBLE?.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>MN14C. UTI?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MN14D. MASTITIS?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MN14E. DISCHARGE?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MN14H. TEAR/INJURY?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MN14F. WOUND INFECTION?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MN14G. HEMORRHAGE?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MN14I. DEPRESSION?</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>MN14J OTHER</td> <td></td> <td></td> </tr> <tr> <td colspan="3">_____</td> </tr> </tbody> </table>		Yes	No	MN14A. FEVER?.....	1	2	MN14B. URINE TROUBLE?.....	1	2				MN14C. UTI?	1	2	MN14D. MASTITIS?	1	2	MN14E. DISCHARGE?	1	2	MN14H. TEAR/INJURY?	1	2	MN14F. WOUND INFECTION?	1	2	MN14G. HEMORRHAGE?	1	2	MN14I. DEPRESSION?	1	2				MN14J OTHER			_____			
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CONTRACEPTION MODULE		CP
<p>The following questions apply only to currently married women. Check MA1 in the Marriage Module. Woman is currently married?</p> <p><input type="checkbox"/> Yes. ⇒ Continue with CP1 <input type="checkbox"/> No. ⇒ Go to Domestic Violence Module</p>		
<p>CP1. NOW I WOULD LIKE TO TALK ABOUT FAMILY HEALTH AND CHILD SPACING ARE YOU PREGNANT NOW?</p>	<p>Yes, currently pregnant.....1 No.....2 Unsure or DK.....8</p>	1⇒ CP4B
<p>CP2. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO SPACE YOUR CHILDREN?</p>	<p>Yes.....1 No.....2</p>	2⇒ CP4A
<p>CP3. WHICH METHOD ARE YOU USING?</p> <p><i>Do not prompt. If more than one method is mentioned, circle each one.</i></p>	<p>Pill.....C IUD.....D Injections.....E Condom.....G Diaphragm.....I Foam/jelly.....J</p> <p>Lactational amenorrhoea method (LAM).....K Periodic abstinence.....L Withdrawal.....M</p> <p>Other (<i>specify</i>) _____ X</p>	<p>K⇒CP4A L⇒CP4A M⇒CP4A X⇒CP4A</p>
<p>CP3A WHERE DID YOU OBTAIN (CURRENT METHOD) THE LAST TIME?</p>	<p>Public sector Govt. hospital ..... 11 Govt. health centre ..... 12 Govt. health post ..... 13 Village health worker ..... 14 Mobile/outreach clinic ..... 15 Other public (<i>specify</i>) _____ 16</p> <p>Private medical sector Private hospital/clinic ..... 21 Private physician ..... 22 Private pharmacy ..... 23 Mobile clinic ..... 24 Other private medical (<i>specify</i>) _____ 25</p> <p>Other source inside country Relative or friend ..... 31 Shop ..... 32 Traditional practitioner ..... 33</p> <p>Other source outside country Relative or friend ..... 41 Shop ..... 42</p> <p>Other (<i>specify</i>) ..... 96 DK ..... 98</p>	

<p>CP4A. Now I would like to ask some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?</p> <p>CP4B. <i>If currently pregnant:</i> 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?</p>	<p>Have (a/another) child.....1</p> <p>No more/none.....2</p> <p>Says she cannot get pregnant.....3</p> <p>Undecided/don't know.....8</p>	<p>} 2,3 &amp;8 ⇒NEXT MODULE</p>
<p>CP4C. How long would you like to wait before the birth of (a/another) child?</p>	<p>Months.....1 __</p> <p>Years.....2 __</p> <p>Soon/now.....993</p> <p>Says she cannot get pregnant.....994</p> <p>Other.....996</p> <p>Don't know..... 998</p>	

ATTITUDES TOWARD DOMESTIC VIOLENCE MODULE		DV																										
<p>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:</p> <p>DV1A. If she goes out without telling him?</p> <p>DV1B. If she neglects the children?</p> <p>DV1C. If she argues with him?</p> <p>DV1D. If she refuses sex with him?</p> <p>DV1E. If she burns the food?</p>	<table border="0"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Goes out without telling .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Neglects children.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Argues.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Refuses sex .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Burns food .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		Yes	No	DK	Goes out without telling .....	1	2	8	Neglects children.....	1	2	8	Argues.....	1	2	8	Refuses sex .....	1	2	8	Burns food .....	1	2	8			
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Burns food .....	1	2	8																									

FEMALE GENITAL MUTILATION/CUTTING MODULE		FG
FG3. NOW I WOULD LIKE TO TALK TO YOU ABOUT FEMALE CIRCUMCISION. HAVE YOU YOURSELF EVER BEEN CIRCUMCISED?	Yes.....1 No.....2	2⇒FG8
FG4. NOW I WOULD LIKE TO ASK YOU WHAT WAS DONE TO YOU AT THIS 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 (OR 'SEALED')?	Yes.....1 No.....2 DK.....8	
<p>FG8. The following questions apply only to women who have at least one living daughter. Check CM4 and CM6, Child Mortality Module: Woman has living daughter?</p> <p><input type="checkbox"/> Yes. ⇒ Continue with FG9</p> <p><input type="checkbox"/> No. ⇒ Go to FG16</p>		
FG9. HAVE ANY OF YOUR DAUGHTERS BEEN CIRCUMCISED?  IF YES, HOW MANY?	Number of daughters circumcised: .....__ __  No daughters circumcised.....00	00⇒FG16
FG10. TO WHICH OF YOUR DAUGHTERS DID THIS HAPPEN MOST RECENTLY? <i>Record the daughter's name.</i>	Name of daughter: _____	
FG11. 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 No.....2 DK.....8	1⇒FG13
FG12. WAS THE GENITAL AREA JUST NICKED WITHOUT REMOVING ANY FLESH?	Yes.....1 No.....2 DK.....8	
FG13. WAS THE GENITAL AREA SEWN CLOSED (OR 'SEALED')?	Yes.....1 No.....2 DK.....8	
FG14. HOW OLD WAS (name) WHEN THIS OCCURRED? <i>If the respondent does not know the age, probe to get an estimate.</i>	Daughter's age at circumcison.....__ __  DK.....98	
FG16. DO YOU THINK THIS PRACTICE SHOULD BE CONTINUED OR SHOULD IT BE DISCONTINUED?	Continued.....1 Depends.....3 Discontinued.....2 DK.....8	2⇒NEXT MODULE
FG16A WHAT TYPE OF CIRCUMCISION SHOULD BE CONTINUED?	Pharonic.....1 Intermediate.....2 Sunna.....3  DK.....8	

HIV/AIDS MODULE		HA																
HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF THE VIRUS HIV OR AN ILLNESS CALLED AIDS?	Yes.....1 No.....2	END THE INTERVIEW																
HA2. CAN PEOPLE PROTECT THEMSELVES FROM GETTING INFECTED WITH THE AIDS VIRUS BY HAVING ONE SEX PARTNER WHO IS NOT INFECTED AND ALSO HAS NO OTHER PARTNERS?	Yes.....1 No.....2 DK.....8																	
HA3. CAN PEOPLE GET INFECTED WITH 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 REDUCE THEIR CHANCE OF GETTING INFECTED WITH THE AIDS VIRUS BY NOT HAVING SEX AT ALL?	Yes.....1 No.....2 DK.....8																	
HA7. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS AIDS?	Yes.....1 No.....2 DK.....8																	
HA8. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes.....1 No.....2 DK.....8																	
HA9. CAN THE AIDS VIRUS BE TRANSMITTED FROM A MOTHER TO A BABY?  HA9A. DURING PREGNANCY? HA9B. DURING DELIVERY? HA9C. BY BREASTFEEDING?	<table border="0"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>During pregnancy .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>During delivery .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>By breastfeeding.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		Yes	No	DK	During pregnancy .....	1	2	8	During delivery .....	1	2	8	By breastfeeding.....	1	2	8	
	Yes	No	DK															
During pregnancy .....	1	2	8															
During delivery .....	1	2	8															
By breastfeeding.....	1	2	8															
HA10. 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																	
HA11. 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																	
HA12. IF A MEMBER OF YOUR FAMILY BECAME INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes.....1 No.....2 DK/not sure/depends.....8																	

HA13. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH THE AIDS VIRUS, WOULD YOU BE WILLING TO CARE FOR HIM OR HER IN YOUR HOUSEHOLD?	Yes.....1 No.....2 DK/not sure/depends.....8	
HA15. I DO NOT WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE HIV, THE VIRUS THAT CAUSES AIDS?	Yes.....1 No.....2	2⇒HA18
HA16. I DO NOT WANT YOU TO TELL ME THE RESULTS OF THE TEST, BUT HAVE YOU BEEN TOLD THE RESULTS?	Yes.....1 No.....2	
HA17. DID YOU, YOURSELF, ASK FOR THE TEST, WAS IT OFFERED TO YOU AND YOU ACCEPTED, OR WAS IT REQUIRED?	Asked for the test.....1 Offered and accepted.....2 Required.....3	END THE INTERVIEW
HA18. AT THIS TIME, DO YOU KNOW OF A PLACE WHERE YOU CAN GO TO GET SUCH A TEST TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes.....1 No.....2	END THE INTERVIEW

## QUESTIONNAIRE FOR CHILDREN UNDER FIVE

UNDER-FIVE CHILD INFORMATION PANEL		UF
<p><i>This questionnaire is to be administered to all mothers or caretakers (see household listing, column HL8) who care for a child that lives with them and is under the age of 5 years (see household listing, column HL5).</i></p> <p><i>A separate questionnaire should be used for each eligible child.</i></p> <p><i>Fill in the cluster and household number, and names and line numbers of the child and the mother/caretaker in the space below. Insert your own name and number, and the date.</i></p>		
UF1. Cluster number: _____	UF2. Household number: _____	
UF3. Child's Name: .....	UF4. Child's Line Number: _____	
UF5. Mother's/Caretaker's Name: .....	UF6. Mother's/Caretaker's Line Number: _____	
UF7. Interviewer name and number: _____	UF8. Day/Month/Year of interview: ____/____/_____	
UF9. Result of interview for children under 5 (Codes refer to mother/caretaker.)	Completed .....1 Not at home .....2 Refused .....3 Partly completed .....4 Incapacitated .....5 Other (specify) .....6	

*Repeat greeting if not already read to this respondent:*

WE ARE FROM (country-specific affiliation). WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT (45) MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED. ALSO, YOU ARE NOT OBLIGED TO ANSWER ANY QUESTION YOU DON'T WANT TO, AND YOU MAY WITHDRAW FROM THE INTERVIEW AT ANY TIME. MAY I START NOW?

*If permission is given, begin the interview. If the respondent does not agree to continue, thank him/her and go to the next interview. Discuss this result with your supervisor for a future revisit.*

UF10. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF EACH CHILD UNDER THE AGE OF 5 IN YOUR CARE, WHO LIVES WITH YOU NOW. NOW I WANT TO ASK YOU ABOUT (name). IN WHAT MONTH AND YEAR WAS (name) BORN? <i>Probe:</i> WHAT IS HIS/HER BIRTHDAY?  <i>If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day.</i>	Date of birth: Day ..... DK day .....98  Month.....  Year.....	
UF11. HOW OLD WAS (name) AT HIS/HER LAST BIRTHDAY? <i>Record age in completed years.</i>	Age in completed years.....	



BIRTH REGISTRATION AND EARLY LEARNING MODULE		BR
BR1. DOES (name) HAVE A BIRTH CERTIFICATE? MAY I SEE IT?	Yes, seen.....1 Yes, not seen.....2 No.....3 DK.....8	1⇒BR5 3⇒BR3
BR2. HAS (name's) BIRTH BEEN REGISTERED WITH A NOTARY OR THE MUNICIPALITY? OR ANY OTHER AUTHORITIES?	Notary.....1 Municipality.....2 Othe.....3 No.....4 DK.....8	1⇒BR5 2⇒BR5 3⇒BR5 4⇒BR3 8⇒BR5
BR3. WHY IS (name's) BIRTH NOT REGISTERED?	Costs too much.....1 Must travel too far.....2 Did not know it should be registered.....3 Does not know where to register.....5 Do not see the need to.....7 Other (specify).....6 DK.....8	
BR5. Check age of child in UF11: Child is 3 or 4 years old? <input type="checkbox"/> Yes. ⇒ Continue with BR6 <input type="checkbox"/> No. ⇒ Go to BR8		
BR6. DOES (name) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	Yes.....1 No.....2 DK.....8	2⇒BR8 8⇒BR8
BR7. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (name) ATTEND?	No. of hours.....__ __	
BR8. 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):  <i>If yes, ask: WHO ENGAGED IN THIS ACTIVITY WITH THE CHILD - THE MOTHER, THE CHILD'S FATHER OR ANOTHER ADULT MEMBER OF THE HOUSEHOLD (INCLUDING THE CARETAKER/RESPONDENT)?</i> <i>Circle all that apply.</i>		
BR8A. READ BOOKS OR LOOK AT PICTURE BOOKS WITH (name)?	Books	Mother    Father    Other    No one A          B          X          Y
BR8B. TELL STORIES TO (name)?	Stories	A          B          X          Y
BR8C. SING SONGS WITH (name)?	Songs	A          B          X          Y
BR8D. TAKE (name) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	Take outside	A          B          X          Y
BR8E. PLAY WITH (name)?	Play with	A          B          X          Y
BR8F. SPEND TIME WITH (name) NAMING, COUNTING, AND/OR DRAWING THINGS?	Spend time with	A          B          X          Y

VITAMIN A MODULE		VA
VA1. HAS ( <i>name</i> ) EVER RECEIVED A VITAMIN A CAPSULE (SUPPLEMENT) LIKE THIS ONE?  <i>Show capsule or dispenser for different doses – 100,000 IU for those 6-11 months old, 200,000 IU for those 12-59 months old.</i>	Yes.....1 No.....2  DK.....8	2⇒NEXT MODULE  8⇒NEXT MODULE
VA2. HOW MANY MONTHS AGO DID ( <i>name</i> ) TAKE THE LAST DOSE?	Months ago.....  DK.....98	
VA3. WHERE DID ( <i>name</i> ) GET THIS LAST DOSE?	On routine visit to health facility .....1 Sick child visit to health facility .....2 National Immunization Day campaign.....3  Other ( <i>specify</i> ) .....6  DK.....8	

BREASTFEEDING MODULE		BF
BF1. HAS ( <i>name</i> ) EVER BEEN BREASTFED?	Yes.....1 No.....2  DK.....8	2⇒BF3  8⇒BF3
BF2. IS HE/SHE STILL BEING BREASTFED?	Yes.....1 No.....2  DK.....8	
BF3. SINCE THIS TIME YESTERDAY, DID HE/SHE RECEIVE ANY OF THE FOLLOWING:  <i>Read each item aloud and record response before proceeding to the next item.</i>		Y N DK
BF3A. VITAMIN, MINERAL SUPPLEMENTS OR MEDICINE?	A. Vitamin supplements.....1 2 8	
BF3B. PLAIN WATER?	B. Plain water.....1 2 8	
BF3C. SWEETENED, FLAVOURED WATER OR FRUIT JUICE OR TEA OR INFUSION?	C. Sweetened water or juice .....1 2 8	
BF3D. ORAL REHYDRATION SOLUTION (ORS)?	D. ORS.....1 2 8	
BF3E. INFANT FORMULA?	E. Infant formula .....1 2 8	
BF3F. TINNED, POWDERED OR FRESH MILK?	F. Milk .....1 2 8	
BF3G. ANY OTHER LIQUIDS?	G. Other liquids.....1 2 8	
BF3H. SOLID OR SEMI-SOLID (MUSHY) FOOD?	H. Solid or semi-solid food.....1 2 8	
BF4. Check BF3H: Child received solid or semi-solid (mushy) food? <input type="checkbox"/> Yes. ⇒ Continue with BF5 <input type="checkbox"/> No or DK. ⇒ Go to Next Module		
BF5. SINCE THIS TIME YESTERDAY, HOW MANY TIMES DID ( <i>name</i> ) EAT SOLID, SEMISOLID, OR SOFT FOODS OTHER THAN LIQUIDS?  <i>If 7 or more times, record '7'.</i>	No. of times..... Don't know .....8	

CARE OF ILLNESS MODULE		CA
CA1. HAS (name) HAD DIARRHOEA IN THE LAST TWO WEEKS, THAT IS, SINCE (day of the week) OF THE WEEK BEFORE LAST? <i>Diarrhoea is determined as perceived by mother or caretaker, or as three or more loose or watery stools per day, or blood in stool.</i>	Yes.....1 No.....2 DK.....8	2⇒CA5 8⇒CA5
CA1A. WAS BLOOD EVER PRESENT IN THIS DIARRHOEA?	Yes.....1 No.....2 DK.....8	
CA2. DURING THIS LAST EPISODE OF DIARRHOEA, DID (name) DRINK ANY OF THE FOLLOWING:  <i>Read each item aloud and record response before proceeding to the next item.</i>		
CA2A. A FLUID MADE FROM A SPECIAL PACKET CALLED ( <i>local name for ORS packet solution</i> )?		Yes No DK
CA2B. GOVERNMENT-RECOMMENDED HOMEMADE FLUID (SUCH AS SUGAR – SALT SOLUTION, RICE WATER ETC.)?	A. Fluid from ORS packet..... 1 2 8	
CA2C. A PRE-PACKAGED ORS FLUID FOR DIARRHOEA?	B. Recommended homemade fluid ..... 1 2 8 C. Pre-packaged ORS fluid ..... 1 2 8	
CA3 A. DURING (name's) ILLNESS, DID HE/SHE BREASTFEED?	Yes.....1 No.....2 DK.....8	
CA3. DURING (name's) ILLNESS, DID HE/SHE DRINK MUCH LESS, ABOUT THE SAME, OR MORE THAN USUAL?	Much less or none .....1 About the same (or somewhat less) .....2 More .....3 DK.....8	
CA4. DURING (name's) ILLNESS, DID HE/SHE EAT LESS, ABOUT THE SAME, OR MORE FOOD THAN USUAL?  <i>If "less", probe: MUCH LESS OR A LITTLE LESS?</i>	None.....1 Much less.....2 Somewhat less .....3 About the same.....4 More .....5 DK.....8	
CA5. HAS (name) HAD AN ILLNESS WITH A COUGH AT ANY TIME IN THE LAST TWO WEEKS, THAT IS, SINCE (day of the week) OF THE WEEK BEFORE LAST?	Yes.....1 No.....2 DK.....8	2⇒CA12 8⇒CA12
CA6. WHEN (name) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, QUICK BREATHS OR HAVE DIFFICULTY BREATHING?	Yes.....1 No.....2 DK.....8	2⇒CA12 8⇒CA12
CA7. WERE THE SYMPTOMS DUE TO A PROBLEM IN THE CHEST OR A BLOCKED NOSE?	Problem in chest .....1 Blocked nose .....2 Both .....3  Other ( <i>specify</i> ) .....6 DK.....8	2⇒CA12 6⇒CA12
CA8. DID YOU SEEK ADVICE OR TREATMENT FOR THE ILLNESS OUTSIDE THE HOME?	Yes.....1 No.....2 DK.....8	2⇒CA10 8⇒CA10

<p>CA9. FROM WHERE DID YOU SEEK CARE?</p> <p>ANYWHERE ELSE?</p> <p>Circle all providers mentioned, but do NOT prompt with any suggestions.</p> <p>If source is hospital, health center, or clinic, write the name of the place below. Probe to identify the type of source and circle the appropriate code.</p> <p>_____</p> <p>(Name of place)</p>	<p>Public sector</p> <p>Govt. hospital ..... A</p> <p>Govt. health centre ..... B</p> <p>Govt. health post ..... C</p> <p>Village health worker ..... D</p> <p>Other public (<i>specify</i>) ..... H</p> <p>Private medical sector</p> <p>Private hospital/clinic ..... I</p> <p>Private physician ..... J</p> <p>Private pharmacy ..... K</p> <p>Other private</p> <p>_____ medical (<i>specify</i>) ..... O</p> <p>Other source</p> <p>Relative or friend ..... P</p> <p>Shop ..... Q</p> <p>Traditional practitioner ..... R</p> <p>Other (<i>specify</i>) ..... X</p>	
<p>CA10. WAS (<i>name</i>) GIVEN MEDICINE TO TREAT THIS ILLNESS?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	<p>2⇒CA12</p> <p>8⇒CA12</p>
<p>CA11. WHAT MEDICINE WAS (<i>name</i>) GIVEN?</p> <p>Circle all medicines given.</p>	<p>Antibiotic ..... A</p> <p>Paracetamol/Panadol/Acetaminophen ..... P</p> <p>Aspirin ..... Q</p> <p>Ibuprofen ..... R</p> <p>Other (<i>specify</i>) ..... X</p> <p>DK ..... Z</p>	
<p>CA12. Check UF11: Child aged under 3?</p> <p><input type="checkbox"/> Yes. ⇒ Continue with CA13</p> <p><input type="checkbox"/> No. ⇒ Go to CA14</p>		
<p>CA13. THE LAST TIME (<i>name</i>) PASSED STOOLS, WHAT WAS DONE TO DISPOSE OF THE STOOLS?</p>	<p>Child used toilet/latrine ..... 01</p> <p>Put/rinsed into toilet or latrine ..... 02</p> <p>Put/rinsed into drain or ditch ..... 03</p> <p>Thrown into garbage (solid waste) ..... 04</p> <p>Buried ..... 05</p> <p>Left in the open ..... 06</p> <p>Other (<i>specify</i>) ..... 96</p> <p>DK ..... 98</p>	

ASK THE FOLLOWING QUESTIONS (CA 14, CA15) ONLY ONCE FOR EACH MOTHER/CARETAKER		
<p>CA14. 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?</p> <p><i>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</i></p>	<p>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 is coughing ..... H            Child has diarrhea.....I</p> <p>Other (specify) _____ X</p> <p>DK.....Z</p>	
<p>CA15. What ARE THE SYMPTOMS OR SIGNS OF MALARIA?</p> <p><i>Circle all symptoms mentioned.</i></p>	<p>Fever/sweats.....A            Headaches.....B            Chills/shivers.....C            Neckache.....D            Weakness/tiredness.....E            Loss of appetite.....F            Bitterness in the mouth.....G            Vomiting/Nausea.....H</p> <p>Others (specify).....X</p> <p>DK.....Z</p>	
MALARIA MODULE FOR UNDER-FIVES		ML
<p>ML1. IN THE LAST TWO WEEKS, THAT IS, SINCE (<i>day of the week</i>) OF THE WEEK BEFORE LAST, HAS (<i>name</i>) BEEN ILL WITH A FEVER?</p>	<p>Yes.....1            No.....2            DK.....8</p>	<p>2⇒ML10            8⇒ML10</p>
<p>ML2. WAS (<i>name</i>) SEEN AT A HEALTH FACILITY DURING THIS ILLNESS?</p>	<p>Yes.....1            No.....2            DK.....8</p>	<p>2⇒ML10            8⇒ML10</p>
<p>ML3. DID (<i>name</i>) TAKE A MEDICINE FOR FEVER OR MALARIA THAT WAS PROVIDED OR PRESCRIBED AT THE HEALTH FACILITY?</p>	<p>Yes.....1            No.....2            DK.....8</p>	<p>2⇒ML10            8⇒ML10</p>
<p>ML4. WHAT MEDICINE DID (<i>name</i>) TAKE THAT WAS PROVIDED OR PRESCRIBED AT THE HEALTH FACILITY?</p> <p><i>Circle all medicines mentioned.</i></p>	<p>ANTIMALARIALS:            SP/FANSIDAR ..... A            CHLOROQUINE ..... B            AMODIAQUINE ..... C            QUININE ..... D            ARTEMISININ-BASED COMBINATIONS..... E            OTHER ANTI-MALARIAL            (SPECIFY) _____ H</p> <p>OTHER MEDICATIONS:            PARACETAMOL/PANADOL/ACETAMINOPHEN ..... P            ASPIRIN ..... Q            IBUPROFEN ..... R</p> <p>OTHER (SPECIFY) _____ X            DK.....Z</p>	

<p>ML8. Check ML4 : Anti-malarial mentioned (codes A - H)?</p> <p><input type="checkbox"/> Yes. ⇒ Continue with ML9</p> <p><input type="checkbox"/> No. ⇒ Go to ML10</p>		
<p>ML9. HOW LONG AFTER THE FEVER STARTED DID (name) FIRST TAKE (name of anti-malarial from ML4)?</p> <p><i>If multiple anti-malarials mentioned in ML4 name all anti-malarial medicines mentioned.</i></p> <p><i>Record the code for the day on which the first anti-malarial was given.</i></p>	<p>Same day .....0</p> <p>Next day .....1</p> <p>2 days after the fever .....2</p> <p>3 days after the fever .....3</p> <p>4 or more days after the fever.....4</p> <p>DK.....8</p>	
<p>ML9A . WHERE DID YOU GET THE (name of anti-malarial from ML4)?</p> <p>IF MORE THAN ONE ANTI-MALARIAL IS MENTIONED IN ML4, REFER TO THE FIRST ANTI-MALARIAL GIVEN FOR THE FEVER (THE ANTI-MALARIAL GIVEN ON THE DAY RECORDED IN ML9).</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL .....11</p> <p>GOVT. HEALTH CENTRE .....12</p> <p>GOVT. HEALTH POST.....13</p> <p>VILLAGE HEALTH WORKER.....14</p> <p>MOBILE/OUTREACH CLINIC.....15</p> <p>OTHER PUBLIC (SPECIFY).....16</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC.....21</p> <p>PRIVATE PHYSICIAN .....22</p> <p>PRIVATE PHARMACY .....23</p> <p>MOBILE CLINIC .....24</p> <p>OTHER PRIVATE MEDICAL (SPECIFY) .....26</p> <p>OTHER SOURCE</p> <p>RELATIVE OR FRIEND .....31</p> <p>SHOP .....32</p> <p>TRADITIONAL PRACTITIONER .....33</p> <p>OTHER (SPECIFY).....96</p> <p>DK.....98</p>	
<p>ML10. DID (name) SLEEP UNDER A MOSQUITO NET LAST NIGHT?</p>	<p>Yes.....1</p> <p>No.....2</p> <p>DK.....8</p>	<p>2⇒NEXT MODULE</p> <p>8⇒NEXT MODULE</p>
<p>ML10A. WHAT TYPE IS THIS NET?</p> <p><i>If the respondent does not know the TYPE of the net, show pictorials, or if possible, observe the net.</i></p> <p>LONG LASTING TREATED NETS:</p> <p>PRE-TREATED NETS:</p> <p>OTHER NETS:</p>	<p>Long lasting treated net ..... 1</p> <p>Pre-treated net: .....2</p> <p>Other net: .....3</p> <p>DK brand.....98</p>	

IMMUNIZATION MODULE							IM
If an immunization card is available, copy the dates in IM2-IM8 for each type of immunization or vitamin A dose recorded on the card. IM10-IM18 are for recording vaccinations that are not recorded on the card. IM10-IM18 will only be asked when a card is not available.							
IM1. IS THERE A VACCINATION CARD FOR (name)?		Yes, seen.....1 Yes, not seen.....2 No.....3					2⇒IM10 3⇒IM10
(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:					
IM2. BCG	BCG						
IM3A. POLIO AT BIRTH	OPV0						
IM3B. POLIO 1	OPV1						
IM3C. POLIO 2	OPV2						
IM3D. POLIO 3	OPV3						
IM4A. DPT1	DPT1						
IM4B. DPT2	DPT2						
IM4C. DPT3	DPT3						
IM6. MEASLES (OR MMR)	MEASLES						
IM8A. VITAMIN A (1)	VIT A1						
IM8B. VITAMIN A (2)	VIT A2						
IM9. IN ADDITION TO THE VACCINATIONS AND VITAMIN A CAPSULES SHOWN ON THIS CARD, DID (name) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS? <i>Record 'Yes' only if respondent mentions BCG, OPV 0-3, DPT 1-3, Hepatitis B 1-3, Measles, Yellow Fever vaccine(s), or Vitamin A supplements.</i>		Yes.....1 <i>(Probe for vaccinations and write '66' in the corresponding day column on IM2 to IM8B.)</i> No.....2 DK.....8					1⇒IM18A 2⇒IM18A 8⇒IM18A
IM10. 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⇒IM18A 8⇒IM18A
IM11. HAS (name) EVER BEEN GIVEN A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT CAUSED A SCAR?		Yes.....1 No.....2 DK.....8					
IM12. HAS (name) EVER BEEN GIVEN ANY “VACCINATION DROPS IN THE MOUTH” TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO?		Yes.....1 No.....2 DK.....8					2⇒IM15 8⇒IM15
IM13. HOW OLD WAS HE/SHE WHEN THE FIRST DOSE WAS GIVEN – JUST AFTER BIRTH (WITHIN TWO WEEKS) OR LATER?		Just after birth (within two weeks).....1 Later.....2					

IM14. HOW MANY TIMES HAS HE/SHE BEEN GIVEN THESE DROPS?	No. of times.....__ __	
IM15. HAS ( <i>name</i> ) EVER BEEN GIVEN "DPT VACCINATION INJECTIONS" – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, DIPHTHERIA? (SOMETIMES GIVEN AT THE SAME TIME AS POLIO)	Yes.....1 No.....2 DK.....8	2⇒IM17 8⇒IM17
IM16. HOW MANY TIMES?	No. of times.....__ __	
IM17. HAS ( <i>name</i> ) EVER BEEN GIVEN "MEASLES VACCINATION INJECTIONS" OR MMR – 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	
<i>Ask the following questions (IM 18A, IM 18B, IM 18C IM18D) only once for each mother/caretaker</i>		
IM 18 A. HAVE YOU EVER HEARD OF A DISEASE CALLED POLIO?	YES.....1 NO.....2 DK.....8	2⇒IM18D 8⇒IM18D
IM 18B. DO YOU AGREE TO RECEIVING REPEAT DOSES OF POLIO VACCINES EVERY MONTH?	YES.....1 NO.....2 DK.....8	
IM 18C. HAVE YOU EVER REFUSED TO VACCINATE ONE OF YOUR CHILDREN AGAINST POLIO DISEASE?	NEVER.....1 ONCE.....2 SEVERAL TIMES.....3	
IM18D. WHO IN THE HOUSEHOLD TAKES THE DECISION TO VACCINATE THE CHILD?	Father.....A Mother.....B Grandparents.....C Others (specify).....D	

IM20. Does another eligible child reside in the household for whom this respondent is mother/caretaker?  
Check household listing, column HL8.

Yes. ⇒ End the current questionnaire and then

Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE to administer the questionnaire for the next eligible child.

No. ⇒ End the interview with this respondent by thanking him/her for his/her cooperation.

If this is the last eligible child in the household, go on to ANTHROPOMETRY MODULE.



ANTHROPOMETRY MODULE		AN
<p>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.</p>		
AN1. Child's weight.	Kilograms (kg)..... _ _ . _	
AN2. Child's length or height.  Check age of child in UF11:  <input type="checkbox"/> Child under 2 years old. ⇒ Measure length (lying down).  <input type="checkbox"/> Child age 2 or more years. ⇒ Measure height (standing up).	Length (cm) Lying down.....1 _ _ _ . _  Height (cm) Standing up.....2 _ _ _ . _	
AN3. Measurer's identification code.	Measurer code ..... _ _	
AN4. Result of measurement.	Measured.....1 Not present.....2 Refused.....3  Other (specify) .....6	

AN5. Is there another child in the household who is eligible for measurement?  <input type="checkbox"/> Yes. ⇒ Record measurements for next child.  <input type="checkbox"/> 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.
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