Sierra Leone

Monitoring the situation of children and women

Multiple Indicator Cluster Survey 2005

Statistics Sierra Leone

United Nations Children's Fund

MICS

Sierra Leone
Multiple Indicator Cluster Survey
2005

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UNICEF
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In collaboration with members of the MICS3 Steering Committee, including representatives of the Ministry of Health and Sanitation and the Ministry of Education, Science and Technology

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The survey has been conducted as part of the third round of MICS surveys (MICS3) that were carried out around the world in more than 50 countries in 2005-2006. The MICS3 follows the first two rounds of MICS surveys that were conducted in 1995 and 2000. Survey tools are based on the models and standards developed by the global MICS project and are designed to collect information on the situation of children and women in countries around the world. Additional information on the global MICS project may be obtained from www.childinfo.org.

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Summary Table of Findings

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Sierra Leone, 2005

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	
CHILD MORTALITY					
Child mortality	1	13	Under-five mortality rate	267	per thousand
	2	14	Infant mortality rate	158	per thousand
NUTRITION					
Nutritional status	6	4	Underweight prevalence	30	Percent
	7		Stunting prevalence	40	Percent
	8		Wasting prevalence	9	Percent
Breastfeeding	45		Timely initiation of breastfeeding	33	Percent
	15		Exclusive breastfeeding rate	8	Percent
	16		Continued breastfeeding rate		
			at 12-15 months	87	Percent
			at 20-23 months	57	Percent
	17		Timely complementary feeding rate	52	Percent
	18		Frequency of complementary feeding	37	Percent
	19		Adequately fed infants	23	Percent
Salt iodization	41		Iodized salt consumption	45	Percent
Vitamin A	42		Vitamin A supplementation (under-fives)	49	Percent
	43		Vitamin A supplementation (post-partum mothers)	55	Percent
Low birth weight	9		Low birth weight infants	24	Percent
	10		Infants weighed at birth	29	Percent
CHILD HEALTH					
Immunization	25		Tuberculosis immunization coverage	84	Percent
	26		Polio immunization coverage	57	Percent
	27		DPT immunization coverage	56	Percent
	28	15	Measles immunization coverage	63	Percent
	31		Fully immunized children	35	Percent
	30		Yellow fever immunization coverage	61	Percent
Tetanus toxoid	32		Neonatal tetanus protection	78	Percent
Care of illness	33		Use of oral rehydration therapy (ORT)	60	Percent
	34		Home management of diarrhoea	23	Percent
	35		Received ORT or increased fluids, and continued feeding	31	Percent
	23		Care seeking for suspected pneumonia	48	Percent
	22		Antibiotic treatment of suspected pneumonia	21	Percent
Solid fuel use	24	29	Solid fuels	99	Percent
Malaria	36		Household availability of insecticide-treated nets (ITNs)	5	Percent
	37	22	Under-fives sleeping under insecticide-treated nets	5	Percent
	38		Under-fives sleeping under mosquito nets	20	Percent
	39	22	Antimalarial treatment (under-fives)	45	Percent
	40		Intermittent preventive malaria treatment (pregnant women)	2	Percent

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	
ENVIRONMENT					
Water and Sanitation	11	30	Use of improved drinking water sources	47	percent
	13		Water treatment	5	percent
	12	31	Use of improved sanitation facilities	30	percent
	14		Disposal of child's faeces	41	percent
REPRODUCTIVE HEALTH					
Contraception and unmet need	21	19c	Contraceptive prevalence	5	percent
Maternal and newborn health	20		Antenatal care	81	percent
	44		Content of antenatal care	94	percent
	4	17	Skilled attendant at delivery	43	percent
	5		Institutional deliveries	19	percent
Maternal mortality	3	16	Maternal mortality ratio	457	per 100,000
CHILD DEVELOPMENT					
Child development	46		Support for learning	65	percent
	47		Father's support for learning	65	percent
	48		Support for learning: children's books	11	percent
	49		Support for learning: non-children's books	29	percent
	50		Support for learning: materials for play	52	percent
	51		Non-adult care	21	percent
EDUCATION					
Education	52		Pre-school attendance	13	percent
	53		School readiness	7	percent
	54		Net intake rate in primary education	48	percent
	55	6	Net primary school attendance rate	69	percent
	56		Net secondary school attendance rate	19	percent
	57	7	Children reaching grade five	92	percent
	58		Transition rate to secondary school	52	percent
	59	7b	Primary completion rate	11	percent
	61	9	Gender parity index		
			primary school	1.01	ratio
			secondary school	0.78	ratio
Literacy	60	8	Adult literacy rate	25	percent
CHILD PROTECTION					
Birth registration	62		Birth registration	48	percent
Child labour	71		Child labour	48	percent
	72		Labourer students	64	percent
	73		Student labourers	45	percent
Child discipline	74		Child discipline: Any psychological/physical punishment	92	percent
Early marriage and polygyny	67		Marriage before age 15	27	percent
			Marriage before age 18	62	percent
	68		Young women aged 15-19 currently married/in union	36	percent
	70		Polygyny	43	percent
	69		Spousal age difference		
			Among women aged 15-19	58	percent
			Among women aged 20-24	56	percent

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	
Membership in secret societies (proxy for female genital cutting)	66		Approval for continuation of secret societies	86	percent
	63		Prevalence of membership in secret societies	94	percent
	65		Prevalence of membership in secret societies among daughters	34	percent
Domestic violence	100		Attitudes towards domestic violence	85	percent
Disability	101		Child disability	23	percent
HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANED AND VULNERABLE CHILDREN					
HIV/AIDS knowledge and attitudes	82	19b	Comprehensive knowledge about HIV prevention among young people	17	percent
	89		Knowledge of mother- to-child transmission of HIV	54	percent
	86		Positive attitude towards people with HIV/AIDS	5	percent
	87		Women who know where to be tested for HIV	18	percent
	88		Women who have been tested for HIV	6	percent
	90		Counselling coverage for the prevention of mother-to-child transmission of HIV	41	percent
	91		Testing coverage for the prevention of mother-to-child transmission of HIV	5	percent
Sexual behaviour	84		Age at first sex among young people	25	percent
	92		Age-mixing among sexual partners	39	percent
	83	19a	Condom use with non-regular partners	20	percent
	85		Higher-risk sex in the last year	43	percent
Support to orphaned and vulnerable children	75		Prevalence of orphans	11	percent
	78		Children's living arrangements	20	percent
	76		Prevalence of vulnerable children	18	percent
	77	20	School attendance of orphans versus non-orphans	0.83	ratio
	81		External support to children orphaned and made vulnerable by HIV/AIDS	1.3	percent
	79		Malnutrition among children orphaned and made vulnerable by HIV/AIDS	0.96	ratio
	80		Early sex among children orphaned and made vulnerable by HIV/AIDS	1.51	ratio

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal care
ARI	Acute respiratory infection
BCG	Bacillus-Cereus-Geuerin (Tuberculosis)
CBIMCI	Community-Based Integrated Management of Childhood Illnesses
DD	Diarrhoeal disease
DPT	Diphtheria Pertussis Tetanus
EA	Enumeration area
ECD	Early child development
EPI	Expanded Programme on Immunization
FGC	Female genital cutting
GoSL	Government of Sierra Leone
HIV	Human Immunodeficiency Virus
IDD	Iodine deficiency disorders
IMCI	Integrated Management of Childhood Illnesses
IMR	Infant mortality ratio
IPT	Intermittent preventive treatment (for malaria)
ITN	Insecticide-treated net
IUD	Intrauterine device
LAM	Lactational amenorrhea method
LBW	Low birth weight
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MMR	Maternal mortality ratio
MoH	Ministry of Health
MTCT	Mother-to-child transmission
NAR	Net attendance rate
NGO	Non-governmental Organization
ORS	Oral rehydration solution
ORT	Oral rehydration therapy
OPV	Oral polio vaccine
OVC	Orphans and vulnerable children
PMTCT	Prevention of mother-to-child transmission
ppm	Parts per million
PPVAS	Postpartum vitamin A supplementation
PRSP	Poverty Reduction Strategy Paper
RHF	Recommended home fluid
SBA	Skilled birth attendant
SPSS	Statistical Package for Social Sciences
SSL	Statistics Sierra Leone
STI	Sexually transmitted infection
TT	Tetanus toxoid
UFMR	Under-five mortality 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
VAS	Vitamin A supplementation
WCA	Western and Central Africa
WFFC	World Fit For Children
WHO	World Health Organization

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Christian Health Association of Sierra Leone (CHASL)
World Vision

The 2005 Sierra Leone Multiple Indicator Cluster Survey (MICS3) is a nationally representative survey of households, women, and children. The main objectives of the survey are (i) to provide current information for assessing the present situation of women and children in Sierra Leone; (ii) to produce data to monitor progress toward the achievement of targets and goals that include the Millennium Development Goals (MDGs); and, (iii) to contribute to the improvement of data and monitoring systems in Sierra Leone. Interviews were successfully completed in 7,078 households drawn from all districts of Sierra Leone. The main results from the survey are summarized below.

Child Mortality

The MICS3 survey measured child mortality by using a methodology that produced retrospective estimates of the infant mortality rate (IMR) and under-five mortality rate (UFMR). The survey estimated the IMR to be 158 per 1000 and the UFMR to be 267 per 1000 with 2002 as the reference year. These estimates are little changed from those generated during the MICS2 survey in 2000 that produced estimates for 1997. It appears that child mortality in Sierra Leone has not decreased substantially between 1997 and 2002—although perhaps it should not have been expected to, given the conflict that was raging in the republic during that time.

Nutrition

Nutritional Status

Thirty percent of children under age five in Sierra Leone are *underweight* or too thin for their age. Forty percent of children are *stunted* or too short for their age, while nine percent are *wasted*, or too thin for their height. The prevalence of undernourished children in Sierra Leone has increased modestly since 2000 and is slightly higher than norms in West and Central Africa.

Breastfeeding

Only 33 percent of newborns are given breastmilk within one hour of birth while a mere eight percent of children less than four months of age are exclusively breastfed. Fifty-two percent of children aged 6-9 months receive breast milk and solid or semi-solid foods. Continued breastfeeding rates are 88 and 57 percent among children 12-15 months and 20-23 months of age, respectively. All indicators except for continued breastfeeding fall well short of desired levels.

Salt Iodization

The percentage of households that consume adequately iodized salt in Sierra Leone has doubled in the past five years as 45 percent of households now consume salt that is adequately iodized. The lack of in-country facilities to iodize salt continues to hamper efforts to achieve universal salt iodization in Sierra Leone.

Vitamin A Supplementation

Forty-nine percent of children aged 6-59 months received a high dose vitamin A supplement during the six months prior to the MICS3 survey. The ten percent drop in the level of this indicator since 2000 is attributed to the termination of national vitamin A supplementation

(VAS) campaigns and incorporation of VAS into the routine health services. VAS coverage among postpartum women has improved markedly during the past five years and is now estimated at 55 percent.

Low Birth Weight

The prevalence of low birth weight (LBW) infants was estimated to be 24 percent in the MICS3, a level that is well above the regional norm of 15 percent.

Child Health

Immunization

Eighty-four percent of children aged 12-23 months were found to have received BCG vaccination by their first birthday. Vaccination coverage for these same children at age 12 months was 56 percent for DPT3, 57 percent for OPV3, 63percent for measles, and 61 percent for yellow fever. Only 35 percent of children received all recommended vaccinations by their first birthday. Comparison of these findings with MICS2 results shows that clear gains have been made in improving vaccination status of children in Sierra Leone during the past five years. Vaccination coverage in Sierra Leone is 8 to 21 percent above regional norms, suggesting that the EPI program is a relatively strong component of the health system in Sierra Leone. Vaccination rates are still far short of the UNICEF goal of 90 percent of children fully immunized at one year of age.

Tetanus Toxoid

Seventy-five percent of surveyed women who gave birth during the year prior to the MICS3 survey received at least two doses of tetanus toxoid (TT) vaccine during their pregnancy while an additional three percent were protected against neonatal tetanus due to previous TT vaccinations. This encouraging result represents a twenty percent increase in TT coverage over the past five years and is much higher than the regional norm.

Oral Rehydration Treatment

Approximately 60 percent of children with diarrhoea received either oral rehydration solution (ORS) and/or a recommended home fluid—a 26 percent decrease compared to the MICS2 result. Thirty-one percent of children with diarrhoea received home treatment as recommended: that is, they either received ORT or increased their fluid intake, while continuing feeding at the same time. Shortages in the supply of packaged ORS, on which Sierra Leonean caretakers appear to be over-reliant, may have been contributed to these results, along with low levels of awareness and knowledge among household members regarding the need for children to continue taking fluids and food while ill with diarrhoea.

Care Seeking and Antibiotic Treatment of Pneumonia

Forty-eight percent of surveyed children with suspected pneumonia during the two weeks preceding the survey were taken to an appropriate provider while only 21 percent were treated with an antibiotic. Just 14 percent of surveyed mothers knew the two key danger signs of pneumonia—fast and difficult breathing. Care for pneumonia is highly inequitable: children living in the poorest areas of the country, in the poorest households, and in households where the education level is the lowest, have the lowest access to services and antibiotics.

Solid Fuel Use

Households in Sierra Leone make nearly universal (99 percent) use of solid fuels—primarily wood—for cooking purposes. Stoves that limit indoor pollution that are used in Sierra Leone include closed stoves with chimneys (used by less than one percent of households) and open stoves with chimneys or hoods (used by nine percent of households).

Malaria

MICS3 findings indicate that five percent of children under the age of five slept under an insecticide-treated mosquito net (ITN) the night prior to the survey while 20 percent slept under either an ITN or an untreated net. One-third of surveyed children were ill with fever in the two weeks prior to the MICS3. Among these children, 45 percent were treated with an appropriate anti-malarial drug within 24 hours of onset of symptoms and an additional 7 percent were treated at a later time. These findings suggest that caretakers of children in Sierra Leone emphasize a curative, rather than preventive, approach to malaria control.

Environment

Water and Sanitation

The MICS3 estimates of the Sierra Leonean population's access to improved sources of drinking water (47 percent) and improved sanitation facilities (30 percent) are lower than previous estimates. Enumerators were carefully trained on the different definitions of improved water and sanitation facilities and may have collected more accurate data than have been collected in the past. In addition, the low estimates may be due to a gradual population movement from urban areas (where improved sources are more readily available) to rural locations following the end of the conflict in 2002. Only 24 percent of households have both an improved source of drinking water and improved sanitation facilities. Differences in the level of this indicator vary widely among provinces, ranging from 13 percent in the North to 63 percent in the Western Area.

Reproductive Health

Contraception

Current use of modern contraception was reported by four percent of surveyed women who were married or in union while one percent reported using a traditional method. The only methods with a notable level of use are the pill and injections. The prevalence of contraceptive-use in Sierra Leone even lags behind the low norms of the region (17 percent), suggesting that adequate efforts have not been made in Sierra Leone to promote contraception.

Antenatal Care

Eighty-one percent of pregnant women in Sierra Leone receive antenatal care from a skilled health provider (i.e., a doctor, nurse, or midwife) at least once during their pregnancies. The utilization of antenatal care is approximately 15 percentage points higher than regional estimates and the MICS2 estimate from 2000.

Assistance at Delivery

About 43 percent of births in Sierra Leone that occurred in the year prior to the MICS3 survey were delivered by skilled personnel—that is, a doctor, nurse, or midwife. This level of utilization, which is highest in the Western Area at 83 percent and lowest in the Northern province at 25 percent, remains unchanged since last measured in 2000 and is in line with

the regional value of 45 percent. Nineteen percent of deliveries in Sierra Leone take place in health facilities.

Maternal Mortality Ratio

The MMR in Sierra Leone was measured in the MICS3 using the indirect sisterhood method and estimated to be 457 maternal deaths per 100,000 live births. While this estimate of the MMR is substantially lower than the MICS2 estimate of 1,800 deaths per 100,000 live births, caution should be exercised while drawing conclusions from the comparison of these estimates due to the low precision of the estimates and the different methodologies used to calculate them.

Child Development

An adult engaged in at least five activities that promote learning and school readiness during the three days preceding the survey for two-thirds of surveyed under-five children. The same percentage of children engaged in these activities at least one time with their fathers during the same time period. Twenty-nine percent of children live in households where at least three non-children's books are present while only 11 percent live in households where at least three children's books are found. Fifty-two percent of children aged 0-59 months had three or more playthings to play with in their homes. Twenty percent of children aged 0-59 months were left in the care of other children under ten years of age during the week preceding the interview while six percent of children were left alone.

Education

Pre-School Attendance and School Readiness

Thirteen percent of children aged 3-4 years attend pre-school. Among children who were aged six years and also attended the first grade of primary school at the time of the survey, merely seven percent attended pre-school the previous year. These levels represent a decrease from MICS2 estimates, suggesting a decline in the use of pre-school in Sierra Leone.

Primary and Secondary School Participation

School attendance in Sierra Leone among children of primary school age has increased notably during the past five years and now stands at 69 percent. Forty-eight percent of children in Sierra Leone begin to attend primary school at the stipulated school entry age (six years), foreshadowing the delayed educational status of many children. Ninety-two percent of children who enter the first grade of primary school eventually reach grade five. Many children leave school at this point; only 52 percent of children who successfully complete the last grade of primary school attend the first year of secondary school the following year. The picture regarding secondary education in Sierra Leone is much bleaker. Only 19 percent of children of secondary school age (12-17 years) attend secondary school while 46 percent attend primary school when they should be attending secondary school. The ratio of girls to boys attending primary school at the national level is 1.01. However, the indicator drops to 0.78 for secondary education.

Adult Literacy

The MICS3 found that 25 percent of women in Sierra Leone aged 15-24 are literate—well below the regional norm. A woman's literacy status is positively associated with urban residence, higher levels of education, and higher household wealth.

Child Protection

Birth Registration

Just under half of the births of children under five years of age in Sierra Leone have been registered, a level identical to that found in the MICS2 survey in 2000. There are no significant variations in birth registration across gender or age categories.

Child Labour

The MICS3 survey found that 48 percent of children aged 5-14 years in Sierra Leone perform child labour. Forty-one percent work for a family business while only two percent work on household chores for more than 28 hours per week. Some child protection specialists in Sierra Leone question the accuracy of the latter estimate. The percentage of children who perform child labour is equal among students (45 percent) and all children (48 percent). Sixty-eight percent of all children aged 5-14 attend school while 64 percent of children aged 5-14 who work also attend school, indicating that child labourers and non-labourers have equal access to school-based education.

Child Discipline

MICS3 findings clearly illustrate the punitive nature of child discipline techniques that are practiced in Sierra Leone. Ninety-two percent of children aged 2-14 years were subjected to at least one form of psychological or physical punishment by a household member during the month preceding the survey. Twenty-two percent of children experienced severe physical punishment while 76 percent received minor physical punishment. Fifty-six percent of surveyed caretakers stated that children should be punished physically.

Early Marriage and Polygyny

Early marriage, polygyny, and large spousal age differences are common in Sierra Leone. Twenty-seven percent of women aged 15-49 marry before fifteen years of age. The level of this indicator is lowest (15 percent) among women currently aged 15-19 years, suggesting that this practice is decreasing. Sixty-two percent of surveyed women aged 15-49 married before eighteen years of age. Forty-three percent of women who are currently married or in union report that their husband/partner has another wife. Among women aged 15-19 who are married or in union, 58 percent are with a man who is senior to them by ten or more years.

Membership in Secret Societies

The practice of female genital cutting (FGC) is deeply entrenched in societal norms in Sierra Leone, where it is conducted as an initiation rite by the secret Bondo Society. Given the secrecy that surrounds FGC, it was decided to use "membership in the Bondo Society" as a proxy for "have undergone FGC" in the MICS3 survey. Ninety-four percent of women aged 15-49 stated that they belong to the Bondo Society, which is interpreted to mean that the prevalence of FGC among this population is approximately 94 percent. Thirty-four percent of mothers reported that their daughters had been initiated into the Bondo Society.

Domestic Violence

Women aged 15-49 years were asked whether husbands are justified in hitting or beating their wives or partners under five different scenarios. Women who agree that their partners are justified in beating them tend to themselves be victims of domestic violence. For each of the five situations that were described, over half of the respondents said that beating is justified; the percent who felt so ranged from 54 percent for "if she burns the food" to 74

percent for "if she neglects the children." A full 85 percent of respondents felt that beating was justified under one or more of the scenarios.

Child Disability

A series of questions was asked to assess the prevalence of nine disabilities including sight impairment, deafness, and difficulties with speech in children aged two to nine years. Caretakers reported that 23 percent of their children suffer from at least one of the nine disabilities. This rate is higher than expected and should be confirmed through further research.

HIV/AIDS, Sexual Behaviour, and Orphaned and Vulnerable Children

Knowledge of HIV Transmission and Utilization of HIV Testing Services

Only 17 percent of young women aged 15-24 years have "comprehensive correct knowledge of HIV": that is, they correctly identify two ways of avoiding HIV infection and reject three common misconceptions about HIV transmission. Two-thirds of women aged 15-49 years have heard of AIDS. Sixty-three percent of respondents know that HIV can be transmitted from mother to child while 54 percent know all three ways that transmission can occur. Ninety-five percent of respondents agreed with at least one of four discriminatory statements regarding people living with HIV/AIDS (PLHA), a sign of high levels of discrimination towards PLHA.

Only 16 percent of women could identify a HIV test site while six percent reported that they have been tested for HIV. Among respondents who received ANC from a trained provider during their pregnancy, 51 percent were provided with information about HIV prevention during the ANC visit. Seven percent of these same respondents were tested for HIV during an ANC visit while five percent received the results of their HIV test at an ANC visit.

Sexual Behaviour Related to HIV Transmission

Young women in Sierra Leone are at substantial risk of contracting HIV. Two in five sexually active women aged 15-24 report having engaged in high-risk sex during the year prior to the survey; among those women, only one in five reports that a condom was used during sex with the high-risk partner. Twenty-five percent of girls aged 15-19 first had sex before 15 years of age. Thirty-nine percent of women aged 15-24 stated that they had sex in the 12 months preceding the survey with a man who was ten or more years their senior, a practice that increases their risk of contracting HIV.

Orphans and Vulnerable Children

The MICS3 survey found that 11 percent of children aged 0-17 years are orphans (i.e., one or both parents dead) while 20 percent do not live with a biological parent. Twenty-seven percent of children aged 0-17 in Sierra Leone are classified as orphans or vulnerable children (OVC)[1]. Only one percent of households that provide care to OVC report receiving support from the government or outside agencies for their efforts. While the survey found that there is little or no difference in the nutritional status between OVC and non-OVC, girl OVC were found to be more likely to be sexually exploited than girls who are not OVC. Double-orphans—that is, children aged 10-14 years who have lost both parents—were found to be

[1] OVC is defined as children under age 18 who are either (i) orphans; (ii) have a chronically ill parent; (iii) live in a household where an adult aged 18-59 years has died in the past year; or, (iv) live in a household where an adult aged 18-59 years has been chronically ill in the past year.

disadvantaged compared to children who are not orphans with respect to their access to educational opportunities.

I. Introduction

Background

This report is based on the Sierra Leone Multiple Indicator Cluster Survey that was conducted in 2005 by Statistics Sierra Leone with financial and technical support from UNICEF Sierra Leone. The survey provides valuable information on the situation of children and women in Sierra Leone and was based, in large part, on the need to monitor progress towards goals and targets emanating from recent international agreements: the Millennium Declaration that was adopted by all 191 United Nations Member States in September 2000 and the Plan of Action of A World Fit For Children that was adopted by 189 Member States at the United Nations Special Session on Children in May 2002. Both of these commitments build upon promises made by the international community at the 1990 World Summit for Children.

In signing these international agreements, governments committed themselves to realize the rights of children enshrined in them, improve conditions for children and to monitor progress towards these ends. UNICEF was assigned a supporting role in this task (see box below).

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 monitor 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 sub-national 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."

The Government of Sierra Leone (GoSL), in collaboration with its development partners, is implementing several policies and strategies aimed at achieving national and international goals. The GoSL has recently developed its Poverty Reduction Strategy, the main goals of which are in line with the Millennium Development Goals (MDGs). MICS3 has been identified as a major effort to generate valid and reliable data and information that will be used to monitor key indicators that are being tracked by the GoSL to ensure the realization of major international commitments that include World Fit for Children (WFFC) goals, the Millennium Development Goals (MDGs), the UNGASS on HIV/AIDS, and the Abuja targets for malaria. Roughly 20 of the 48 MDG indicators have been estimated in the MICS3, offering the largest single source of data for MDG monitoring. The MICS3 effort will also contribute to the development of a monitoring and evaluation system for Sierra Leone's Poverty Reduction Strategy and the United Nations Development Framework (UNDAF).

This final report presents indicator estimates for the different topics covered in the survey.

Survey Objectives

The 2005 Sierra Leone Multiple Indicator Cluster Survey has the following primary objectives:

1. To provide up-to-date information for assessing the situation of children and women in Sierra Leone;

2. To furnish data needed for monitoring progress toward goals established by the Millennium Development Goals and the goals of *A World Fit For Children* (WFFC) as a basis for future action;

3. To contribute to the improvement of data and monitoring systems in Sierra Leone and to strengthen technical expertise in the design and implementation of these systems and analysis of the information they generate.

II. Sample and Survey Methodology

Sample Design

The sample for the 2005 Sierra Leone MICS3 Survey was designed to provide estimates of MICS3 indicators at the national level, for urban and rural areas, and for the four provinces. —Northern, Southern, Eastern and Western Areas. The sample was selected in two stages using a stratified cluster sampling methodology. In the first stage, 320 enumeration areas (EAs) were selected, using probability proportional to size methodology, through systematic sampling from a sample frame of all EAs in Sierra Leone that was ordered by province and, within provinces, by district. Using the comprehensive EA-level household lists that had been developed in the 2004 Sierra Leone national census, a random sample of 25 households was drawn within each of the 320 selected EAs to yield an overall sample of 8,000 households. A household was defined as "a group of people who all eat from the same pot". The resulting sample was theoretically self-weighting, although sample weights have been employed to adjust for minor variations among provinces and rural/urban EAs with regards to the proportion of households, women, and children for whom the MICS3 interview was completed among sampled households found to be occupied and the eligible women and children who lived in them.

Questionnaires

Three questionnaires were used in the survey: the Household Questionnaire, the Questionnaire for Individual Women, and the Questionnaire for Children under Five. The questionnaires were based on the MICS3 model questionnaires.

Within each interviewed household, the Household Questionnaire was used to collect information about all *de jure* household members, the household and the dwelling. The respondent for this questionnaire was the head-of-household or another adult who lived in the household. This questionnaire included the following modules:

- Household listing
- Education
- Water and sanitation
- Household characteristics
- Insecticide treated bednets
- Support to children orphaned and made vulnerable by HIV/AIDS
- Child labour
- Child discipline
- Child disability
- Maternal mortality
- Salt iodization

The Questionnaire for Individual Women was administered in each household to all women aged 15-49 years living in the households. This questionnaire included the following modules:

- Child mortality

- Tetanus toxoid
- Maternal and newborn health
- Marriage/Union
- Contraception
- Female secret society (i.e., genital cutting)
- Domestic violence
- Sexual behaviour
- HIV/AIDS

The Questionnaire for Children Under Five was administered to mothers or caretakers of children under 5 years of age[2] living in surveyed households. Normally, the questionnaire was 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. This questionnaire included the following modules:

- Birth registration and early learning
- Child development
- Vitamin A
- Breastfeeding
- Care of illness
- Malaria
- Immunization
- Anthropometry

English is the only written language in Sierra Leone; for this reason, questionnaires were written in English and verbally translated by enumerators into the language preferred by the respondent (generally Krio, Timne, Mende or Limba), using standardized, pre-tested key words. The questionnaires were pre-tested in the Western Area in September 2005. Based on the results of the pre-test, modifications were made to the wording of the questions, the response categories, and the key words. The Sierra Leone MICS questionnaires can be found in Appendix F.

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

Fourteen supervisors and sixty-one enumerators were trained for ten days in early October 2005. Training included lectures on interviewing techniques and the contents of the questionnaires and mock interviews between trainees to gain practice in asking questions. During the training period, trainees spent three days conducting practice interviews in Freetown and rural parts of the Western Area.

[2] The terms "children under 5", "children age 0-4 years", and "children aged 0-59 months" are used interchangeably in this report.

The data were collected by fourteen teams, each composed of one or two female enumerators, two or three male enumerators, one driver and a supervisor. The fieldwork began in October 2005 and concluded in November 2005.

Data Processing

Completed questionnaires were checked in the field by supervisors and then transported to Freetown, where data entry personnel checked each questionnaire to make sure that it had been clearly and correctly completed. Data were entered on 30 microcomputers by 30 data entry operators and two data entry supervisors using CSPro software. In order to ensure quality control, all questionnaires were double-entered and internal consistency checks were performed. Procedures and standard programs developed using CSPro software under the global MICS3 project and adapted to the Sierra Leone questionnaire were used throughout. Data entry and processing began in November 2005 and were completed in April 2006. Data were analysed using the Statistical Package for Social Sciences (SPSS) software program, Version 14, and the model syntax and tabulation plans developed for by UNICEF for this purpose.

III. Sample Coverage and the Characteristics of Households and Respondents

Sample Coverage

Of the 8,000 households selected for the sample, only 7,125 were found to be occupied. This surprisingly low rate of occupation is due to the following reasons:

1. The sample frame of households that was used to randomly select 25 households in each selected EA contained many households that consisted of people who had returned to their original homes at the time of the census only for the purpose of being registered there (for political reasons). Once the census was completed, they moved back to their "real homes" elsewhere. Sub-optimal performance of the task of verifying the presence of all households sampled for the MICS3 survey compounded this problem and led to many houses being classified as "not found / destroyed" at the time of data collection.
2. Names and/or addresses on the lists of sampled households were at times not adequately descriptive to permit identification of the households.
3. Some households had, after the census, dissipated following the death of the head of household.
4. The diamond mining clusters in the Eastern province had household heads who were miners and had moved from their places of registration in search of new areas where diamonds could be found.
5. Sample frames in EAs in border villages along the Sierra Leone/Liberia border included households that had returned to Liberia for registration in their national elections.
6. During the verification of households, some communities did not provide accurate information on existing households, thinking that the households may benefit from possible humanitarian assistance after the MICS3 exercise. During data collection, such households did not meet the standard definition of households.

Of the 7,125 occupied households, 7,078 were successfully interviewed for a household response rate of 99.3 per cent. In the interviewed households, 9,257 eligible women (aged 15-49) were identified. Of these, 7,654 were successfully interviewed, yielding a response rate of 82.7 per cent. The response rate for the Questionnaire for Children Under Five was 88.9 per cent; mothers/caretakers of 5,246 children under five were successfully interviewed, from among 5,904 children under five who were identified in the interviewed households. Overall response rates of 82.1 percent and 88.3 percent are calculated for the women's and under-5's interviews, respectively (Table HH.1).

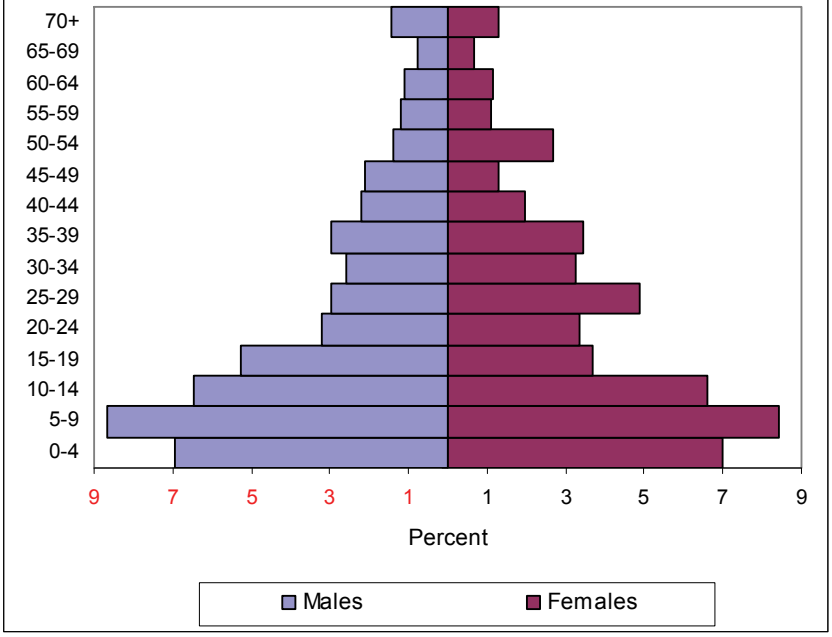
These rates, however, vary widely by province. Response rates for women's interviews range from 70 percent in the East to 97 percent in the Western Area. Similarly, rates for children's interviews vary from 78 percent in the East to 99.6 percent in the Western Area. Response rates in the Western Area were higher than in other provinces due to increased accessibility to respondents. Call-backs were easy to conduct there as most of the households were in Freetown and enumerators were able to make as many visits as necessary—even at night—without hampering their travel schedule. Difficulty in making follow-up visits in other provinces was the primary reason for lower response rates. Response rates were especially low in Kailahun and Kono districts in the Eastern province. MICS3 supervisors

reported that many mothers and caretakers, including their children, were out working in the fields during the day and were difficult to access for interviews.

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 7,078 households that were successfully interviewed in the survey, 42,719 household members were listed. Of these, 21,034 were males, and 21,685 were females. These data also indicate that the survey estimated the average household size at 6.0 individuals per household, the same estimate that was calculated during the 2004 census of Sierra Leone.

Figure HH.1: Age and sex distribution of household population, Sierra Leone, 2005



The table below compares the age and sex distribution of the MICS3 survey population with that from the 2004 Sierra Leone Census. Similarities in the population age distribution between the two surveys would suggest that the MICS3 survey represents a valid sample of the Sierra Leonean population. The MICS3 survey population has a slightly higher percentage of 0-14 year olds and a somewhat lower percentage of 15-64 year olds than the 2004 census.

Table 1: Population age distribution (percent) of MICS3 survey and 2004 Sierra Leone census

	MICS3			2004 Census		
	Male	Female	Total	Male	Female	Total
0-14	44.4	43.1	43.7	43.2	40.3	41.8
15-64	50.3	52.3	51.3	52.5	55.2	54.0
65+	4.5	3.9	4.2	4.3	4.5	4.2
Missing / don't know	0.8	0.7	0.7	-	-	-
Total	**100.0**	**100.0**	**99.9**	**100.0**	**100.0**	**100.0**

Children aged 0-17 years compose 49.3[3] percent of the MICS3 survey population, indicating the young nature of the population in Sierra Leone.

Table HH.3 provides basic background information on the households. Within households, the sex of the household head, province, urban/rural status, number of household members, and religion[4] of the household head are shown in the table. These background characteristics are also used in subsequent tables in this report; the data in the table are also intended to show the numbers of observations by major categories of analysis in the report. The head of household is male in 77 percent of surveyed households. The Western Area and Eastern, Northern, and Southern Provinces comprise 16, 22, 36, and 25 percent of the sampled households, respectively. 71 percent of surveyed households are located in rural locations while 29 percent are in urban areas. The religion of the head of household is Muslim in 77 percent of households and Christian in 23 percent of households.

The weighted and unweighted numbers of households are equal, since sample weights were normalized (See Appendix A). The table also shows that 90 percent of surveyed households had at least one child under 18, 57 percent had at least one child under 5, and at least one eligible woman age 15-49 was found in 85 percent of surveyed households.

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 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 province, urban-rural areas, age, marital status, motherhood status, education[5], wealth index quintiles[6], and

[3] The 2004 Sierra Leone Census found that 44.9 percent of the total population was aged 0-17 years.
[4] This was determined by asking the respondent to the Household Questionnaire "What is the religion of the head of this household?"
[5] Unless otherwise stated, "education" refers to educational level attended by the respondent throughout this report when it is used as a background variable.
[6] 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 or variables used in these calculations were as follows: [*number of persons per sleeping room; type of floor; type of roof; type of wall; type of cooking fuel; presence of household assets including*

religion of household head. 80 percent of sampled women are married or in union and 83 percent have given birth to at least one child. 74 percent of respondents are uneducated while 11 percent have completed primary education and 15 percent have completed secondary education.

Some background characteristics of children under 5 are presented in Table HH.5. These include distribution of children by several attributes: sex, province and area of residence, age in months, mother's or caretaker's education, wealth, and religion of household head. 50.3 percent of the children represented in the MICS3 survey are female. The percentage of children aged 0, 1, 2, 3, and 4 years in the sample is 19, 21, 20, 23, and 17, respectively.

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electricity supply, radio, TV, mobile phone, phone, refrigerator, watch, bicycle, motorcycle, cart, car, and boat; source of drinking water; and, type of sanitary facility]). 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

Key indicators	Estimates (deaths / 1,000 live births)		West-Central Africa[7]
	2005[8] (MICS3)	2000 (MICS2)	2004
Infant mortality rate	158	170	109
Under-five mortality rate	267	286	191

One of the overarching aims 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 in under-five mortality by two-thirds between 1990 and 2015. Monitoring progress towards this goal is important yet difficult. Measuring childhood mortality may seem easy, but attempts using direct questions, such as "Has anyone in this household died in the last year?" give inaccurate results. Using direct measures of child mortality from birth histories is time-consuming, expensive, and requires significant attention to training and supervision. Alternatively, indirect methods that have been developed to measure child mortality produce robust estimates that are comparable with estimates obtained from other sources. Indirect methods minimize the pitfalls of memory lapses, inexact or misinterpreted definitions, and poor interviewing technique.

Millennium Development Goal

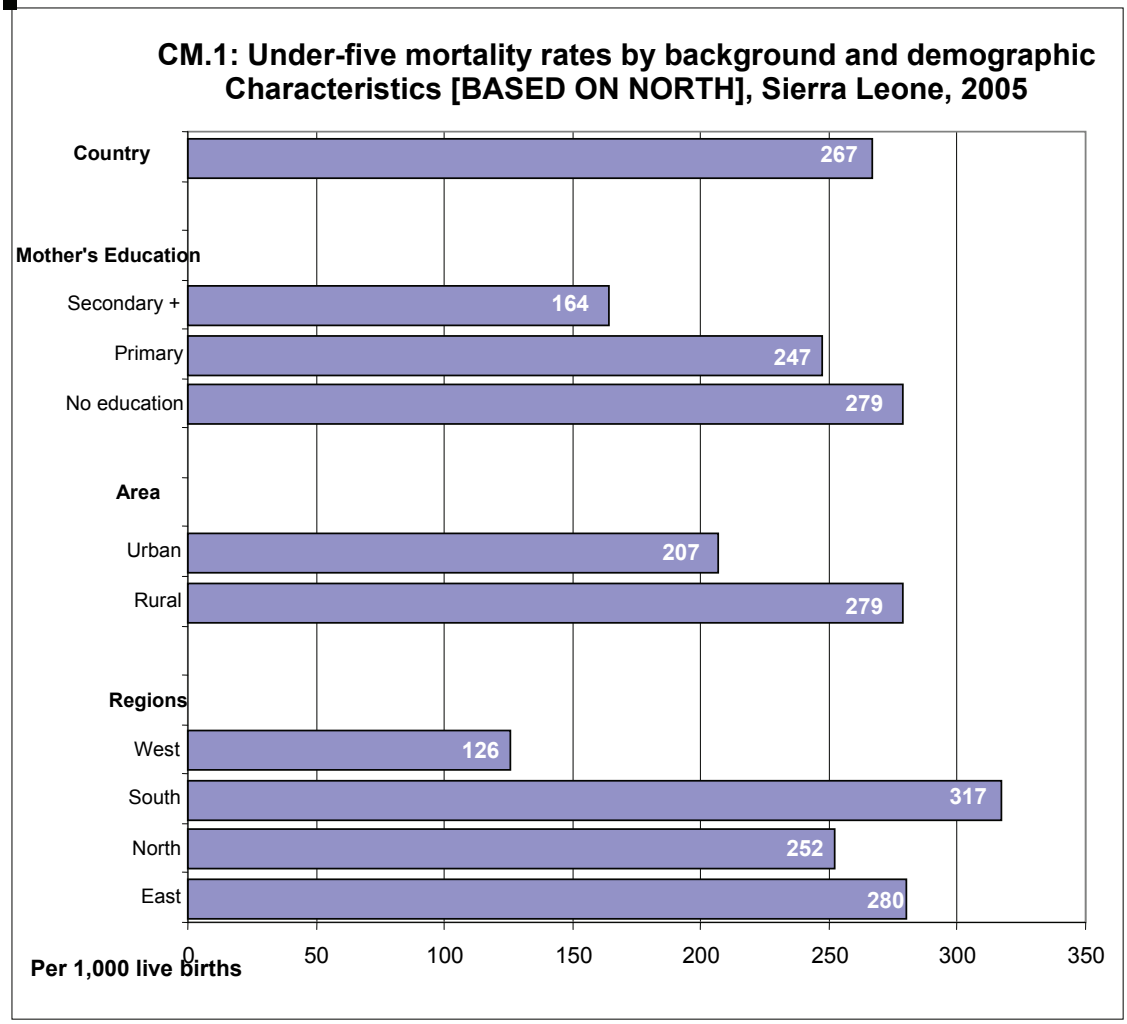
Indicator
Under-five mortality rate

Goal
100 deaths per 1,000 live births by 2015

The *infant mortality rate* (IMR) is the probability of dying before the first birthday. The *under-five mortality rate* (UFMR) is the probability of dying before the fifth birthday. In MICS3, the IMR and UFMR are calculated based on an indirect estimation technique: the so-called Brass method. The data used in the estimation are: the mean number of children ever born, and the proportion of those children who are dead, for five-year age groups of women from age 15 to 49. The technique converts these data into probabilities of dying by taking account of both the mortality risks to which children are exposed and their length of exposure to the risk of dying. Based on previous information on mortality in Sierra Leone, the North model life table was selected as most appropriate.

Table CM.1 provides estimates of child mortality by various background characteristics, while Table CM.2 provides the basic data used in the calculation of the national mortality rate estimates. The IMR in Sierra Leone is estimated to be 158 per thousand while the U5MR is estimated to be 267 per thousand. The IMR and UFMR are approximately 20 and 14 percent higher, respectively, for males than females. Infant and under-5 mortality rates are lowest in the Western Area and highest in the East and South provinces. Mortality rates are lower among the richest 40 percent of the population, compared to the poorest 60 percent. Mortality rates are similarly low for children whose mothers have achieved a secondary education level. Differentials in under-5 mortality rates by background characteristics are displayed in Figure CM.1.

[7] Source: The State of the World's Children 2006. UNICEF, UNICEF House, 3 UN Plaza, New York, NY 10017, USA. (SOWCR 2006)
[8] Note that the method used to produce estimates of UFMR and IMR actually produces a retrospective estimate that pertains to 2002 (for MICS3) and 1997 (for MICS2).



Discussion: Child Mortality

The UFMR in Sierra Leone is among the highest in the world and is far higher than the regional norm of 191 deaths per 1,000 live births. The comparison of the 2005 (UFMR = 267) and 2000 (UFMR = 286) estimates of the UFMR should be made with care, because the methodology that is used to calculate the UFMR generates retrospective estimates. For example, the UFMR estimate generated during the 2000 MICS2 is actually an estimate of the UFMR in Sierra Leone during 1997. Similarly, the 2005 MICS3 has generated an estimate of the UFMR in 2002—the year when the conflict ended. It can thus be concluded that child mortality in Sierra Leone did not reduce substantially between 1997 and 2002—although it perhaps should not have been expected to, given the conflict that was raging in the country during that time. The pertinent Sierra Leone MDG is to reduce the UFMR to 100 by 2015. While it is true that various interventions that are designed to support the achievement of this MDG under the Sierra Leone Poverty Reduction Strategy Paper (PRSP) are just now being put into place, the MICS3 result suggests that it will be very difficult for this MDG to be achieved. Efforts must be redoubled to fully and rapidly implement policies that are designed to integrate the country's strategic approach to improving child survival, including the development and implementation of an integrated child survival strategy and scaling up the Community-Based Integrated Management of Child Illness initiative (CBIMCI) in all districts of the country.

V. Nutrition

Nutritional Status

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1996-2004
Underweight prevalence (2 SD ≤ / 3 SD ≤)	30 / 8	27 / 9	28 / 9
Stunting prevalence (2 SD ≤ / 3 SD ≤)	40 / 20	34 / 16	35 / --
Wasting prevalence (2 SD ≤ / 3 SD ≤)	9 / 2	10 / 2	10 / --

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

Malnutrition is associated with more than half of all child deaths worldwide. Undernourished children are more likely to die from common childhood ailments. Undernourished children who survive these illnesses often suffer from chronic disease and faltering growth. Three-quarters of the children who die from causes related to malnutrition are only mildly or moderately malnourished—and thus do not show outward signs of their vulnerability. A key Millennium Development Goal is to reduce the percentage of people who suffer from hunger by half 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 supports the goal of reducing child mortality.

Millennium Development Goal

Indicator
Percentage of children under five years that are underweight

Goal
12 percent by 2015

Source: SL PRSP 2004

There is a reference distribution of height and weight for children under age five in a well-nourished population. The extent of under-nourishment in a given population of children can be estimated by comparing their nutritional status to that of a reference population. The reference population used in the MICS3 analysis 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—*underweight*, *stunting*, and *wasting*—is expressed in standard deviation units (z-scores) from the median of this 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 to be *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.

During the MICS3 survey, 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.

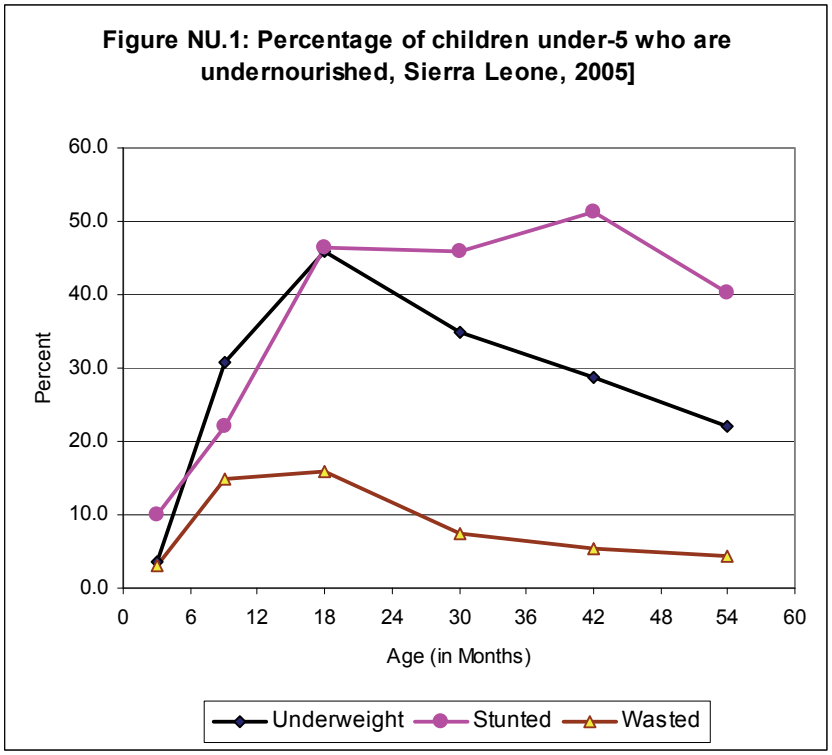
Table NU.1 shows percentages of children classified into each of these categories, based on the anthropometric measurements that were taken during fieldwork. Additionally, the table includes the percentage of children who are *overweight*, which takes into account those children whose weight for height is above 2 standard deviations from the median of the reference population.

The results shown in Table NU.1 do not include the 23 percent of children who were excluded from the analysis. These children were excluded for reasons that include "not measured" (4 percent), "missing weight or height" (0.2 percent), "missing month or year of birth" (12 percent), and "other flagged cases[9]" (6 percent). The percentage of cases that has been excluded is quite high and may affect the generalizability of the anthropometric results.

About three in ten children (30 percent) under five years of age in Sierra Leone are *moderately underweight* and eight percent are classified as *severely underweight* (Table NU.1). Forty percent of children are *stunted* or too short for their age and nine percent are *wasted* or too thin for their height.

The three indicators of malnutrition are similarly high in the Northern, Eastern and Southern provinces and are markedly lower in the Western Area. Those children whose mothers have secondary or higher education are less likely to be malnourished than children of mothers with no or primary-only education. Boys appear to be slightly more likely to be underweight, stunted, and wasted than girls. The age pattern shows that a higher percentage of children aged 12-23 months are undernourished according to all three indices in comparison to children who are younger and older[10] (Figure NU.1). This pattern is expected and is related to the age at which many children cease to be breastfed and begin to be more broadly exposed to contamination in water, food, and environment.

[9] For example, those cases for which the measurements are outside of a plausible range.
[10] The exception to this pattern is an unusually high level of stunting among children aged 36-47 months.



Breastfeeding

Key indicators	Estimates (percent)		West-Central Africa 1996-2004
	2005 (MICS3)	2000 (MICS2)	
Timely initiation of breastfeeding (within 1 hour of birth)	33	--	--
Exclusive breastfeeding (0-5 months)	8	2	20
Timely complementary feeding (6-9 months)	52	52	65
Adequate frequency of complementary feeding (6-11 months)	37	--	--
Adequately fed infants (0-11 months)	23	--	--
Continued breastfeeding (12-15 months / 20-23 months)	87 / 57	85 / 51	-- / 48

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 do not practice exclusive breastfeeding for the first few months and introduce other liquids besides breastmilk (e.g., water); others 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 safe drinking 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 up to 2 years of age and beyond.

WHO and UNICEF make the following feeding recommendations:

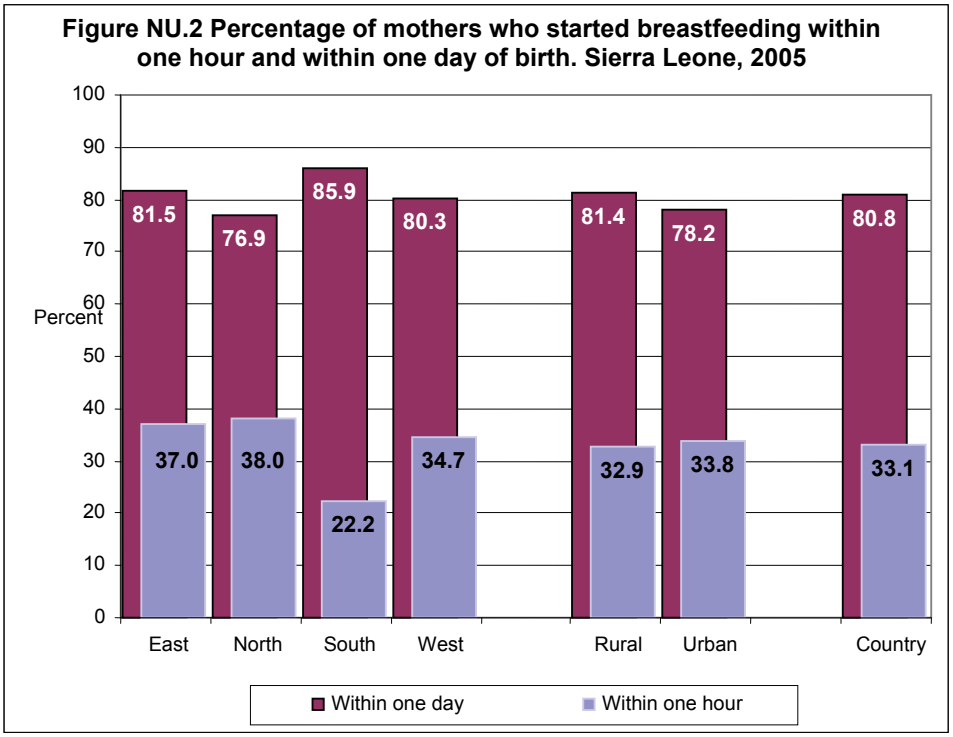
- Early initiation of breastfeeding (within one hour after birth).
- Exclusive breastfeeding for first six months.
- Continued breastfeeding for two years or more.
- Safe, appropriate and adequate complementary foods beginning at 6 months.
- Frequency of complementary feeding: 2 times per day for infants aged 6-8 months; 3 times per day for infants aged 9-11 months.

The indicators of recommended child feeding practices are as follows:

- Exclusive breastfeeding (< 6 months & < 4 months)
- Timely complementary feeding (6-9 months)
- Continued breastfeeding (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 and Figure NU.2 show that 33 percent of women started breastfeeding their infants within one hour of birth. This figure is relatively consistent among sub-populations of women as defined by background characteristics, although respondents from the South (22 percent) and those from the higher wealth quintiles report lower practice of this behaviour than their counterparts. Eighty-one percent of women started breastfeeding their infants within one day of birth. This indicator also shows little variation among respondents when analyzed by their background characteristics.

Figure NU.2 Percentage of mothers who started breastfeeding within one hour and within one day of birth. Sierra Leone, 2005



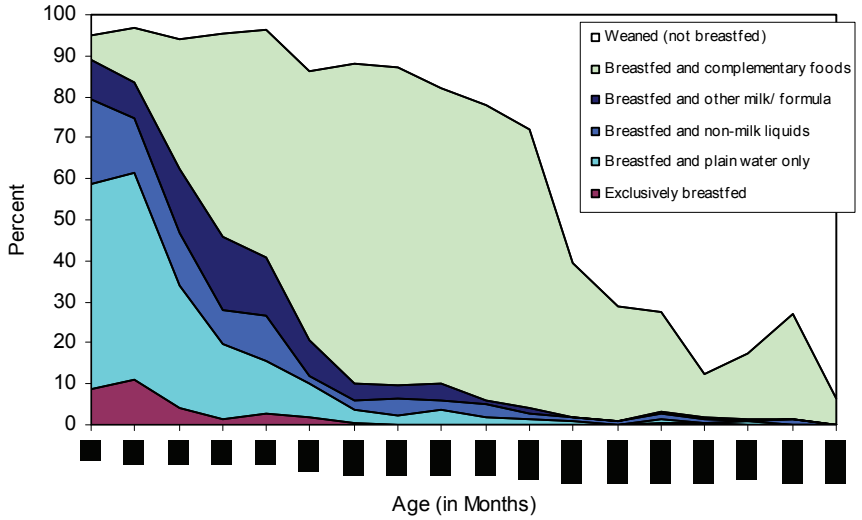
In Table NU.3, the assessment of breastfeeding status is based on the reports of mothers/caretakers of children's consumption of food and fluids in the 24 hours prior to the interview. *Exclusively breastfed* refers to infants who received only breast milk (and vitamins,

mineral supplements, or medicine) during this time period. The table shows rates of 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 11 and 8 percent of children aged less than four and six months, respectively, are exclusively breastfed—levels that should be considered unacceptably low. At age 6-9 months, 52 percent of children are receiving breast milk and solid or semi-solid foods. By age 12-15 months, 88 percent of children are still being breastfed and by age 20-23 months, 57 percent are still breastfed. More females than males are exclusively breastfed before six months of age while more males than females continue breast feeding beyond 20 months of age. Among provinces, the North stands out as generally having the highest level of breastfeeding indicators, while the level of complementary feeding of children aged 6-9 months is highest in the South.

Figure NU.3 shows the detailed pattern of breastfeeding by the child's age in months. Even at very early ages, the majority of children are not exclusively breastfed and are receiving liquids or foods other than breast milk. By the end of the sixth month, the percentage of children who are exclusively breastfed is below five percent. Only about 40 percent of children receive breast milk at 2 years of age.

Figure NU.3 Infant feeding patterns by age: Percent distribution of children aged under 3 years by feeding pattern by age group, Sierra Leone, 2005



The adequacy of infant feeding in children less than 12 months is described 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 represents adequate feeding. Infants aged 6-8 months are considered to be adequately fed if they receive breastmilk and complementary

food at least two times per day, while infants aged 9-11 months are considered to be adequately fed if they receive breastmilk and complementary food at least three times a day.

The low level of adequate feeding among infants aged 0-5 months has been described above in the discussion of exclusive breastfeeding. Among infants aged 6-8 and 9-11 months, only 41 and 31 percent, respectively, are adequately fed according to the definitions above. Levels of adequate feeding for infants aged 6-8 months are lowest in the North (30 percent) and in the Western Area (28 percent) and highest among children of poorer, uneducated mothers. The level of adequate feeding of infants aged 9-11 months is less than levels for infants aged 6-8 months in all provinces except for the Western Area, where it is higher. Higher levels of adequate feeding for infants aged 9-11 months are associated with urban residence, higher levels of maternal education, and very high (as well as very low) wealth status. Overall, 37 percent of children aged 6-11 months are adequately fed. Adequate feeding among all infants (aged 0-11 months) is only 23 percent. There is relatively little variation in this latter indicator among infants with different background characteristics.

Discussion: Nutritional status and breastfeeding

The prevalence of *underweight*, *stunting* and *wasting* among children under five years of age in Sierra Leone in 2005 is slightly higher than prevalence levels in Sierra Leone in 2000 and West and Central Africa (WCA) norms. This decline in nutritional status may be due to a variety of factors that include the limited awareness of mothers about proper child feeding and nutrition; lack of food and lack of food diversification linked to poverty; food insecurity; cultural misconceptions about breastfeeding; and, cultural practices and values relating to distribution of food within the family at household level. The practice of exclusive breastfeeding in Sierra Leone has improved from the meagre level of 2 percent in 2000 but remains extremely low at 8 percent, comparing unfavourably with the WCA norm of 20 percent. MICS3 estimates of complementary feeding and continued breastfeeding rates remain virtually unchanged from 2000 and are similar to WCA norms. Indicators that measure adequate feeding and timely initiation of breastfeeding fall well short of desired levels.

There remains ample room for improvement of infant and young child feeding practices and promotion of growth monitoring and promotion in line with the life cycle of young children in Sierra Leone. Policy makers should focus on creating a conducive environment for national food production, income generation, and implementation of the food security component of the PRSP. Programmatic approaches that integrate nutritional interventions into other child survival strategies are called for. The Family Package—which includes interventions such as insecticide treated bednets, exclusive breastfeeding, immunizations, complementary feeding, nutritional supplements, etc.—should be promoted and introduced at the household level, especially through outreach services.

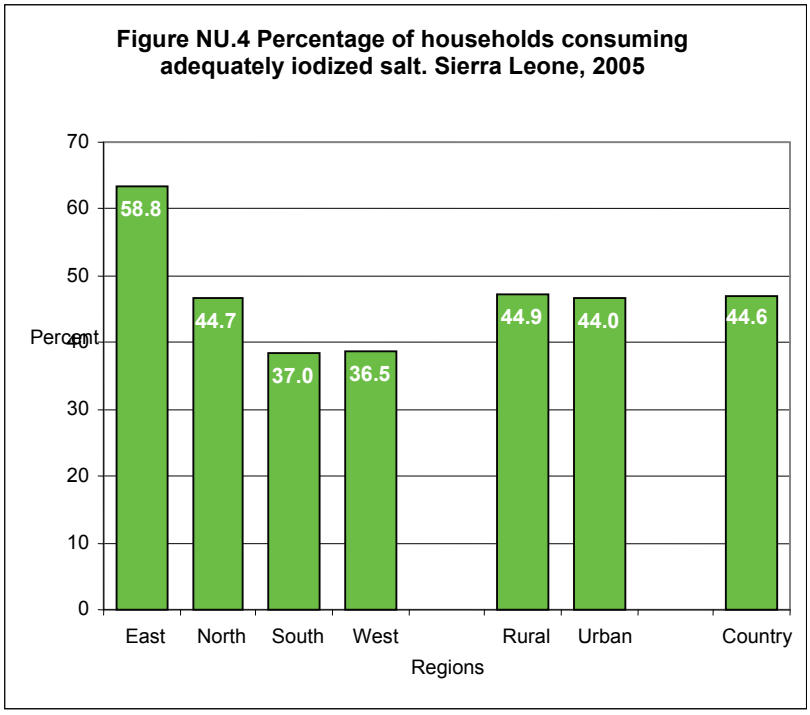
Salt Iodization

Key indicators	Estimates (percent)		West-Central Africa 1998-2004
	2005 (MICS3)	2000 (MICS2)	
Households that consume adequately iodized salt (≥ 15 parts per million)	45	23	68

Iodine Deficiency Disorders (IDD) are 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 among 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 year in which the MICS3 survey was conducted). The primary international indicator is the percentage of households consuming adequately iodized salt (≥15 parts per million).

GoSL policy states that all salts imported into the country should be iodized. However, local production of salt in costal communities continues and this salt is sold in the market. Locally produced salt is not iodized due to the lack of facilities to iodize salt in Sierra Leone.

In about 94 percent of surveyed households, salt used for cooking was tested for iodine content by using salt test kits and testing for the presence of potassium iodate. Table NU.5 shows that in a sizable percentage of households (5 percent), there was no salt available. In 45 percent of households, salt was found to contain 15 parts per million (ppm) or more of iodine. Use of iodized salt was lowest in the Western Area and Southern region (37 percent) and highest in the East (59 percent) (Figure NU.4). The use of adequately iodized salt in urban and rural areas was similar. Similarly, the use of iodized salt was essentially equivalent across the five wealth quintiles.



Discussion: Salt iodization

The goal of Universal Salt Iodization (USI) initiative is to achieve 90 percent iodization by 2005 in all countries. The Sierra Leone MICS3 result reported here is only half of that and must be considered to be disappointing. It is hopeful to see that there has been notable improvement in this indicator (23 to 45 percent) during the five years between MICS2 and MICS3. However, this increase is minor in light of the USI goal.

It appears that the USI goal can best be achieved through an integrated approach. Policy makers should build the promotion of iodized salts into the Family Package. In this way, the promotion and monitoring of iodized salt consumption can be integrated into child survival activities at community-level health facilities and outreach services. There should be also movement in the direction of ensuring that locally produced salt is iodized and that families are empowered to purchase imported iodized salt (e.g., by packaging iodized salt in small quantities that are affordable to families).

Vitamin A Supplements

Key indicators	Estimate (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	2003
Children 6-59 months of age who received vitamin A supplement in last six months	49	58	60
Women who received high dose Vitamin A supplement within 8 weeks of delivery	55	33	--

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. 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 intake is further compromised by (i) increased requirements for the vitamin as children grow or during periods of illness and (ii) increased losses of the vitamin when children suffer from common infections. As a result, vitamin A deficiency is highly 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 vitamin A 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 (VAS) every four to six months that targets all children between the ages of six to 59 months who live in affected areas. The provision of two high-dose vitamin A capsules a year to young children 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 VAS programs, the key indicator of interest is defined as the percentage of children 6-59 months of age who received at least one high dose vitamin A supplement in the last six months.

Based on UNICEF/WHO guidelines, the Sierra Leone Ministry of Health (MoH) recommends that children aged 6-11 months be given one high dose Vitamin A capsules (100,000 IU) and children aged 12-59 months be given a vitamin A capsule (200,000 IU) every 6 months. In Sierra Leone, Vitamin A capsules are linked to immunization services (thus recognised as EPI+). VAS is also a component of the measles immunization protocol when children are brought for measles vaccination at 9 months of age and thereafter. The MoH also recommends that postpartum mothers take a Vitamin A supplement as soon as possible during the six weeks following delivery due to increased Vitamin A requirements during pregnancy and lactation.

Within the six months prior to the Sierra Leone MICS3, 49 percent of children aged 6-59 months received a high dose Vitamin A supplement (Table NU.6). Approximately 18 percent did not receive the supplement in the last 6 months but did receive one prior to that time. Approximately 15 percent of children received a Vitamin A supplement at some time in the past but their mother/caretaker was unable to specify when. VAS coverage among the provinces of Sierra Leone ranges from 42 percent in the South province to 55 percent in the East.

The age pattern of VAS shows that supplementation in the last six months is highest among children aged 6-11 months at 58 percent and then declines steadily with age to its lowest level of 42 percent among children aged 48-59 months.

The mother's level of education does not appear to be associated with the likelihood of VAS. The degree of variation of VAS rates among the wealth quintiles is modest although rates are slightly higher in the wealthiest three quintiles compared to the lower two.

Approximately 55 percent of mothers with a birth in the previous two years before the MICS3 survey received a Vitamin A supplement within eight weeks following the birth (Table NU.7). This percentage is highest in the Western Area (70 percent) and lowest in the South (51 percent). Vitamin A coverage is higher among mothers living in urban areas (63 percent) as compared to rural areas (52 percent) and is higher among women with secondary or higher education (70 percent) versus women with primary education or no education (52 and 53 percent, respectively). This indicator is also clearly associated with the wealth level of the family as it is lowest (49 percent) among mothers from the poorest wealth quintile and increases steadily to its highest level (69 percent) among mothers from the wealthiest quintile.

Discussion: Vitamin A supplements

VAS coverage among children in Sierra Leone needs to be improved. The coverage rate has dropped almost ten percent in the past five years and is below regional norms. Part of the reason for this decline is probably due to the recent inclusion of VAS in the routine service package, under which its provision has still not been fully established. Program managers in Sierra Leone should intensify efforts to standardize the routine provision of VAS as part of the Family Package and integrate the provision of VAS through outreach activities. Greater promotion of VAS is required at the community level given the observed drop in coverage.

In contrast to VAS coverage among children, VAS coverage among postpartum women (PPVAS) has markedly improved during the past five years—although ample room remains for further gains. This increase may be due to increased sensitization for maternal VAS since the integration of PPVAS into the routine health services. Policy makers should consider further strengthening the coverage of this important service through the integration of PPVAS into the MCH postnatal package and the engagement of other health services delivery points (e.g., TBAs). Program managers should continue to monitor the coverage of PPVAS at the health facility and community and outreach levels while promoting PPVAS through outreach services.

Low Birth Weight

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1998-2004
Infants weighed at birth	29	6	--
Low birth weight infants	24	--[11]	15

Weight at birth is a good indicator not only of a mother's health and nutritional status but also of the newborn's potential for survival, growth, long-term health and psychosocial development. Low birth weight (LBW: defined as less than 2,500 grams at birth) carries a range of grave health risks for children. Babies who are undernourished in the womb face a greatly increased risk of dying during the early months and years of their lives. Those who survive often have impaired immune function and increased risk of disease. LBW infants 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, LBW stems primarily from the mother's poor health and nutrition. Three factors have been found to predispose a newborn to be born with LBW: 1) the mother's poor nutritional status before conception, 2) her short stature (due mostly to poor nutrition and infections during her childhood), and 3) poor nutrition during the pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large percentage 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 a higher risk of bearing LBW babies than do fully-developed individuals.

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

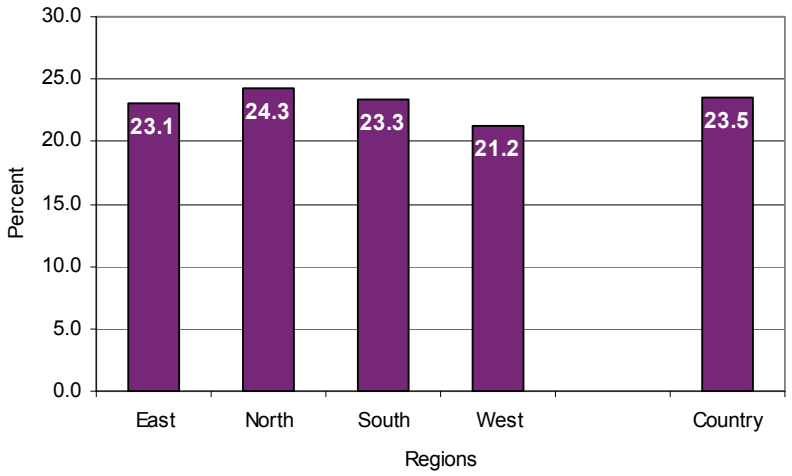
Because many infants are not weighed at birth and those who are weighed are not representative of all infants, reported birth weights usually cannot be used to estimate the prevalence of LBW among all children. Therefore, the percentage of births weighing below 2500 grams is estimated from two items in the MICS questionnaire: (i) 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 (ii) 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[12]). Mothers are asked these questions regarding their most recent live birth.

[11] A different technique was used to estimate this indicator in the MICS2 survey. The MICS2 estimate of this indicator, which is not comparable to the MICS3 estimate, was 52 percent.

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

A total of 2,375 women provided information about weighing practices and size at birth regarding their most recently born child during the 2 years preceding the survey. Overall, 29 percent of these children were weighed at birth. The probability of a child being weighed at birth was strongly associated with urban residence, higher levels of maternal education, and higher levels of wealth. Combining information on the measured birth weights and mothers' perceptions on the size of the baby, it is estimated that 24 percent of the 2,375 respondents had a low birth weight baby. (Table NU.8). There was no significant variation in this latter indicator by any background characteristic (Figure NU.5). The approach used for the estimation of low birth weight prevalence assumes that the relationship between the measured birth weight and the mothers' perceptions for these babies holds true for those whose birth weight was not measured but their mothers were asked to provide their perception on the size of the baby. In some categories, the proportion of babies measured are quite low – for these, the results should be regarded with caution.

Figure NU.5 Percentage of Infants Weighing Less Than 2500 Grams at Birth, Sierra Leone, 2005



Discussion: Low birth weight

The high prevalence of LBW newborns in Sierra Leone is well above the regional norm and represents a serious problem for public health officials. There is no simple solution to this issue. Efforts to lower the incidence of LBW should focus on advocacy for and implementation of the antenatal package, which contains interventions such as deworming, insecticide-treated bednets, and iron-folate supplementation that can have a positive influence on the incidence of LBW. Efforts should continue to address important topics that can positively contribute to reduction of LBW such as birth spacing and delayed age of pregnancy.

VI. Child Health

Immunization

	Estimates (percent)			
	2005 (MICS3)	**2005 (MICS3)**	**2000 (MICS2)**	**West-Central Africa (2004)**
Numerator	Imm. Status at first birthday	Imm. Status at time of survey	Imm. Status at time of survey	Unclear
Denominator	# of 1-year-olds	# of 1-year-olds	# of 1-year-olds	Unclear
Column #	1	2	3	4
BCG coverage	84	86	73	67
Polio coverage (OPV3)	57	65	61	57
DPT coverage (DPT3)	56	64	46	52
Measles coverage	63	77	62	55
Yellow fever coverage	61	76	--	--
Fully immunized children	35	54	39	--

Note: Only estimates in columns 2 and 3 are directly comparable.

The Millennium Development Goal (MDG) Number 4 is to reduce child mortality by two-thirds between 1990 and 2015. Immunization plays a key role in reaching 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 who do not receive routine immunizations. As a result, vaccine-preventable diseases cause more than 2 million deaths every year.

The goal of A World Fit for Children with regards to EPI is to achieve full immunization for 90 percent of children under one year of age at the national level and corresponding coverage levels of at least 80 percent 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 vaccine to protect against diphtheria, pertussis, and tetanus (DPT); three doses of oral polio vaccine (OPV); and, a measles vaccination—all by the age of 12 months. All of these vaccinations are provided in Sierra Leone through the Ministry of Health (MoH) and--together with the yellow fever vaccine—form the basic EPI package in Sierra Leone. The vaccine schedule is described in the table below.

Table 2: EPI package and schedule in Sierra Leone

Vaccine	Age at vaccination
BCG	At birth
OPV 0	At birth
OPV1/DPT1	6 weeks after delivery
OPV2/DPT2	10 weeks after delivery
OPV3/DPT3	14 weeks after delivery
Measles	9 months after delivery
Yellow fever	9 months after delivery

Caretakers of children under the age of five who were interviewed as part of the MICS3 were asked to show interviewers their children's vaccination cards. When these cards were available, interviewers copied vaccination information from the cards onto the MICS3

questionnaire. When cards were not available, vaccination status was assessed through a structured oral history taken from the mother / caretaker.

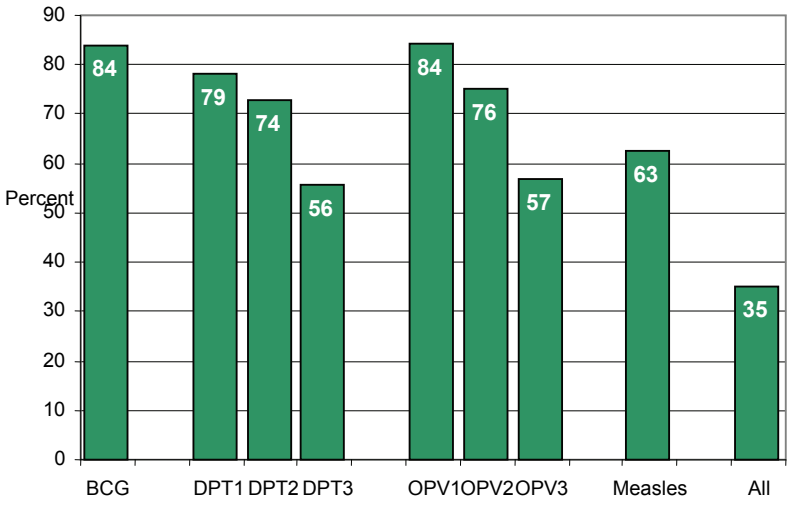
Millennium Development Goal

Indicator
Percentage of children under one year immunized against measles

Goal
100 percent by 2015

Overall, interviewers were shown health cards for 53 percent of children included in the MICS3 survey (Table CH.2). The percentage of children aged 12 to 23 months who received each of the vaccinations is shown in Table CH.1 and Figure CH.1. The denominator for the estimates presented in the table and figure is comprised of 1074 children aged 12-23 months; this approach ensures that only children who are old enough to be fully vaccinated are counted. In the coverage estimate presented in the third row of Table CH.1, 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 order to generate the coverage estimate presented in the bottom row, only those children who were vaccinated before their first birthday are included. For children without vaccination cards, the percentage of vaccinations given before the first birthday is assumed to be the same as for children with vaccination cards.

Figure CH.1 Percentage of children aged 12-23 months who received the recommended vaccinations by 12 Months. Sierra Leone, 2005



Approximately 84 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 79 percent. The percentage declines for subsequent doses of DPT to 74 percent for the second dose and 56 percent for the third dose (Table CH.1). Similarly, 84percent of children received the first dose of polio vaccine (OPV1) by age 12 months and this declines to 57 percent for the third dose. The coverage for measles vaccine by 12 months is—at 63 percent—higher than for OPV3 or DPT3. Coverage for yellow fever vaccine at age 12 months is 61 percent. The percentage of children aged 12-

23 months who received all eight recommended vaccinations excluding yellow fever (BCG, DPT x 3, OPV x 3, and measles) by their first birthday is 35 percent.

Table CH.2 shows vaccination coverage rates among children 12-23 months by background characteristics. These estimates represent coverage rates among surveyed children at the time of the survey (regardless of the age at which the vaccine was received) and are based on information from both the vaccination cards and mothers'/caretakers' reports. Coverage rates among male children are slightly higher than for females. A comparison across provinces shows that coverage rates of polio are lowest in the more developed Western Area. For other antigens, coverage is generally higher in the South and in the Western Area. Coverage levels are slightly higher in urban areas as compared to rural locations for all antigens. The association of coverage and the education level of the mother does not follow a linear trend, as vaccination rates for most antigens are highest among women with primary education, followed by mothers with secondary education or higher. Coverage is lowest among children of uneducated women. Finally, there is a clear positive association between increasing wealth status and higher coverage levels. Coverage rates for most antigens are markedly lower for the two lowest wealth quintiles as compared with the three higher quintiles.

Discussion: Immunization

The MICS3 survey has introduced an approach to the measurement of immunization rates that differs from the approach taken during MICS2. Timely immunization—that is, completion of basic immunizations by an infant's first birthday, as measured among 12-23 month-olds—is the basis of the MICS3 EPI assessment. This contrasts with the approach taken during MICS2, when indicators were defined based on current immunization status among surveyed 12-23 month-olds. This latter approach aggregates the vaccination status of children of different ages (between 12 and 23 months) in the calculation.

Estimates of timely immunization are not available from MICS2; it is therefore necessary to examine current immunization status as measured during MICS3 and MICS2 (columns 2 and 3 in the table that can be found at the beginning of this section) in order to examine trends in vaccination status over time. A comparison of these data suggests that clear gains have been made in improving vaccination status of children in Sierra Leone during the past five years. This finding, along with data that show immunization rates in Sierra Leone to be 8-to-21 percent above regional norms (measles), suggests that the EPI program in Sierra Leone is a relatively strong component of the health system. Vaccination rates in Sierra Leone are still far short of the UNICEF goal of 90 percent of children fully immunized at one year of age or the MDG for measles vaccination of 100 percent at one year of age.

Policy recommendations to strengthen the EPI program in Sierra Leone include prioritizing the placement of adequate personnel at the community-level to carry out EPI programs and supporting the integration of EPI activities in the broader Integrated Child Survival Strategies. EPI program managers should continue to focus on strengthening outreach EPI services and establishing appropriate technology for cold chain maintenance.

Tetanus Toxoid

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	2004
Mothers given at least two doses of tetanus toxoid vaccine within appropriate interval	75	58	57

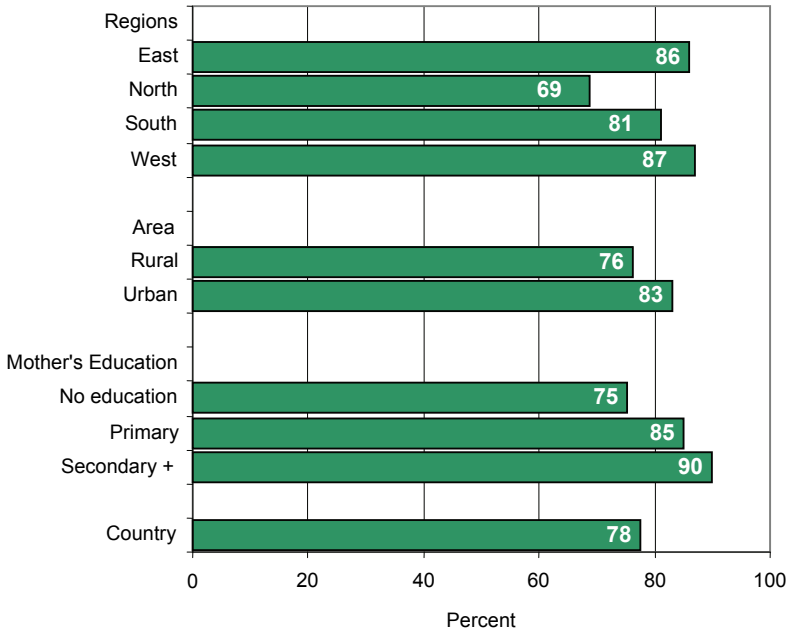
A central MDG is to reduce the maternal mortality ratio by three-quarters. A key strategy to help reach this goal is to eliminate maternal tetanus. In addition, the global standard is to ensure that neonatal tetanus is reduced to less than one case of neonatal tetanus per 1000 live births in every district. A World Fit for Children goal is to eliminate maternal and neonatal tetanus by 2005.

The best way to prevent maternal and neonatal tetanus is to ensure that all pregnant women receive at least two doses of tetanus toxoid vaccine. However, if women have not received two doses of the vaccine during their current pregnancy, they (and their newborn) are also considered to be protected if any of the following conditions are met:

- Received at least two doses of tetanus toxoid vaccine during lifetime, the last within the prior three years;
- received at least three doses during lifetime, the last within the prior five years;
- received at least four doses during lifetime, the last within ten years; or,
- received at least five doses during lifetime

Table CH.3 shows that 75 percent of surveyed women who had a live birth within 12 months prior to the survey received at least two doses of TT vaccine during their last pregnancy and 78 percent of surveyed women were protected against neonatal tetanus according to the conditions outlined directly above. Figure CH.2 below shows the protection status from tetanus of women by major background characteristics. Coverage of protection against tetanus is highest in the Western Area and East and notably lower in the North. Coverage levels are higher in urban than in rural areas. There is little difference in vaccination rates among different age groups of women; rates range from 75 percent (among 25-29 year-olds) to 82 percent (among 20-24 year-olds). Those differences that do exist among age groups do not follow a discernible trend. There is a direct association between higher levels of mothers' education and higher vaccination rates. Similarly, increasing wealth status is positively associated with higher coverage levels.

Figure CH.2 Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus. Sierra Leone, 2005



Discussion: Tetanus toxoid

Similar to the findings presented above for child vaccination, the results for TT vaccination of pregnant women are encouraging. Although key interventions to strengthen the vaccination program have only just begun, TT coverage has increased notably during the past five years and is much better than the regional norm. Policy recommendations to further strengthen the coverage of TT are similar to those presented above for children's vaccination—that is, to prioritize adequate staffing at the community-level to implement EPI programs and support the integration of EPI activities in the broader Integrated Child Survival Strategies. EPI program managers should focus on strengthening outreach EPI services and cold chain maintenance.

Oral Rehydration Therapy

Key indicators	Estimates		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1996-2004
Prevalence of diarrhoea	14	25	--
Oral rehydration therapy (ORT) *Children with diarrhoea that received oral rehydration solution and/or household solution*	60	86	--
Home management of diarrhoea *Children with diarrhoea that received more fluids AND continued eating food*	23	28	--
ORT or increased fluids ***AND*** continued feeding	31	--	30

Diarrhoea is the second leading cause of death worldwide among children under five years of age. 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 solution (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 during diarrhoeal episodes are also important strategies for managing diarrhoea.

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

The primary indicators with regards to diarrhoeal disease and management that have been measured through the MICS3 are the following:

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

In the MICS3 questionnaire, mothers (or caretakers) were asked to report whether their child had diarrhoea in the two weeks prior to the survey. If yes, 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.

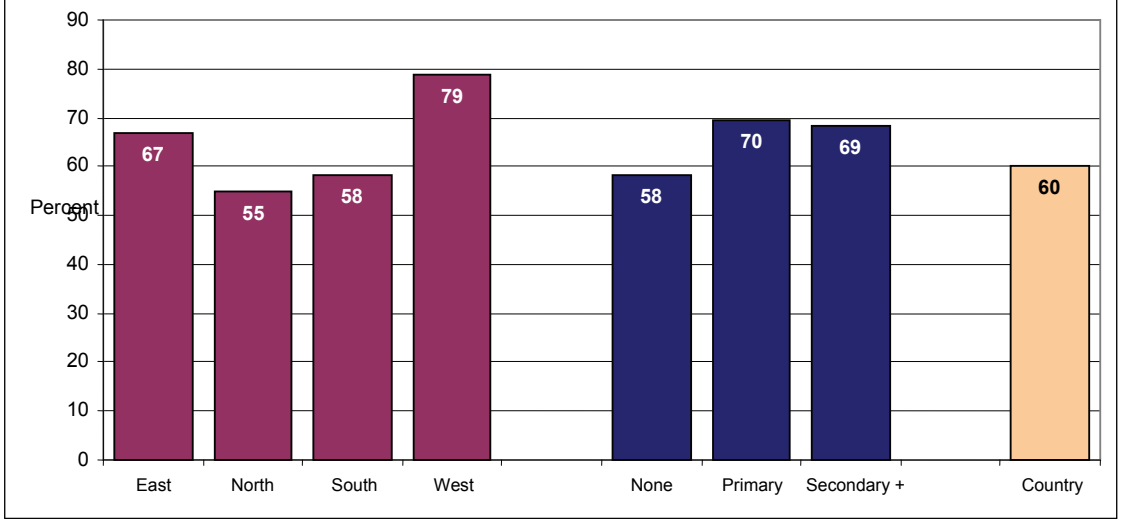
Overall, 14 percent of children under five had diarrhoea in the two weeks preceding the survey (Table CH.4). Diarrhoea prevalence was lowest in the South and Western Area (11 percent) and highest in the North (18 percent). Among children of different age groups, the peak of diarrhoea prevalence (22 percent) occurs during the weaning period (i.e., among children aged 12-23 months).

Table CH.4 also shows the percentage of children receiving various types of recommended liquids during diarrhoeal episodes. Since mothers were able to name more than one type of liquid, the percentages add to more than 100. About 51 percent received fluids from ORS

packets; 7 percent received pre-packaged ORS fluids; and, 12 percent received recommended homemade fluids. Approximately 60 percent of children with diarrhoea received one or more of the recommended home treatments (i.e., were treated with ORS or RHF), while 40 percent received no treatment.

Figure CH.3 shows the disparities, by selected background variables, in the percentage of children with diarrhoea who received ORT. The use of ORT was found to be lowest in the North and South (55 and 58 percent, respectively) and highest in the Western Area (79 percent). Children of mothers with no education are less likely to receive ORT than children of mothers with primary or secondary-plus education. The utilization of ORT was higher in urban than rural areas (77 versus 55 percent) and much higher among children from households in the upper two wealth quintiles, as compared to the lower three quintiles. There was little variation in ORT use rates among children from different age groups.

Figure CH.3 Percentage of children aged 0-59 months with diarrhoea who received oral rehydration treatment. Sierra Leone, 2005

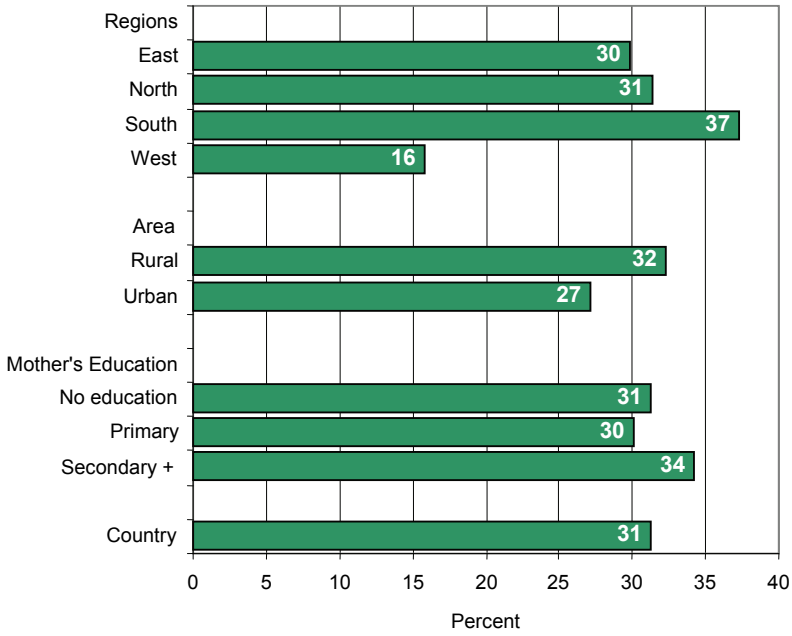


Slightly more than one-half (51 percent) of under-five children with diarrhoea drank more than usual during their illness while 47 percent drank the same or less (Table CH.5). Forty percent ate somewhat less, the same or more than usual (continued feeding) while sixty percent ate much less than usual or almost nothing. Combining these findings, only 23 percent of children with diarrhoea received increased fluids and at the same time continued feeding. Thirty-one percent of children received home treatment according to the recommendation: that is, they either received ORT or increased their fluid intake, and at the same time, continued feeding.

There are modest differences by background characteristics in the percentage of children who received ORT or increased fluids and continued feeding. Among provinces, the percentage of children ranges from 30 to 37 percent in all provinces except for the Western Area, where it is a meagre 16 percent. Differences by gender, location (rural/urban), and mother's education level are unremarkable and do not exceed five percent (see Figure CH.4). Children aged 24-48 months have a much higher level of appropriate management than do children of other age groups. Analysis of this indicator by household wealth status reveals

that mothers in the poorest quintile demonstrate a somewhat higher level of appropriate management as compared to mothers from the other four quintiles.

Figure CH.4 Percentage of children aged 0-59 months with diarrhoea who received ORT or increased fluids AND continued feeding. Sierra Leone, 2005



Discussion: Oral rehydration therapy

Due to a major decrease in the use of ORT over the last five years and steadily low levels of home management of diarrhoeal disease (DD), the results presented above are not encouraging. Child health specialists note that there have been shortages in the supply of ORT recently that may have contributed to the result. It appears that there may be an over-reliance on packaged ORS in Sierra Leone (it is easily caretakers' preferred method of treatment) and that household members do not readily prepare homemade ORS if the packets are not available. The negative effects of this practice are exacerbated by low levels of awareness and knowledge among household members regarding the need for children to continue taking fluids and food during DD.

Policy and programming recommendations with regards to improving the situation include considering the establishment of ORT corners in health centres and training Blue Flag Volunteers and community members regarding their use. The use of locally-made ORS formulas should be promoted in these corners as should the importance of increased fluid intake and continued feeding.

Care Seeking and Antibiotic Treatment of Pneumonia

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1998-2004
Prevalence of suspected pneumonia	11	9	10
Knowledge of danger signs of pneumonia	14	--	--
Care seeking for suspected pneumonia	48	50	35
Antibiotic treatment of suspected pneumonia	21	--	--

At the global level, pneumonia is the leading cause of death in children and the treatment of under-5s who have suspected pneumonia with antibiotics is an important intervention. A World Fit for Children goal is to reduce by one-third the deaths due to acute respiratory infections. In the MICS3 survey, a child with suspected pneumonia is defined as a child whose caretaker reported that s/he 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 analysis below was limited to children who had suspected pneumonia during the two weeks prior to the survey. The indicators of interest are the following:

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

Table CH.6 presents the prevalence of suspected pneumonia and—if care was sought outside the home—the site of care. Eleven 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, 48 percent were taken to an appropriate provider. The types of facilities that provided services to a substantial percentage of children with suspected pneumonia include government hospitals (9 percent), health centers (22 percent) and health posts (7 percent), village health workers (6 percent), and private health centers (5 percent). The use of appropriate providers is somewhat higher for male children (50 percent) than female children (45 percent). Caretakers in the South make the highest use of appropriate providers (50 percent) while the lowest rate of use is in the Western Area (42 percent). Younger children are more likely to be taken to be seen by an appropriate provider than are older children. The association of the utilization of an appropriate provider with the variables mother's education and wealth status is mixed and does not follow a linear trend.

Table CH.7 presents data that describe the use of antibiotics for the treatment of suspected pneumonia in under-5s by sex, age, province, residence, and socioeconomic status. In Sierra Leone, 21 percent of under-5 children with suspected pneumonia during the two weeks prior to the survey were treated with an antibiotic. The percentage treated with an antibiotic was highest (47 percent) in the Western Area and varied among the other provinces from 27 percent in the East to 13 percent in the North. The table also shows that antibiotic treatment of suspected pneumonia is highest among children from the two highest wealth quintiles and among children whose mothers/caretakers have secondary education or higher.

Mothers' knowledge of danger signs of pneumonia is an important determinant of care-seeking behaviour. Issues related to knowledge of danger signs of pneumonia are presented in Table CH.7A. Only 14 percent of women knew both of the two key danger signs of pneumonia—fast breathing and difficult breathing. The most commonly identified symptom

for taking a child to a health facility is fever (83 percent). Twenty-one percent of mothers identified fast breathing and 27 percent of mothers identified difficult breathing as symptoms that require taking a sick child to see a health care provider immediately. Differences in the level of this indicator vary little by all background characteristics except for province, where huge variation is seen: three percent of mothers in the East and seven percent of mothers in the North demonstrate correct knowledge, as compared to 15 and 33 percent in the Western Area and South, respectively.

Discussion: Care seeking and antibiotic treatment of pneumonia

The results presented above suggest that the status of care for children with pneumonia in Sierra Leone is dismal. Caretakers do not know key symptoms of the disease, more than half of children with suspected pneumonia are not seen by a trained provider, and only ten percent (0.48 x 0.21) of children with suspected pneumonia receive antibiotics. Key indicators suggest that the situation is highly inequitable: children living in the poorest areas of the country, in the poorest households, and in households where the education level is the lowest, have the lowest access to services and antibiotics.

The indicators antibiotic treatment of suspected pneumonia and knowledge of danger signs of pneumonia were not measured in the 2000 MICS2, making it impossible to assess trends in their level over time. A related indicator—the percentage of children with ARI taken to an appropriate health provider—was measured in the MICS2, and its value has remained static over the past five years (see table above). The value of this latter indicator remains higher in Sierra Leone than the WCA norm, suggesting that programs to raise awareness of Sierra Leonean caretakers regarding the need to seek care for severe ARI may have achieved a relative level of "success".

Policy makers should seek to increase demand for ARI services while also ensuring that quality ARI services are provided at the nation's community-level health facilities. There is an urgent need to increase the access to treatment and antibiotics for children from disadvantaged households.

Solid Fuel Use

Key indicators	Estimate (percent) 2005 (MICS3)
Households using solid fuels as primary source of domestic energy for cooking	99

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 pollution and is a major cause of ill-health in the world—particularly among under-5 children—through its contribution to acute respiratory illness. The main problem with the use of solid fuels is that it creates by-products of incomplete combustion that include CO, polyaromatic hydrocarbons, SO_2, and other toxic elements. The use of solid fuels increases the risks of acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, low birth weight, cataracts, asthma and possibly tuberculosis. The primary MICS3 indicator with regard to solid fuel use is the percentage of the population using solid fuels as the primary source of domestic energy for cooking.

Households in Sierra Leone make nearly universal (99 percent) use of solid fuels for cooking purposes. Some households use charcoal—these households are mostly located in the Western Area and represent households that lie in the highest wealth quintile and/or where the household head has achieved high levels of education. Residents of the rest of the country cook almost exclusively with wood. Table CH.8 presents relevant data.

Solid fuel use alone is a poor proxy for indoor air pollution, since the concentration of the pollutants differs according to the type of stove or fire that is used. The use of closed stoves with chimneys minimizes indoor pollution, while the use of an 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.9. Ninety percent of surveyed households cook using solid fuels over an open fire or stove with no chimney or hood—the most dangerous kind of stove with regards to generating indoor air pollution. Nine percent of households use an open fire or stove with a chimney or hood, which offers some protection from the harmful effects of solid fuel use. The use of a chimney or hood is highest in the East (21 percent) and South (11 percent).

Discussion: Solid fuel use

The overwhelming reliance on solid fuels for cooking in Sierra Leone is due to the ready availability of inexpensive wood products and the comparatively high price and limited availability of alternative fuels. Given the dire economic conditions in Sierra Leone at this time, it is probably not realistic to expect people to change their fuel source. Efforts to reduce ARI through control of indoor pollution should therefore focus on the promotion of stoves that limit indoor pollution, such as closed stoves with chimneys (used by less than one percent of households in Sierra Leone) or open stoves with chimneys or hoods (used by nine percent of households).

Malaria

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1999-2004
Households with insecticide-treated bednets (ITNs)	5	2	--
Under-fives sleeping under ITNs	5	2	2
Under-fives sleeping under mosquito nets	20	15	15
Ant-malarial treatment (under-fives)			
➢ Within 24 hours of onset of symptoms	45	--	--
➢ Any time	52	61	43
Pregnant women who received appropriate intermittent preventive therapy for malaria	2	--	--

Malaria is a leading cause of death of children under age five in Sierra Leone. It also contributes to anaemia in children and is a common cause of school absenteeism. Preventive measures, especially the use of insecticide-treated mosquito nets (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. Younger children should continue breastfeeding while recovering from malaria.

The MICS3 questionnaire incorporates questions on the availability and use of bed nets, both at household level and among children under five years of age. Other questions assess anti-malarial treatment and intermittent preventive therapy for malaria. Survey results indicate that only five percent of households in Sierra Leone have at least one ITN (Table CH.10). The ITNs that are available in Sierra Leone are the long-lasting variety that do not require treatment with an insecticide for five years.

Results also indicate that 20 percent of children under the age of five slept under any type of mosquito net (i.e., treated or untreated) the night prior to the survey while 5 percent slept under an ITN (Table CH.11). The use of ITNs as well as the use of untreated bed nets by children under five declines steadily with increasing age of the child. There were no significant gender disparities in use of ITNs / bed nets among children under five.

Questions on the prevalence of fever and its treatment were asked for all children under age five. Slightly more than one in three (35 percent) children were ill with fever in the two weeks prior to the MICS3 (Table CH.12). Fever prevalence was highest among children aged 12-23 months (41 percent) and thereafter declined slowly with increasing age. The prevalence of fever was relatively similar across all levels of mother's education and wealth quintiles. Among provinces, fever was least prevalent in the Western Area (26 percent) and most prevalent in the North (39 percent).

Among children who experienced fever in the two weeks prior to the survey, caretakers were asked to report all of the medicines that were given to their children to treat the fever, including medicines given at home and medicines given or prescribed at a health facility. Overall, 52 percent of children with fever in the last two weeks were treated with an "appropriate" anti-malarial drug and 45 percent received anti-malarial drugs within 24 hours of onset of symptoms.

"Appropriate" anti-malarial drugs include Chloroquine, Fansidar, and artimisine combination drugs. In Sierra Leone, 46 percent of children with fever were given Chloroquine and 5 percent were given quinine. Only one percent received artimisine combination therapy. More than two-thirds of children with malaria (68 percent) were given other types of medicines that are not anti-malarials, including anti-pyretics such as paracetamol, aspirin or ibuprofen.

Overall, children with fever in the East (54 percent) and South (53 percent) are the most likely to have received an appropriate anti-malarial drug within 24 hours of the onset of symptoms while those in the North, where malaria is most prevalent, are the least likely (35 percent) to receive an appropriate anti-malarial drug in timely fashion. Urban children are slightly more likely than rural children to be treated appropriately as are the children of mothers with secondary or higher education. Little difference was noted between the percentage of 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 more likely to be of low birth weight, which increases the risk that they may not survive their first year of life. For this reason, steps are taken to protect pregnant women by distributing ITNs and treatment during antenatal check-ups with drugs that prevent malaria infection (intermittent preventive treatment or IPT). In the Sierra Leone MICS3 survey, women were questioned

regarding the medicines they had received in their last pregnancy during the 2 years preceding the survey. Women are considered to have received IPT if they have received at least 2 doses of SP/Fansidar during the pregnancy. Data regarding the percentage of pregnant women who gave birth in the two years preceding the survey and who received IPT for malaria are presented in Table CH.13. Only two percent of eligible women received IPT. The few women who received IPT tended to be from the Western Area or from urban locations, to have been educated up through the secondary level or above, and to come from the highest wealth quintile.

Discussion: Malaria

One in six children in Sierra Leone takes malaria medication every two weeks. Since 2000, the use of mosquito nets—both ITNs as well as normal bednets—has increased slightly due to the program that distributes ITNs free of charge to families with pregnant women and children. However, the percentage of households that use bednets is still low. These findings suggest that the people of Sierra Leone continue to emphasize a curative, rather than preventive, approach to malaria control among children. Organizations and individuals working in child public health issues in Sierra Leone must make it a priority to change this approach and emphasize prevention over cure.

Among the four provinces of Sierra Leone, the North has the highest level of malaria morbidity and highest use of bednets—but the lowest level of treatment of febrile children with an appropriate anti-malaria drug. These differences between the North and the other provinces are less stark than during MICS2—when the North had the highest morbidity but lowest use of antibiotics and bednets—suggesting that the emphasis on targeting the Northern Province with additional resources to control malaria has achieved some success and should be continued.

Policy makers and programmers should allocate more resources to interventions that prevent malaria. Roughly equal disease burden and bednet use in the East, South and North suggest that resources be distributed equitably among these three provinces. ITNs must be made much more widely available to the public at the lowest possible cost through a sustainable mechanism. This process could be aided by tax waivers for ITNs and additional funding to support an increase in the coverage of ITN distribution programs and other strategies to prevent malaria. The promotion of ITNs for use by pregnant women and children under five should also be emphasized. On the curative side, malaria in children should be dealt with through an integrated approach to management of sick children—that is, through CBIMCI, the national roll-out of which should be prioritized.

VII. Environment

Water and Sanitation

Key indicators	Estimates for Sierra Leone (percent)				West-Central Africa 2002
	2005 (MICS3)	2004 (census)	2002 (SOWC)	2000 (MICS2)	
Use of improved drinking water sources	47	53	57	54	58
Use of adequate water treatment method	5	--		--	--
Use of improved sanitation facilities	30	--	39	63	35
Sanitary disposal of child's faeces	41	--		--	--

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 that have 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, where they often bear primary responsibility for carrying water for long distances.

The MDG goal with regards to water and sanitation is to reduce the percentage of people who do not have sustainable access to safe drinking water and basic sanitation by half between 1990 and 2015. The World Fit for Children goal calls for a reduction in the percentage of households that do not have access to hygienic sanitation facilities and affordable and safe drinking water by at least one-third.

The MICS3 indicators that are related to water and sanitation 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

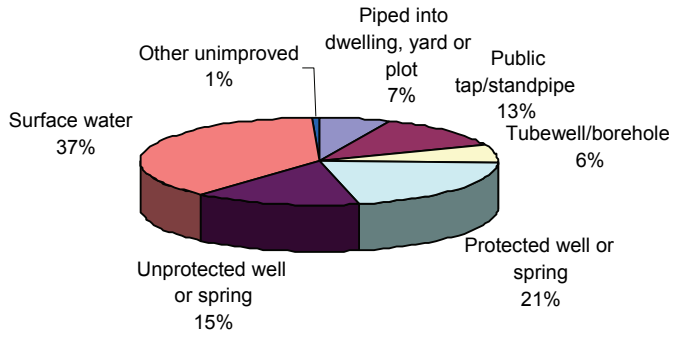
Sanitation

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

The distribution of the population by source of drinking water is shown in Tables EN.1 and EN.1b, and in Figure EN.1. The population that uses *improved drinking water sources* is defined as those who obtain water from any of the following sources: piped water (into dwelling, yard or plot), public tap/standpipe, tubewell/borehole, protected well, protected spring, or rainwater collection. Bottled water is considered to be an improved water source only if the household is using an improved water source for other purposes, such as hand washing and cooking. Overall, 47 percent of the population has access to improved drinking water sources—84 percent in urban areas and 32 percent in rural areas. Among provinces, the situation is best in the largely urban Western Area (87 percent) and worst in the North,

where only 30 percent of the population obtains its drinking water from an improved source.

Figure EN.1 Percentage distribution of household members by source of drinking water. Sierra Leone, 2005



The sources of drinking water for the population of the North, South, and East follow similar patterns (Tables EN.1 and EN.1b). Surface water is the primary source of drinking water in all three provinces, especially in the North, where over half of the population gets their water from this unsafe source. Substantial percentages (15-18 percent) of the populations in these three provinces get their drinking water from unprotected wells or springs. The primary improved water sources in these provinces are public taps, tube wells, and protected wells. In the Western Area, the primary improved water source is piped water, whether it is piped into the dwelling, the yard, or at a public tap.

Data that describe the practice of in-house water treatment are presented in Table EN.2. Households were asked to describe ways that they treat water at home to make it safer to drink—boiling, adding bleach or chlorine, using a water filter, and using solar disinfection are all considered to be proper treatment methods to prepare drinking water. Among these methods, by far the predominant practice in Sierra Leone is to add bleach or chlorine (4.6 percent out of a total of 5.0 percent). Table EN.2 also shows the percentage of household members using appropriate water treatment methods; this indicator is reported separately (i) for all households, (ii) for households using improved drinking water sources, and (iii) for households using unimproved drinking water sources. Appropriate water treatment is practiced by ten percent of households that use improved drinking water sources and less than one percent of households that use water from unimproved sources. Appropriate water treatment is most highly practiced in the North (six percent) and South (five percent) and among households that are in urban locations, households in which the head of household is educated to the secondary level or above, and households in the highest wealth quintile.

Information regarding the amount of time that it takes to obtain water is presented in Table EN.3. Note that these results refer to the time needed to make one roundtrip from home to drinking water source. Information on the number of trips made in one day was not

collected. Related data that describe the person who usually collects the water are presented in Table EN.4.

Result in Table EN.3 shows that the drinking water source on the premises is only nine percent of households. It takes less than 30 minutes to get to the water source and bring water in almost seventy percent of all households, while another 18 percent of households spend 30-60 minutes for this purpose. Excluding those households with water on the premises, the average time for a roundtrip to the source of drinking water is more than 17 minutes. There is little variation in this figure when it is analyzed by background characteristics. The time spent collecting water in rural and urban areas is equal.

Result in Table EN.4 shows that an adult female collects the water (when the source of drinking water is not on the premises) in 70 percent of households. Adult men collect water in only nine percent of households, children under age 15 collect water in the remaining households (21 percent). Children and men play a much greater role collecting water in the Western Area than in other provinces.

Millennium Development Goal

Indicator
Population with access to safe drinking water

Goal
82.5 percent by 2015

Inadequate disposal of human excreta and poor personal hygiene are associated with a range of diseases including diarrhoeal diseases and polio. *Improved sanitation facilities* for excreta disposal include the following: flush or pour flush to a piped sewer system, septic tank, or latrine; ventilated improved pit latrine or pit latrine with slab; and, composting toilet. Thirty percent of the population of Sierra Leone lives in households that use improved sanitation facilities (Table EN.5). This percentage is 64 in urban areas and 17 percent in rural areas. Residents of the East (20 percent) and North (22 percent) are the least likely to use improved facilities. In the East and South most of the population uses rivers, bush, fields, or has no facilities. In contrast, in the North the most common facility is a pit latrine without slab or an open pit. Fifty-four percent of the population in the Western Area uses a pit latrine with slab. The table indicates that use of improved sanitation facilities is strongly correlated with location (urban versus rural), increasing wealth status, and increasing educational level of the head of household.

In the MICS3 survey, a child's faeces are considered to be safely disposed of if the child's last stool was rinsed into a toilet or latrine or if the child used a toilet to defecate. Data that describe the disposal of faeces of children 0-2 years of age are presented in Table EN.6. The table reveals that the stools of forty-one percent of surveyed children were disposed of safely. The practice of safe disposal was lowest in the South (28 percent) and highest in the Western Area (90 percent). The practice is strongly correlated with urban residence and increasing socioeconomic status.

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. A combination indicator has been formed that measures the percentage of households that have both an improved source of drinking water and sanitary means of excreta disposal. Twenty-four percent of households in Sierra Leone meet this standard, ranging from 13 percent in the North to 63 percent in the Western Area. Similar to other water and sanitation indicators, high levels of

this indicator are associated with urban residence, increasing levels of education of the head of household, and increasing socioeconomic status.

Discussion: Water and sanitation

The MICS3 estimates of the Sierra Leonean population's access to improved sources of drinking water (46 percent) and sanitation facilities (30 percent) are lower than previous estimates. Enumerators were carefully trained on the different definitions of improved water and sanitation facilities and may have collected more accurate data than have been collected in the past.

Other reasons that the MICS3 estimates may be lower than previous estimates include the following:

1. There has been a gradual movement of population from urban (where improved sources are more readily available) to rural locations following the end of the conflict. The MICS2 survey was conducted in 2000 at the height of the war, when many people had moved temporarily to urban locations. There was massive destruction of water and sanitation facilities during the war until it ended in 2002.
2. Interviewers' access to remote and rural locations (where improved sources of water and sanitation are less readily available) in MICS2 was limited, which may have led to an overestimation of access to improved sources of water and sanitation in that survey.

The results above suggest that policy makers should consider prioritizing the allocation of resources to provide potable water to rural communities while emphasizing sustainability through support to community-based water system maintenance structures. Water and sanitation programs in Sierra Leone should emphasize the development of improved water sources while raising the public's awareness regarding good hygiene practices.

Policy makers should consider revitalizing and enforcing the GoSL act that stipulates that a house owner must first construct a latrine before building a house. Policies that provide incentives for the private sector to produce materials used to build basic sanitation facilities (e.g., latrine slabs, etc.) may also contribute to the improvement of the public's access to improved sanitary facilities. The conduct of programs that promote and facilitate the construction of low-cost family latrines in rural communities would help to raise the percentage of households with access to improved sanitary facilities.

VIII. Reproductive Health

Contraception

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1996-2004
Contraceptive prevalence (modern or traditional)	5	4	17

Appropriate family planning is important to the health of women and children through: 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.

Current use of contraception was reported by only 5 percent of women currently married or in union in Sierra Leone (Table RH.1). Four percent of surveyed women reported that they or their partner uses a modern method of contraception while one percent reported using a traditional method. The most popular method is the pill which is used by 2.5 percent of married women in Sierra Leone. The next most popular method is injectable contraceptives that are used by 1.4 percent of married women. Contraceptive prevalence is highest in the Western Area at 20 percent and ranges from two to four percent in the remaining provinces. Adolescents are less likely to use contraception than older women. Only about 2 percent of married or in-union women aged 15-19 currently use a method of contraception compared to 4 percent of 20-24 year olds and a slightly higher percentage of older women.

Women's education level is strongly associated with contraceptive prevalence. The percentage of women using any method of contraception rises from 3 percent among those with no education to 8 percent among women with primary education, and to 20 percent among women with secondary or higher education. The method mix is fairly constant across the different strata of women's educational status.

Discussion: Contraception

The astonishingly low contraceptive prevalence in Sierra Leone contributes directly to high birth rates as well as high rates of child and maternal mortality. The contraceptive prevalence in Sierra Leone lags well behind the low norms of the region (17 percent), suggesting that adequate efforts have not been made in Sierra Leone to promote contraception. Barriers to higher use of contraception in Sierra Leone include low awareness of the need for contraception, poor availability of contraceptives, and negative cultural perceptions regarding contraceptives.

The promotion and provision of contraceptives must be integrated into all appropriate aspects of the health services, particularly delivery, postnatal and outreach services. Research is needed in order to identify barriers to contraception use, messages that will effectively increase demand for contraceptives, types of contraceptives that Sierra Leoneans find acceptable and culturally acceptable mechanisms to supply contraceptives to those who need them.

Antenatal Care

Key indicators	Estimates		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1996-2004
Received antenatal care at least once during pregnancy from skilled personnel	81	68	66
Received some type of antenatal care from skilled or unskilled personnel	94	--	--

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to both their own health and well-being as well as to 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 for antenatal care (ANC) to improve maternal and newborn health. For example, if women and their families are provided with information about the danger signs, symptoms and risks of labour and delivery during the antenatal period, this may in turn help to ensure that pregnant women seek the assistance of a skilled health care provider during delivery. The antenatal period also represents an important opportunity to supply pregnant women and their family members with 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 her infant. The prevention and treatment of malaria among pregnant women, the management of anaemia during pregnancy, and treatment of sexually transmitted infections (STIs) can significantly improve foetal outcomes and improve maternal health. Adverse outcomes such as low birth weight can also be reduced through a combination of interventions that 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 mother-to-child transmission of HIV (PMTCT), has led to renewed interest in access to and use of antenatal services.

Based on a review of the effectiveness of different models of ANC, it is recommended by WHO that each pregnant woman makes a minimum of four antenatal visits. WHO recommends that the following services be included in the ANC visits:

- Blood pressure measurement
- Urine testing for bateriuria and proteinuria
- Blood testing to detect syphilis and severe anaemia
- Weight/height measurement (optional)

ANC coverage by a skilled provider is relatively high in Sierra Leone as 81 percent of women receive ANC from a skilled provider (i.e., a doctor, nurse, or midwife) at least once during their pregnancies (Table RH.2). An additional 13 percent receive ANC from an unskilled provider. The percentage of women who receive ANC from a skilled provider varies from 73 percent in the North to 93 percent in the Western Area. The use of antenatal services is positively associated with increasing levels of education of the head of household and increasing household wealth status. ANC coverage is relatively constant across different age ranges of women although it is slightly higher among 15-19 year old women (86 percent). Pregnant women make greater use of antenatal services in urban than rural areas (88 versus 79 percent).

The type of personnel providing ANC to women aged 15-49 years who gave birth in the two years preceding the MICS3 survey is also presented in Table RH.2. The great majority of services that are given by skilled personnel are provided by nurses or midwives (68 percent). Auxiliary midwives (nine percent) and physicians (four percent) also provide ANC services to a substantial percentage of pregnant women. Wealthier women in urban locations who live in households with more highly educated heads of household have a greater tendency to receive ANC from physicians than do other women.

The types of services that pregnant women receive during ANC visits are described in Table RH.3. Twenty-six percent of all pregnant women (including those who did not receive ANC and those who received ANC from an unskilled provider) had a blood sample taken while 28 percent had a urine sample taken. Sixty-eight and seventy-three percent of all pregnant women had their blood pressure and weight measured, respectively. Taken together, these data show that 94 percent of all women who gave birth during the two years preceding the survey received some kind of antenatal care.

Discussion: Antenatal care

The use of antenatal care is relatively high in Sierra Leone and is higher than regional estimates and the MICS2 estimate from 2000. Data presented regarding the services that pregnant women receive suggest that the quality of ANC services may not be as high as the coverage level. Efforts to make further improvements in antenatal care should include strengthening the quality of care (including the services that are provided through ANC) and strengthening coverage among population groups that current have lower ANC utilization rates: these groups include women who live in rural areas, come from poor households, and who live in the Northern province.

Assistance at Delivery

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1996-2004
Skilled attendant at delivery	43	42	45
Delivered in health facility	19	--	--

Three quarters of all maternal deaths occur during delivery and the immediate postpartum period. The single most critical intervention for safe motherhood is to ensure that a competent health worker with midwifery skills is present at every birth—and that transport is available to a referral facility for obstetric care in case of emergency. The relevant goal from A World Fit for Children is to ensure that women have ready and affordable access to skilled attendance at delivery. The MICS3 indicators related to assistance at delivery are (i) the percentage of births that occur with a skilled attendant present and (ii) the percentage of deliveries that take place in health facilities. The indicator regarding skilled attendant at delivery 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 MICS3 questionnaire included a number of questions to assess the percentage of births that were attended by a skilled attendant. A *skilled attendant* is defined as a doctor, nurse, midwife or auxiliary midwife.

About 43 percent of births in Sierra Leone occurring in the year prior to the MICS3 survey were delivered by skilled personnel (Table RH.4). This percentage is highest in the Western Area at 83 percent and lowest in the North at 25 percent. Highly educated women are more likely to have delivered with the assistance of a skilled birth attendant than their less educated counterparts. Increased socioeconomic status is clearly associated with increased use of skilled birth attendants.

Thirty-eight percent of births in Sierra Leone during the year prior to the MICS3 survey were delivered with assistance of a nurse or midwife. Auxiliary midwifes attended three percent of births while doctors assisted with the delivery of two percent of births. The relative percentages of different types of skilled birth attendants that were used were similar across the four provinces and varied primarily in magnitude. Among unskilled birth attendants, the most commonly used included traditional birth attendants (37 percent) and relative/friend (14 percent).

An estimated nineteen percent of all deliveries in Sierra Leone take place in health facilities, reflecting the low access of the population to health facilities where deliveries can be managed.

Discussion: Assistance at delivery

The percentage of births attended by skilled birth attendants (SBAs) in Sierra Leone remains unchanged since last measured in 2000 and is in line with the regional value of 45 percent. Access to SBAs and health delivery services in institutions in Sierra Leone is limited by financial barriers (payments must be made to providers, even though delivery services are theoretically free of charge), difficulties reaching health facilities, perceptions that care is of poor quality, and a cultural preference for home births.

Policy makers in Sierra Leone need to finalize and ratify the Reproductive Health Policy that, among other things, stipulates that mother-friendly facilities should be developed. Health officials and administrators should ensure that policies providing special facilities to vulnerable groups are realized in the field. Health workers must receive supportive supervision to strengthen the quality of the services they provide and adequate remuneration if they are not to seek under-the-table payments for delivery.

Maternal Mortality

Key indicators	Estimates (deaths per 100,000 live births)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	2004
Maternal mortality ratio	457	1,800	900

Complications that occur during pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in developing countries. It is estimated that approximately 529,000 women die worldwide each year from maternal causes. For every woman who dies, additional 20 — over ten million women in total—suffer injuries, infection and disabilities during pregnancy or childbirth.

The most common fatal maternal complication is postpartum 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 without forewarning at any time during pregnancy and childbirth, require prompt access to quality obstetric services that are equipped to (i) provide lifesaving drugs, antibiotics and transfusions and (ii) perform caesarean sections and other surgical interventions. A key MDG is to reduce the maternal mortality ratio (MMR) by three-quarters between 1990 and 2015.

Millennium Development Goal

Indicator
Maternal mortality ratio

Goal
175 deaths per 100,000 live births by 2015

Maternal mortality is defined as the death of a woman from pregnancy-related causes either during pregnancy or within 42 days following the termination of pregnancy. The MMR is the number of maternal deaths per 100,000 live births. In the MICS3 survey, the MMR is estimated by using the indirect sisterhood method. In order 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 (for deceased sisters) relative to pregnancy, childbirth and the postpartum period. The information that is gathered is then used to calculate the lifetime risk of maternal death and the MMR[13].

The estimate of the MMR from the Sierra Leone MICS3 survey is 457 maternal deaths per 100,000 live births (Table RH.5). The estimate of the MMR that has been generated from the MICS3 is an unstratified national-level estimate, given the large sampling errors that are generally associated with the MMR.

Discussion: Maternal mortality

An initial comparison of the MMR estimates generated from the MICS2 and MICS3 surveys may suggest that the MMR may have decreased substantially during the past five years. However, caution should be exercised while drawing conclusions from the comparison of these estimates. Estimates of MMR tend to be very imprecise, with very large confidence intervals, and therefore are not suggested to be used for tracking changes. For example, the MMR estimate of 1800 per 100,000 live births from MICS2 had a margin or error of about 800. Compared to international estimates, though, the current estimate of MMR appears to be very low.

The Sierra Leone public health community needs accurate information regarding the causes of maternal mortality, both from the clinical perspective as well as in terms of shortcomings of the health system. In addition to the implementation of the interventions mentioned throughout this report that are designed to reduce maternal mortality, it will almost certainly be necessary to accelerate the development of structures and human resources within the health system in order to achieve meaningful improvement in the situation.

[13] For more information on the indirect sisterhood method, see WHO and UNICEF, 1997.

IX. Child Development

Key indicators	Estimates (percent) 2005 (MICS3)
Adult's support for learning and school readiness	65
Father's support for learning and school readiness	65
Support for learning: Children's books	11
Support for learning: Non-children's books	29
Support for learning: Materials for play	52
Children left under inadequate care	21

It is well recognized that a period of rapid brain development occurs during the first three to four years of life. The quality of home care is the major determinant of the child's development during this period. Important indicators of the quality of home care include the amount and nature of adult activities with children, the presence of children's books in the home, and the conditions of 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 and child development was collected in the MICS3 survey. These activities include 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 almost two-thirds (65 percent) of surveyed under-five children, an adult engaged in more than four activities that promote learning and school readiness during the three days preceding the survey (Table CD.1). Adults engaged with children in an average of 3.8 activities. The table also indicates that fathers had engaged in one or more activities during the three days prior to the survey with 65 percent of children, suggesting that fathers in Sierra Leone are well-engaged in the process of promoting learning and readiness for school. One-quarter of children were living in a household without their natural fathers.

There are only minor gender differentials in terms of adult activities with children. A somewhat larger percentage of adults engaged in learning and school readiness activities with children in urban areas (72 percent) than in rural areas (63 percent). Strong differentials by province are also observed: Adult engagement in activities with children was greatest in the Western Area (82 percent) and lowest in the South (56 percent). Adult engagement was highest in the richest wealth quintile (72 percent) and varied little in the remaining four quintiles. Father's involvement in learning activities followed a somewhat different pattern, as it was highest in the East (76 percent), mid-range in the Western Area (62 percent) and lowest in the South (55 percent). Mothers and fathers with higher education engaged in these activities more frequently than did those with less education.

Exposure to books in early years does more than provide the child with greater understanding of the nature of print. It also gives the child opportunities to see others reading—such as older siblings doing school work. The presence of books in the home can be an important determinant of a young child's future school performance and intelligence.

In Sierra Leone, 29 percent of children live in households where at least three non-children's books are present (Table CD.2). Only 11 percent of children aged 0-59 months live in households where at least three children's books can be found. While no gender differentials are observed, urban children live in households where there is significantly more access to both types of books than exists in rural households. Fifty-five percent of under-5 children living in urban areas live in households with more than three non-children's books, while the figure is 22 percent in rural households. The percentage of under-5 children who live in households with three or more children's books is 27 percent in urban areas, compared to seven percent in rural areas. The presence of both non-children's and children's books does not differ significantly by child's age.

Fifty-two percent of children aged 0-59 months had 3 or more playthings to play with in their homes, while 12 percent did not have any of the playthings that were described to respondents (Table CD.2). The playthings that were read off to respondents by MICS3 enumerators included household objects (78 percent), homemade toys (50 percent), toys that came from a store (37 percent), and objects and materials found outside the home (71 percent). The percentage of children who have 3 or more playthings to play with differs by only two percentage points among male and female children. No urban-rural differentials are observed while only small differences are observed in terms of mother's education. Differences in the value of this indicator are negligible among the five wealth quintiles but do vary notably by province from a high of 64 percent in the East to 40 percent in the North. The background variable age of child is strongly correlated with the number of playthings that a child has, as children aged 24-59 months are significantly more likely to have 3 or more playthings than are children less than two years of age.

Leaving children alone or under the care of other young children is known to increase the risk of accidents. In the MICS3 survey, questions were asked to find out whether children aged 0-59 months were left alone during the week preceding the interview and whether they were left in the care of other children under 10 years of age.

Table CD.3 shows that 20 percent of children aged 0-59 months were left in the care of other children under ten years of age during the week preceding the interview while six percent of children were left alone. Combining these two indicators, it is calculated that 21 percent of children were left under inadequate care during the week preceding the survey. This indicator does not differ among male and female children and varies only modestly by location (rural/urban). Inadequate care was more prevalent among children whose mothers had no education (21 percent) or a primary-level education (24 percent) as opposed to children whose mothers had studied to the secondary level or beyond (16 percent). Children aged 24-59 months were left with inadequate care more (24 percent) than those who were aged 0-23 months (15 percent). Differences in this indicator with regards to socioeconomic status of the household are minor.

Discussion: Child development

The survey results presented above present a mixed picture of the state of child development in Sierra Leone. If the data that describe adults' support for learning and school readiness are accurate, they represent an encouraging finding regarding adults' interest in and dedication to furthering their children's education.

The findings that describe the availability of books in households are discouraging, if predictable, and reflect the low literacy rate in Sierra Leone, ignorance regarding the value of reading materials, poverty and a general unavailability of children's books. The low

availability of materials for children to play with is predictable, given that most families in Sierra Leone are simply trying to deal with poverty and survive, with the result that children's toys are not considered a priority issue. Parental responsibility is a critical component of child protection; the levels of inadequate care of small children reflect families that are engrossed with survival issues, exacerbated by a breakdown in the extended family support system.

Relevant policy makers in the GoSL should ensure that due priority is given to early child development (ECD) within the national development agenda. Educational policies should recognize and build on the links between adult literacy, ECD and parenting education. A thorough understanding of gender roles in the promotion of child learning in Sierra Leone is crucial for the strengthening of ECD. Policies should encourage the participation of both parents in parental education programs. The government should explore strategies to create an enabling environment for the provision of children's books at minimal or no cost to needy children and schools; for example, they could remove all tariffs related to the import of children's books. Policies related to child development should articulate the link between play and readiness for school, and also reinforce parental responsibility for child care despite difficult economic circumstances.

Programmers should put in place interventions that build parenting skills into adult literacy and ECD programs. They should focus on the development of innovative approaches to strengthening parenting skills to ensure the involvement of men in ECD. Local authors should receive support to develop children's books that are culturally relevant and interesting to the children of Sierra Leone.

X. Education

Pre-School Attendance and School Readiness

Key indicators	Estimates (percent) 2005 (MICS3)
Pre-school attendance among children aged 36-59 months	13
School readiness: Children in first grade that attended pre-school in previous year	7

Pre-school educational programs play an important role in increasing the readiness of children for school. One of the World Fit for Children goals is to promote early childhood education.

Only 13 percent of children aged 36-59 months in Sierra Leone are attending pre-school (Table ED.1). Urban-rural and province-level differentials are significant—24 percent of children aged 36-59 months attend pre-school in urban areas, compared to ten percent in rural areas. The attendance level is highest in the Western Area (30 percent), and lowest in the North (six percent). Although this indicator does not vary by gender, increasing socioeconomic status is strongly correlated with increasing levels of attendance. Thirty-one percent of children living in the wealthiest households attend pre-school while only eight percent of children from the poorest households attend. Only eight percent of children aged 36-47 months attend pre-school as compared to 19 percent of children aged 48-59 months.

An important indicator of school readiness is the percentage of children that currently attend the first grade of primary school who also attended pre-school the previous year (Table ED.1). Overall, only seven percent of children who are currently aged six years and who attend the first grade of primary school attended pre-school the previous year. The variation in the level of this indicator by background characteristics is almost identical to that described above for the indicator of pre-school attendance.

Discussion: Pre-school attendance and school readiness

The use of pre-school to increase children's readiness for school in Sierra Leone was found to be extremely low in MICS2 and has dropped even further during the past five years. Those few pre-schools that do exist are costly private institutions to which the average family has only limited access. The data presented above show that early child development (ECD) is not a national priority in Sierra Leone. This has implications for primary school enrolment, performance, retention, and completion.

These findings should represent an urgent wake-up call to the GoSL and its partners to become more involved in this sector. ECD is no longer an option for governments; it must be recognized as a national priority that supports the improvement of primary education. There is an urgent need for the approval and implementation of the draft GoSL ECD policy. Program planners need to marshal support (human, material and financial) for initiatives that increase the accessibility of the public to pre-school opportunities.

Primary and Secondary School Participation

Key indicators	Estimates		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1996-2004
Net intake rate in primary education *(children of school-entry age that are currently attending first grade)*	48	--	--
Primary school net attendance ratio *(children of primary-school age currently attending primary or secondary school)*	69	42	55
Secondary school net attendance ratio *(children of secondary-school age currently attending secondary school or higher)*	19	13[14] (1996-2004)	23
Net primary school attendance rate of children of secondary school age	46	--	--
Survival rate to grade five *(children entering the first grade of primary school that eventually reach grade five)*	92	85	87
Transition rate to secondary school *(children that were in the last grade of primary school during the previous school year that attend secondary school)*	52	--	--
Net primary completion rate *(children aged 11 years attending the last grade of primary school (excluding repeaters))*	11	--	--
Gender parity index: ratio of [girls : boys] attending school (primary; secondary)	1.01; 0.78	--	0.86; 0.8

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 MDGs 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 MICS3 indicators for primary and secondary school attendance include the following:

- 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 gender parity index (GPI)

The indicators of school progression include the following:

- Survival rate to grade five

[14] Source: SOWCR 2006.

- Transition rate to secondary school
- Net primary completion rate

Primary and secondary school attendance

The degree to which children attend primary school in a timely manner is defined in the MICS3 survey as the percentage of children who are of primary school entry age (6 years) and who attend the first grade of primary school. The value of this indicator in Sierra Leone is 48 percent (Table ED.2). Differentials by gender do not exist; however, significant differentials are present by province and urban-rural areas. In the Western Area, for instance, the value of the indicator reaches 67 percent, while it is 40 percent in the North. Children's participation to primary school is timelier in urban areas (60 percent) than in rural areas (44 percent). A positive correlation between this indicator and mother's education and socioeconomic status is observed; for children age six whose mothers have at least primary school education, an estimated 69 percent attend the first grade. In households in the highest wealth quintile, the percentage is around 67 percent, while it is 36 percent among children living in the least wealthy households.

Data presented in Table ED.3 show that 69 percent of children of primary school age in Sierra Leone (defined for this analysis as children aged 6-11 years) attend primary or secondary school. Eighty-five percent of children attend school in urban areas while 63 percent attend in rural areas. School attendance is highest in the Western Area at 89 percent and elsewhere ranges from 63 percent in the North to 72 percent in the East. There is no meaningful difference between male and female primary school attendance at any level or within any strata.

Millennium Development Goal

Indicator
Net primary school attendance rate

Goal
100 percent by 2015

Source: SL-PRSP, 2004.

The secondary school net attendance ratio is presented in Table ED.4. A huge decrease in this measure of age-appropriate attendance between primary and secondary school can be seen as only 19 percent of children of secondary school age (defined for this analysis as children aged 12-17 years) are attending secondary school. There is a huge gap in the value of this indicator between the Western Area (54 percent) and the remaining three provinces of the country (11-14 percent). The value of the indicator increases steadily by age of child from 10 percent for children aged 12 to 32 percent for children aged 17. Higher levels of this indicator are strongly associated with urban residence, high levels of mother's education, and high socioeconomic status. Among the remaining 81 percent of children of secondary school age who do not attend secondary school, 46 percent attend primary school and 35 percent are out of school (see below for further details).

The primary school net attendance ratio of children of secondary school age in Sierra Leone is presented in Table ED.4W. Almost half (46 percent) of the children of secondary school age are attending primary school when they should be attending secondary school. When we consider that 19 percent of children of secondary school age are attending secondary school, we can conclude that 35 percent of children in this age group do not attend school at all. Values of this indicator are highest outside of the Western Area and in rural locations. This indicator is negatively associated with the age of the child—65 percent of children aged 12 are in primary school, while only 19 percent of 17-year-olds are in primary school.

Data presented in Table ED.5 show that 92 percent of all children who start grade one in Sierra Leone eventually reach grade five. This estimate includes children that repeat grades but persevere and eventually move up to reach grade five. The percentage of children passing to the subsequent grade between grades one and five varies between 97 and 99 percent. There is little variation in the "survival rate to grade five" by background characteristics such as sex of child, area (urban/rural), and household socioeconomic status. This variable ranges from 87 percent in the East to 96 percent in the Western Area.

Primary school completion and transition to secondary school

Data regarding the net primary school completion rate are presented in Table ED.6. This indicator is defined as the percentage of children of primary completion age (11 years) who are attending the last grade of primary education (grade six). As such, it is a measure of the percentage of children who are on a "normal track" to complete their primary school education on time. Data from MICS3 show that the estimate for the net primary school completion rate is 11 percent in Sierra Leone, suggesting that most children are either delayed in the completion of their primary education or are not attending school at all. There is little difference in the rate between boys (12 percent) and girls (10 percent). The rate is 28 percent in the Western Area and varies between six and nine percent in the other three provinces. This indicator is strongly positively correlated with urban residence, high levels of mother's education and high socioeconomic status.

Data that describe the transition rate to secondary education are also presented in Table ED.6. Slightly over half (52 percent) of surveyed children who successfully completed the last grade of primary school during the year prior to the MICS3 survey were attending the first year of secondary school at the time of the survey. This rate varies little by gender but does vary notably among provinces; its value is 34 percent in the East, 43 percent in the South, 48 percent in the North, and 78 percent in the Western Area. Higher levels of the rate are strongly associated with urban residence, households where the mother's education is secondary level or higher and high socioeconomic status.

The ratio of girls to boys attending primary and secondary education is provided in Table ED.7. This ratio is better known as the Gender Parity Index (GPI). It should be noted that the results presented here are obtained from net attendance rates rather than gross attendance rates. The table shows that gender parity for primary school is 1.01, indicating virtually no difference in the attendance of girls and boys to primary school. However, the indicator drops to 0.78 at the national level for secondary education. This represents a divide between rural and urban locations—and perhaps even more so, between Freetown and the rest of Sierra Leone. The value of the GPI is 0.64 in all three provinces other than the Western Area (where it is 0.90) and 0.56 in rural areas as opposed to 0.82 in urban areas. Increasing wealth status of households is strongly associated with increases in gender parity for secondary school attendance.

Discussion: Primary and secondary school participation

Primary school attendance in Sierra Leone has increased substantially over the past five years and has now surged ahead of the regional norm. This is most likely due to improved access to education in areas that were held by the rebels at the time of the MICS2 survey as well as increased support to primary education throughout the country. Only half of the children six years of age enter primary school "on time", foreshadowing the "late" or "delayed" educational status of most children in Sierra Leone. The MICS3 result showing an extremely high survival rate to grade five is questioned by some education experts in Sierra Leone who note that their experience from the field suggests that the drop-out rate is still

very high between grades one and five, especially among girls. Educational policy as it pertains to primary education appears to be achieving success and should be continued. Policies related to increasing school enrolment—especially among girls—should be strengthened while the abolition of all hidden costs that create barriers to school enrolment must be pursued. Current policy calls for an effective coordination mechanism to be established as responsibility for educational programs is devolved from the Ministry of Education (MoE) to district and local councils. The GoSL and its partners supporting primary education in Sierra Leone must ensure that the coordination mechanism functions effectively and resources are distributed equitably if the goal of universal primary education by 2015 is to be met.

The results above present a much bleaker picture regarding secondary education in Sierra Leone. Not even one in five children of secondary school age attends secondary school—the remaining four are either delayed in primary school or do not attend school altogether. One-half of the children attending grade six do not advance to secondary school, due to factors that include limited physical access to secondary schools, cost-related factors, and the difficult secondary school entrance examination. The need now is to undertake a strategic reorientation in program planning and implementation for secondary education. Most of the current support for education in Sierra Leone goes to the primary level with little reaching the secondary and tertiary levels. The GoSL and its partners must intensify the development and implementation of diversified programs and activities for the secondary sector nationwide.

The gender parity index shows an encouraging situation at the primary level, with equivalent attendance rates for girls and boys. Although past figures are not available in Sierra Leone to assess trends, gender parity for primary education in Sierra Leone appears to be ahead of the rest of the region. Support for girls' education has been strongest at the primary level and gender parity at the secondary level may have suffered as a result. The MoE needs to enforce the Girls Education policy—especially at the second and tertiary levels—and otherwise intensify efforts that promote secondary and tertiary-level girls' education.

Adult Literacy

Key indicators	Estimates		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	2004
Literacy rate among women aged 15-24 years	25	[20[15]]	[48]

Note: MICS3 estimates not directly comparable with MICS2 or regional estimates. Please see footnote.

One of the World Fit for Children goals is to assure adult literacy. Increasing adult literacy is also an MDG for both men and women. In the MICS3 survey, results pertaining to literacy are reported for females age 15-24 in Table ED.8. Literacy was assessed based on (i) respondents' ability to read a simple, short statement that was written on a card or on (ii) school attendance (women who had completed at least one year at secondary level were assumed to be literate). The survey found that the literacy rate among Sierra Leonean females aged 15-24 is 25 percent. Similar to other educational indicators, the literacy rate is strongly and positively associated with urban residence, higher levels of education, and higher household wealth. The literacy rate is 31 percent among 15-19 year-olds but drops to 19 percent among 20-24 year-olds. Among provinces, literacy is highest in the Western Area (68 percent) but ranges between 15 and 20 percent in the remaining three provinces.

Discussion: Adult literacy

The low adult literacy rate among the young women of Sierra Leone lags well behind the regional norm. Support for female adult literacy programs has been in gradual decline over the past decade and must be reinvigorated, given the importance of adult literacy interventions--especially for women—to national development.

[15] MICS2 and regional estimates of literacy are for women aged 15-49 years. Literacy measured in MICS2 by asking heads of household if women could "read a newspaper or letter easily, with difficulty, or not at all." It is not clear which method(s) was used to generate regional estimate.

XI. Child Protection

Birth Registration

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1999-2004
Birth registration of children	48	47	41

The Convention on the Rights of the Child states that every child has the right to a name and nationality and the right to protection from being deprived of his or her own identity. Birth registration is a fundamental means of securing these rights. The corresponding goal of A World Fit for Children is to develop systems to ensure the registration of every child at or shortly after birth, thereby fulfilling his or her right to acquire a name and a nationality in accordance with national laws and relevant international instruments. The relevant MICS3 indicator is the percentage of children under 5 years of age whose birth is registered.

The births of 48 percent of children under five years of age in Sierra Leone have been registered (Table CP.1). There are no significant variations in birth registration across gender or age categories. Increasing mother's education status is positively associated with birth registration status. Birth registration status varies sharply by province; the highest level of birth registration is found in the South (72 percent), followed by the Western Area (67 percent), the East (45 percent), and the North (29 percent). Caretakers whose children's births had not been registered were asked why; common responses include "didn't know child should be registered" (33 percent), "costs too much" (21 percent), "doesn't know where to register" (20 percent), and "must travel too far" (15 percent).

Discussion: Birth registration

There has been no progress in expanding the coverage of birth registration in Sierra Leone over the past five years. Eighty-four percent of infants receive the BCG vaccination by their first birthday; registering the births of most or all of these infants should dramatically boost the percentage of births that are registered and strengthen this important aspect of child's rights. The government should implement the official policy to integrate birth registration into the BCG vaccination process.

Child Labour

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	2004
Child labour *(children aged 5-14 years that are involved in child labour)*	48	[72[16]]	41
Labourer students *(children aged 5-14 years involved in child labour activities that attend school)*	64	--	--
Student labourers *(children aged 5-14 years attending school that are involved in child labour activities)*	45	--	--

Note: MICS3 and regional estimates not directly comparable with MICS2 estimates.

Article 32 of the Convention on the Rights of the Child 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 document mentions nine strategies to combat child labour, while the MDGs call for the protection of children against exploitation. In the MICS questionnaire, a number of questions were asked to document the issue of child labour—that is, the involvement of children 5-14 years of age in labour activities. A child was considered to be involved in child labour activities if they met the following criteria 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.

These definitions make it possible to differentiate child labour from child work, which in turn allows organizations working in child protection to identify the types of work that should be eliminated. The assessment described below yields a minimum estimate of the prevalence of child labour, as some children may be involved in hazardous labour activities (and thus be performing child labour) for a smaller number of hours than is specified in the criteria above. Table CP.2 presents the results of child labour by the type of work. A total of 48 percent of surveyed children perform child labour. Forty-one percent of children work for a family business, while only two percent work on household chores for over 28 hours per week. Among those children who work outside the household, 16 percent perform unpaid work while two percent are paid for their efforts. Although the percentage of children performing child labour does not vary by gender, it is associated strongly with rural residence, younger age (5-11 years), lack of participation in school, lower mother's educational level, and low socioeconomic status. The percentage of children involved in child labour varies from 28 percent in the Western Area to 57 percent in the North.

Table CP.3 presents data that describe the percentage of children classified as student labourers or as labourer students. The indicator student labourer is defined as the percentage of children who are involved in child labour activities among all children who attend school at the time of the MICS3 survey. The MICS3 survey found that among the 68 percent of children 5-14 years of age attending school in Sierra Leone, 45 percent are also involved in child labour activities. The association of this indicator with background

[16] Child labour was measured in the MICS2 survey using a definition different than that used in MICS3.

variables is very similar to that described in the preceding paragraph for the indicator of child labour.

The indicator labourer student is defined as the percentage of children who attend school among all children who are involved in child labour activities at the time of the MICS3 survey. In Sierra Leone, among the 48 percent of the children classified as child labourers, the majority of them (64 percent) also attend school. The association of this indicator with background variables is essentially the inverse of that described for student labourers; while it does not vary notably by gender or age of child, it is associated strongly with urban residence, higher levels of mother's education, and higher socioeconomic status. The percentage of labourer students varies from 88 percent in the Western Area to 58 percent in the North.

Discussion: Child labour

Child protection experts in Sierra Leone find the estimate of children performing labour (48 percent) to be lower than they had expected. Particularly surprising is the finding that only two percent of children work 28+ hours per week on household chores. This may reflect a systematic underestimation by respondents of the time children spend on household chores. At the same time, it should be noted that the overall estimate of child labour is higher than regional norm.

The percentage of children who participate in child labour is approximately equal among students (45 percent) and among the general population of children (48 percent). This suggests that being a student does not stop children from working. Perhaps more important is the question: Does being a child labourer stop children from going to school? Table CP.3 shows that among all children aged 5-14, 68 percent are currently attending school, as compared to a 64 percent attendance rate among labourer students. This latter finding suggests that child labourers and non-labourers alike have roughly equal attendance rates at school. One conclusion that might be drawn here is that performing labour is so firmly entrenched in the lives of the children of Sierra Leone that it does not affect other activities such as school attendance—many children somehow manage to attend school despite the burden of their jobs.

In order to protect children from being exploited as labourers, the GoSL should ratify the International Labour Organization conventions 138 (regarding the minimum age that a child should reach before being eligible for labour) and 182 (which requires countries to commit themselves to take immediate action to prohibit and eliminate the worst forms of child labour and reflect this in both criminal and labour laws). It should also ensure alignment and harmonization between the laws and policies in the labour, education and social welfare sectors and the enactment of the Child Rights Bill.

With regards to students and labour, the GoSL must maintain and enhance all children's access to school. This involves the creation of a school environment that caters to children who are involved in labour and that support child labourers' attendance in school. The amount of non-school-related labour that is performed by students should be limited; fully half of the children who attend school perform labour, a situation that demands a response.

Child Discipline

Key indicators	Estimates (percent) 2005 (MICS3)
Child discipline: Any psychological or physical punishment	92
Child discipline: Non-violent aggression only	6
Child discipline: Psychological aggression	82
Child discipline: Minor physical punishment	76
Child discipline: Severe physical punishment	23
Mother / caretaker believes that physical punishment is necessary	56

As stated in A World Fit for Children, "children must be protected against any acts of violence." The Millennium Declaration likewise calls for the protection of children against abuse, exploitation and violence. In the Sierra Leone MICS3 survey, mothers and caretakers of children age 2-14 years were asked a series of questions regarding how parents discipline their children when they misbehave. This line of inquiry was pursued because violence against children is practiced through "child discipline" in many countries. During the administration of the survey in the field, one child aged 2-14 years was selected randomly in each household. The respondent was then asked a series of questions regarding whether / how they had recently disciplined the selected child. Responses to these questions were used to construct two principle indicators that describe aspects of child discipline: 1) the percentage of children 2-14 years that experience psychological aggression as punishment or physical punishment (see Row 1 in table above); and, 2) the percentage of parents / caretakers of children 2-14 years of age that believe that in order to raise their children properly, they need to physically punish them (last row in table above).

In Sierra Leone, 92 percent of children aged 2-14 years were subjected to at least one form of psychological or physical punishment by their mothers/caretakers or other household members (Table CP.4). Twenty-two percent of children were subjected to severe physical punishment while 76 percent of children received minor physical punishment. Fifty-six percent of mothers/caretakers stated that children should be physically punished. Only minor associations were discovered between the various types of discipline that were estimated and the background variables measured in the MICS3 survey.

Discussion: Child discipline

These results clearly show the punitive nature of child discipline techniques that are used by the caretakers of the children of Sierra Leone. Psychological and physical punishments are common cultural practices in Sierra Leone and people do not consider them necessarily to be bad ways to discipline children. The GoSL should pass the Child Rights Bill which deals directly with the issue of excessive punishment for children. Supporters of child rights and protection need to advocate for the passage of this Bill while also supporting activities designed to improve child discipline practices in Sierra Leone. Further study of these practices and programme initiatives should be coordinated with the UN study on violence against children.

Early Marriage and Polygyny

Key indicators	Estimates (percent) 2005 (MICS3)	West-Central Africa 1986-2004
Women first married before age 15 / before age 18	27 / 62	-- / 45
Women aged 15-19 currently married or in union	36	--
Women aged [15-19 / 20-24 years] whose age differs from current spouse's by 10 or more years	58 / 56	--
Women in polygynous union	43	--

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 or 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 that is supported by an enforcement mechanism to address cases of child marriage; and, the existence of cultural or religious norms that condone the practice.

In many parts of the world parents encourage the marriage of their daughters while they are still children. They do so with the hope that the marriage will benefit them both financially and socially, while also relieving financial burdens on the family. In fact, child marriage is a violation of human rights, compromising the development of girls and often resulting in early pregnancy and social isolation. Girls who marry as children receive little or no education or vocational training which only reinforces the gendered nature of poverty. The right to "free and full" consent to marriage is recognized in the Universal Declaration of Human Rights—with the recognition that consent cannot be "free and full" when one of the involved parties 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. Article 16 of the Convention 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. Child marriage is also 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 power 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. When 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 to be significant factors that help to determine a girl's risk of becoming married while still a child. Women who marry at young ages are more likely to believe that it is sometimes acceptable for a husband to beat his wife and are more likely to experience domestic violence themselves. The age gap between partners is thought to contribute to 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 younger members of this cohort. There is evidence to suggest that girls who marry at young ages are more likely to marry older men, which puts them at increased risk of HIV infection. Parents may seek to marry off their girls to protect their honour, and men often seek younger women (or girls) as wives as a means to avoid choosing a wife who may already be infected. The pressure on this young wife to reproduce combined with the power imbalance that results from the age differential between husband and wife can contribute to very low levels of condom use among such couples.

Two of the indicators that are widely used to measure the degree to which early marriage is practiced are (i) the percentage of women married before 15 years of age, and (ii) the percentage married before 18 years of age. Twenty-seven percent of women interviewed during the MICS3 were married before fifteen years of age (Table CP.5). Among different age strata of respondents, this indicator is lowest among women currently aged 15-19 years (15 percent), indicating that the practice of early marriage in Sierra Leone is declining. The percentage of women married before fifteen years of age is highest in rural areas, in households that have low socioeconomic status, and where the mother's educational level is lower.

Sixty-two percent of all women interviewed during the MICS3 were married before eighteen years of age while thirty-six percent of women respondents currently aged 15-19 years reported that they were currently married or in union. The patterns of these two indicators among different sub-populations (e.g., rural/urban, by province, etc.) are similar to those described in the paragraph above for marriage below fifteen years of age.

Data presented in Table CP.5 also show that polygyny is widely practiced in Sierra Leone. Forty-three percent of the women interviewed during the MICS3 who are currently married or in union reported that their husband/partner has another wife. Among provinces, the practice of polygyny is by far the lowest in the Western Area (12 percent)—in the remaining provinces, it ranges from 38 percent in the East to 53 percent in the North. The percentage of women whose partners are in polygynous relationships increases with the increasing age category of the women. Increasing women's educational status is associated with a decreasing percentage of women reporting polygyny. Women in the richest wealth quintile report the lowest prevalence of polygyny (27 percent). The percentage of women reporting polygyny in the remaining four quintiles is similar, ranging from 43 to 48 percent.

The dangers inherent in the practice of marriage between young girls and older men were discussed above. The indicator that has been constructed to measure spousal age difference is the percentage of women who are currently married/in union with a man older by ten or more years than them (see Table CP.6). The estimate of this indicator among women aged 15-19 is 58 percent while it is 56 percent among women aged 20-24. Among women aged 15-19 years, the practice is lowest in the Western Area (43 percent) and highest in the South (61 percent). Higher levels of high spousal age difference are found in rural communities and households where the head of household is uneducated. The practice of women marrying men who are ten or more years senior to them is clearly widespread across all strata of society in Sierra Leone.

Discussion: Early marriage and polygyny

The data presented above paint a disturbing picture of early marriage, widespread polygyny, and a common practice of women marrying men who are much senior to them. Local experts concur that cultural norms, early pregnancy and forced marriage are all likely contributing factors to these practices in Sierra Leone.

Efforts to estimate the indicators reported above have only recently begun at the global level. The MICS3 survey has generated the first estimate of many of these indicators in Sierra Leone. Levels of marriage before age 18 are higher in Sierra Leone than the regional average, suggesting that this aspect of child protection has been inadequately addressed by policy makers and program managers.

The Child Rights Bill of the GoSL makes marriage illegal below the age of 18. Concerned organizations need to advocate for the passage of this act. Although legislation alone will not eliminate early marriage, the Child Rights Bill is an important first step that establishes an age for informed consent and responsibility. Policies are also required to prevent or discourage children and young women from entering into polygynous unions. A woman's educational status is positively correlated with a reduced probability that she will marry early or be in a polygynous union, suggesting that efforts to promote education of girls and young women may contribute to reducing these practices.

Membership in Secret Societies and Female Genital Cutting

Key indicators	Estimates (percent) 2005 (MICS3)	West-Central Africa 1998-2004
Prevalence of membership in secret societies [proxy for prevalence of female genital cutting (FGC)] *Women aged 15-49 years who are members of secret societies that practice genital cutting*	94	29
Prevalence of daughters' membership in secret societies [proxy for prevalence of FGC among daughters] *Women aged 15-49 years who have at least one daughter is a member of a secret society*	35	19
Approval of secret societies *Women aged 15-49 years who favour the continuation of secret societies*	86	--

Female genital cutting (FGC) is the partial or total removal of the female external genitalia or other injury to the female genital organs. FGC is always traumatic with complications that can include excruciating pain, shock, urine retention, ulceration of the genitals and injury to adjacent tissue. Other complications may include septicaemia, infertility, obstructed labour, and even death. The practice of FGC in Sierra Leone is shrouded in secrecy and conducted by members of a secret society known as the Bondo Society. Most women in Sierra Leone are initiated into the Bondo Society between the ages of 8 and 18. It is widely reported that all women who are initiated into the Bondo Society undergo FGC. FGC in Sierra Leone is generally done under the auspices of the local head of the Bondo Society. The incision is generally made with the assistance of qualified nurses within the community using new razor blades under local anaesthesia.

FGC 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 the rights that are violated are the rights to the highest attainable standard of health and to bodily integrity. Furthermore, it can be argued that girls under age 18 cannot be said to give informed consent to a practice that is as potentially damaging as FGC is.

MICS3 survey planners in Sierra Leone felt that—given the secrecy that surrounds the Bondo Society and the practice of FGC—respondents would not give accurate responses if they were directly asked whether they had undergone FGC. Given that most or all women who are initiated into the Bondo Society in Sierra Leone undergo FGC, it was decided to use "membership in the Bondo Society" as a proxy for "have undergone FGC" in the MICS3 survey. While this approach may yield a valid measure of prevalence of the practice of FGC—although there are no empirical data to support this assumption—it is certainly not a valid way to measure attitudes towards FGC. This latter issue is discussed at greater length below.

In the MICS3 survey, a series of questions were asked to assess the prevalence of membership in secret societies as well as women's attitudes towards secret societies. The results of this inquiry are presented in Table CP.7. Ninety-four percent of respondents stated that they were members of the Bondo Society, which is interpreted to mean that the prevalence of FGC in Sierra Leone among women aged 15-49 is approximately 94 percent.

Lower levels of membership in the Bondo Society were found in the Western Area, in urban areas, among women aged 15-19 years, among more educated women, and among women with higher socioeconomic status. Although 86 percent of respondents stated that they thought that the Bondo Society should be continued, this should not be interpreted to mean that most or all of them think that the practice of FGC should be continued. It is very possible that a substantial percentage of respondents who stated that they think the Bondo Society should be continued either (i) value some aspects of the Bondo Society but do not approve of the practice of FGC, and/or (ii) do not feel comfortable stating to interviewers that the Bondo Society should be discontinued.

Data that are presented in Table CP.8 show that 34 percent of the daughters of respondents are members of the Bondo Society (a result that is interpreted as meaning that the prevalence of FGC is at least 34 percent among this population). Lower prevalence levels are associated with residence in the Western Area or urban locations, younger age of mother, and mother's education at the primary or secondary-plus level. This indicator does not vary according to household socioeconomic status.

Table CP.8A shows the distribution of daughters by age at the time of initiation to the secret society (age at which FGM/C was performed). Relatively lower numbers of daughters are initiated during the first five years of life (10 percent), while during ages 5-7, 19 percent are initiated. Of particular interest is age 10, when 14 percent of daughters are initiated. A significant proportion of daughters are initiated after age 15 (14 percent).

Discussion: Female genital cutting and membership in the Bondo Society

The practice of FGC is deeply entrenched in societal norms in Sierra Leone. Prevalence is lower among the younger generation and younger mothers appear to be less likely to have their own daughters undergo FGC. These findings suggest that there is an increasing—albeit extremely modest—trend to not practice FGC among the young generation in Sierra Leone. This creates an opportunity for interventions to stop this harmful practice.

Leading organizations that work in the field of child protection, including UNICEF, should advocate with the GoSL to pass the Child Rights Bill that bans harmful cultural practices. Further information is required regarding why women have their daughters undergo FGC. Given this information, program planners can design appropriate programs to reduce the practice of FGC. Partnerships should be created with appropriate groups to combat FGC. Community-based action, including declarations by chiefs and communities, will certainly be part of an overall strategy to change people's attitude and behavior with regards to FGC.

The findings presented here regarding the prevalence of FGC were obtained based on the assumption that "membership in the Bondo Society" implies "has undergone FGC." This assumption needs to be validated through small-scale field research before it is accepted as fact. A respondent's statement that she supports the continuation of the Bondo Society should not be interpreted as support for the practice of FGC—even though she may, in fact, support its practice. Further research is required to measure the extent of support for the continuation of both the Bondo Society as well as for the practice of FGC in Sierra Leone.

Domestic Violence

Key indicators	Estimates (percent) 2005 (MICS3)
Women who consider that a husband is justified in beating his wife if she:	
• Goes out without telling him	73
• Neglects the children	74
• Argues with him	71
• Refuses sex	63
• Burns the food	55
• For any of above reasons	85

A number of questions were asked of women aged 15-49 years to assess their attitudes towards whether husbands are justified in hitting or beating their wives/partners in a variety of scenarios. These questions were asked in order to better understand the cultural beliefs that are often associated with the prevalence of violence against women by their husbands and partners. The main assumption that underlies these questions is that women who agree with statements that indicate that their husbands and partners are justified in beating their wives/partners under the situations described tend to be abused by their own husbands and partners. The findings from the survey are described in Table CP.9. Over half of the respondents stated that beating is justified for each of the five situations that were described; the percent who felt so ranged from 54 percent for "if she burns the food" to 74 percent for "neglects the children." Eighty-five percent of all respondents felt that beating was justified for one or more of the situations that were described. The level of this latter indicator ranged from 66 percent in the Western Area to 90 percent in the North. Higher levels of positive attitudes towards domestic violence are associated with rural residence, women who are currently married or in union (as opposed to women who were never married or formerly married), and lower educational status. Women in the wealthiest quintile of respondents were less supportive (73 percent) of domestic violence than respondents in the lower four wealth quintiles (range: 84-90 percent).

Discussion: Domestic violence

An overwhelming majority of women in Sierra Leone clearly think that their partners are justified in committing domestic violence against them in a variety of situations. This attitude may be related to the high level of psychological and physical punishment that children endure in Sierra Leone. The GoSL should develop policy that recognizes the problem of domestic violence and seeks to diminish its practice. Advocacy and sensitization will be needed, especially in the provinces, to change women's attitude and men's behavior with regards to domestic violence.

Child Disability

Key indicators	Estimates (percent) 2005 (MICS3)
Children aged 2-9 years with the following disabilities:	
1. delay in sitting, standing or walking	4
2. difficulty seeing	1
3. appears to have difficulty hearing	2
4. difficulty in understanding instructions	5
5. difficulty walking or moving arms	2
6. has fits, becomes rigid	2
7. does not learn to do things like others	6
8. cannot speak or be understood	10
9. appears mentally backward or dull	5
10. has at least one of the above disabilities	23
Children whose speech is not normal (children aged 3-9 years)	16
Children who cannot name at least one object (children aged 2 years)	38

One of the World Fit for Children goals is to protect children against abuse, exploitation, and violence, including the elimination of discrimination against children with disabilities. In the MICS3 survey, a series of questions was asked to respondents for the Household Questionnaire in order to assess the prevalence of a number of disabilities/impairments in children aged 2 to 9 years such as sight impairment, deafness, and difficulties with speech. This approach rests in the concept of functional disability developed by WHO and aims to identify the implications of any impairment or disability for the development of the child (e.g., health, nutrition, education, etc.). The results of this inquiry are presented in Table CP.10 and are summarized in the table directly above. Caretakers report that 16 percent of children aged 3-9 years do not speak normally and that 38 percent of children aged two years cannot name at least one everyday object. According to caretaker reports, 23 percent of surveyed children demonstrate at least one of the nine surveyed disabilities. This indicator varies from 14 percent in the Western Area to 37 percent in the South. Somewhat higher levels of reported disability are found in children living in rural areas and among younger children (aged 2-4 years).

Discussion: Child disability

The rate of "disabilities" reported by respondents appears to be quite high and brings into question the validity of their responses. Further research is required to confirm or complement the findings presented here.

XII. HIV/AIDS, Sexual Behaviour, and Orphaned and Vulnerable Children

Knowledge of HIV Transmission and Utilization of HIV Testing Services

Key indicators	Estimates (percent)		West-Central Africa
	2005 (MICS3)	2000 (MICS2)	1998-2004
Comprehensive knowledge about HIV prevention among young people	17	--	18
Knowledge of 2 ways of prevention	44	--	--
Knowledge of 3 ways of prevention	35	21	--
Rejection of 3 misconceptions	21	19	
Knowledge of all three ways of mother-to-child transmission of HIV	54	27	--
Positive attitude towards people with HIV/AIDS	5	--	--
Women who know where to be tested for HIV	18	9	--
Women who have been tested for HIV	6	2	--
Counselling coverage for the prevention of mother-to-child transmission of HIV	41	--	--
Testing coverage for the prevention of mother-to-child transmission of HIV	5	--	--

One of the most important prerequisites for reducing the rate of HIV infection is for the general population to have accurate knowledge of how HIV is transmitted and how to prevent transmission. Correct information is the first step toward raising awareness and giving young people the tools they need to protect themselves from infection. Misconceptions about HIV are common and can confuse young people and hinder prevention efforts. Populations in different countries are likely to have variations in misconceptions although some appear to be universal (for example, that HIV can be transmitted through sharing food or from mosquito bites). The UN General Assembly Special Session on HIV/AIDS (UNGASS) has called on governments to improve the knowledge and skills of young people to protect themselves from HIV. The indicators that have been identified to measure progress towards the achievement of both this goal—as well as measure achievement of the MDG that states that HIV infections should be reduced by half—describe (i) the level of knowledge of HIV and its prevention and (ii) the level of practice of behaviours that prevent further spread of the disease.

This section of the MICS3 survey report describes the current status of knowledge regarding HIV transmission as well as the utilization of HIV testing services. The MICS3 HIV module was administered to all women 15-49 years of age who participated in the survey.

Knowledge of HIV prevention and transmission

The percentage of young women who have comprehensive and correct knowledge of HIV prevention and transmission—defined as women aged 15-24 years that correctly identify two ways of avoiding HIV infection and reject three common misconceptions about HIV transmission—is a key indicator for both an MDG as well as for UNGASS. Respondents were asked questions to determine 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 of this inquiry are presented in Tables HA.1 and HA.3.

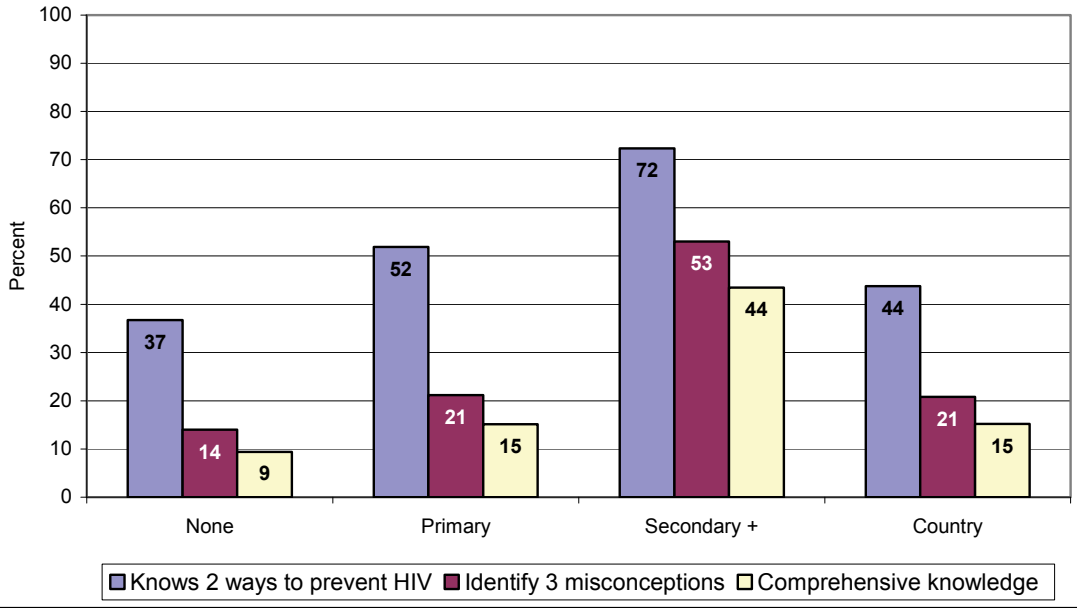
In Sierra Leone, two-thirds of the interviewed women (67 percent) have heard of AIDS. Forty-four percent of respondents know two ways of preventing HIV transmission while 35 percent know all three ways. Eighty-one per cent of women living in the Western Area know two prevention methods; among women in the other three provinces, the percentage of women with this knowledge ranges from 34 percent in the North to 42 percent in the South. As expected, the percentage of women who know two prevention methods increases with women's educational level and wealth status.

Table HA.2 presents data that describe the percentage of women who can correctly identify two common misconceptions concerning HIV. This indicator is based on the misconceptions that HIV can be transmitted by sharing food and mosquito bites. The table also provides information on whether women know that HIV cannot be transmitted by supernatural means and that HIV can be transmitted by sharing needles. Forty-one percent of women know that HIV cannot be transmitted by sharing food and 41 percent of women know that HIV cannot be transmitted by mosquito bites, while 42 percent know that a healthy-looking person can be infected. Of the interviewed women, only 21 percent both reject the two common misconceptions and know that a healthy-looking person can be infected. As with other HIV-related indicators, the level of this measure is much higher in the Western Area (59 percent) than in the remaining three provinces (range: 11 to 20 percent). Higher levels of knowledge are associated with urban residence, higher levels of education, and higher socioeconomic status.

Table HA.3 summarizes information from Tables HA.1 and HA.2 and presents the percentage of women aged 15-49 who have comprehensive correct knowledge of HIV: that is, who (i) know two methods of preventing HIV, (ii) reject two common misconceptions regarding HIV, and (iii) know that a healthy looking person can have HIV. Only 15 percent of respondents have comprehensive correct knowledge of HIV. Among young women aged 15-24 years, 17 percent have comprehensive correct knowledge of HIV transmission. Fifty-two percent of respondents in the Western Area demonstrated comprehensive correct knowledge of HIV. In the remainder of the country, the value of this indicator ranges from five percent in the North to 16 percent in the East. Level of education (see Figure HA.1), residence, and socioeconomic status are all highly associated with the level of this indicator.

Knowledge of mother-to-child transmission (MTCT) of HIV is also an important prerequisite for women if they are to seek HIV testing when they are pregnant in order to avoid potential infection of the child. Women need to know that HIV can be transmitted from the mother to the child during pregnancy, delivery, and through breastfeeding. The level of knowledge among women age 15-49 years concerning MTCT is presented in Table HA.4. Overall, 63 percent of women know that HIV can be transmitted from mother to child. Fifty-four percent of women know all three ways that MTCT can take place. The level of this indicator is notably higher in the Western Area (81 percent) than in the other three provinces (range: 44 to 60 percent). Higher levels of knowledge are associated with urban residence, higher levels of education, and higher socioeconomic status.

Figure HA.1 Percent of women who have comprehensive knowledge of HIV/AIDS transmission, by women's educational level, Sierra Leone, 2005



Attitudes towards PLHA

The MICS3 questions on attitudes toward people living with HIV/AIDS (PLHA) measure stigma and discrimination in the Sierra Leonean community. A respondent is considered to not have shown stigma and discrimination if she demonstrates an accepting attitude with regards to the following four scenarios: 1) would care for a family member who is sick with AIDS; 2) would buy fresh vegetables from a vendor who is 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 the HIV status of a family member a secret. Table HA.5 summarizes respondents' attitudes towards PLHA. Forty-six percent of respondents stated that they would not care for a family member who was sick with AIDS while 36 percent said that if a family member had HIV they would want to keep it a secret. Sixty-nine percent feel that a teacher with HIV should not be allowed to work and 78 percent would not buy food from a person with HIV/AIDS. Ninety-five percent of respondents agreed with at least one of these four discriminatory statements while only five percent did not agree with any of them and thus did not show any discrimination towards PLHA. Lack of stigma and discrimination towards PLHA is associated with urban residence and high levels of education and socioeconomic status.

Utilization of HIV testing services

Other important indicators with regards to HIV that were estimated in the MICS3 survey include women's knowledge of where HIV testing services are offered and the extent to which they utilize these services. Information related to these two indicators is presented in Table HA.6. Only 16 percent of women know where they can be tested while six percent reported that they actually were tested. Among those women who were tested, approximately two-thirds (69 percent) were told the result. Knowledge of a location where HIV testing is offered is highest among respondents in the Western Area (45 percent) and East (25 percent) and lowest in the North (eight percent). Knowledge of the location of an

HIV test site is associated with urban residence, high levels of education, and high socioeconomic status. The patterns of association of background variables with the indicator percentage of women who have been tested for HIV are identical except that the level of the indicator is highest in the Western Area (16 percent) and South (six percent) and lowest in the East (three percent).

Data were gathered from women who had given birth within the two years preceding the survey regarding any HIV counselling and testing that they may have received during antenatal care (ANC) visits. Results from this inquiry are presented in Table HA.7. Eighty-one percent of respondents utilized ANC and 41 percent were provided with information about HIV prevention during the visit; this signifies that slightly over half (41/81 = 51 percent) of respondents who utilized ANC received information about HIV prevention. The percentage of women who received information about HIV prevention during the ANC visit was highest in the East (54 percent) and Western Area (53 percent) and lowest in the South (33 percent). Higher levels of this indicator are associated with urban residence, high educational status, and high socioeconomic status.

Seven percent of these same respondents were tested for HIV at an ANC visit and five percent received the results of their HIV test at an ANC visit. Similar to other results discussed above, although the practice of counselling women during the ANC visit regarding HIV prevention was highest in the East, the percentage of women in the East who were tested for HIV at the ANC visit was the lowest (four percent) among all four provinces. The indicator was highest in the Western Area (22 percent).

Discussion: Knowledge of HIV prevention and transmission and utilization of HIV testing
Relatively few of the MICS3 indicators presented in this section have been measured previously in Sierra Leone. Two components of the indicator comprehensive knowledge about HIV/AIDS were measured in both MICS2 and MICS3 —knowledge of 3 ways of prevention and rejection of 3 misconceptions—and the modest positive trends in these indicators can be seen in the table above. Although there has been improvement in these two indicators, the overall percentage of women with comprehensive knowledge remains disturbingly low. HIV/AIDS prevention can be most effectively addressed at the policy level through the establishment of policies that empower women, such as girls education, income generation, etc. IEC programs that educate the public about HIV/AIDS should attempt to improve knowledge about both prevention as well as misconceptions and should be gender-sensitive with a specific focus on women. The North province stands out as the area of the country where knowledge regarding HIV prevention and testing sites is lowest.

MICS3 results with regards to attitudes towards PLHA suggest that widespread stigma and discrimination towards PLHA is a huge problem in Sierra Leone. Officials working in HIV prevention and control should intensify efforts to address this burning issue so that people at risk of HIV will feel more comfortable seeking testing and—if they are found to be HIV-positive—treatment and support.

Although half of pregnant women receive counselling on HIV at ANC visits, very few know where they can be tested and even fewer are actually tested. Public health officials should continue to promote HIV counselling during ANC visits while providing health workers with specific information regarding where testing services are found. Indicators that measure knowledge of testing sites and HIV test coverage among all women aged 15-49 show modest improvement since 2000 but remain extremely low.

In summary, the data presented above suggest that HIV/AIDS interventions in Sierra Leone should be more vigorously implemented with a specific focus on women.

Sexual Behaviour Related to HIV Transmission

Key indicators	Estimates (percent) 2005 (MICS3)	West-Central Africa 1998-2004
Age at first sex among young people *Women aged 15-19 years that had sex before age 15.*	25	--
Age-mixing among sexual partners *Among sexually active women aged 15-24 years, those that had sex in the past 12 months with a partner who was 10 or more years older than they were.*	39	--
High-risk sex in the last year *Among women aged 15-24 years who were sexually active in the past year, those that have had sex with a non-marital, non-cohabitating partner.*	43	--
Condom use with non-regular partners *Among women aged 15-24 years who had a non-marital, non-cohabiting sex partner(s) in the previous 12 months, those reporting condom use with their last non-marital, non-cohabiting sex partner.*	20	26

Promoting safer sexual behaviour is critical for reducing HIV prevalence. The use of condoms during sex, especially with non-regular partners, is especially important for reducing the spread of HIV. Globally, over half of new HIV infections are among young people 15-24 years; a change in behavior among this age group will thus be especially important to reduce new infections.

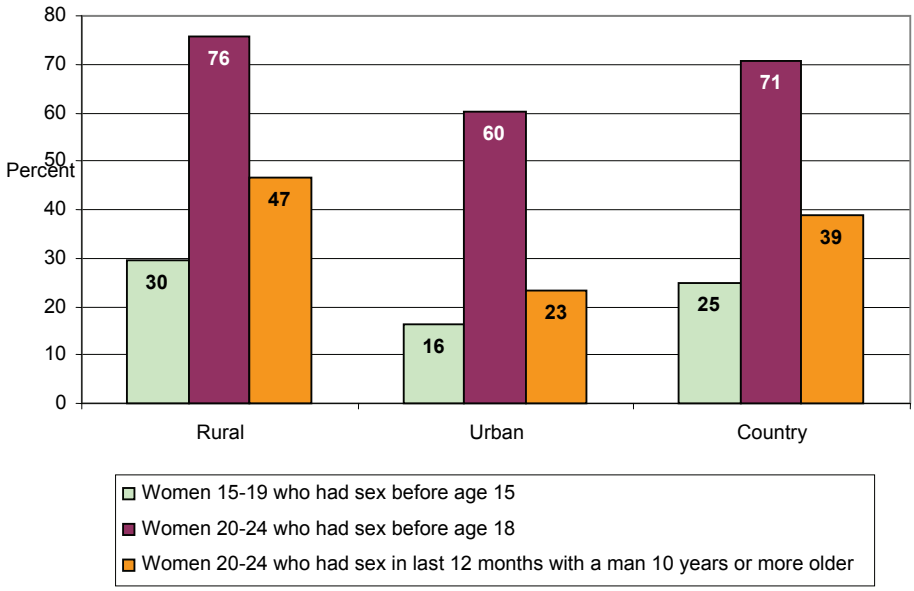
A module of questions was administered to women 15-24 years of age in the MICS3 survey to assess their risk of HIV infection through high-risk sexual practices that include having sex at an early age, having sex with older men, having sex with a non-marital non-cohabitating partner, and failure to use a condom during sex with non-regular partners.

The results of this assessment are presented in Table HA.8 and Figure HA.2. Twenty-five percent of women aged 15-19 reported that they had sex before age 15. The level of this indicator is lower in the Western Area and East (14 and 16 percent, respectively) and higher in the South and North (30 and 31 percent, respectively). Girls who had sex before age 15 were more likely to live in rural areas, have low or no education, and have low socioeconomic status. The percentage of women aged 20-24 who reported that they had sex before age 18 is much higher (71 percent).

As noted previously, girls who have sex with older men are at increased risk of HIV infection. In the MICS3 survey, 39 percent of women aged 15-24 stated that they had sex in the 12 months preceding the survey with a man who was ten or more years their senior. This practice is much lower in the Western Area (18 percent) than in the other three provinces (range: 40-45 percent). Higher levels of this practice are found in rural areas, among women

aged 20-24 (as compared to those aged 15-19), and among less educated women and those with lower socioeconomic status.

Figure HA.2 Sexual behaviour that increases risk of HIV Infections, Sierra Leone, 2005



Condom use during sex with men other than husbands or live-in partners (non-marital, non-cohabiting) was assessed in women 15-24 years of age who had sex with such a partner in the previous year (Table HA.9). Forty-three percent of women 15-24 years report having sex with a non-regular partner in the 12 months prior to the MICS. Among those women, only one in five report having used a condom when they had sex with the high-risk partner. The use of a condom during high-risk sex in was highest among women aged 15-24 years in the Western Area (31 percent) and the North (21 percent) and lowest in the East (11 percent). Women with secondary or higher education, woman living in urban areas, and women in the highest wealth quintile were more likely to use a condom with such a partner.

Discussion: Sexual behavior related to HIV transmission

The indicators presented in the table above highlight the finding that young women aged 15-24 in Sierra Leone are at substantial risk of contracting HIV. Two in five sexually active women in this age group engage in high-risk sex, many without the protection of a condom. Twenty-five percent of girls aged 15-19 have had sex before 15 years, which increases their risk of contracting HIV.

Experts in Sierra Leone note that a lack of information regarding HIV/AIDS, poverty, lack of life skills, peer pressure, family separation, early marriage, and lack of access to condoms all contribute to these dismal findings. High-risk sexual activity among this important target group increases the spread of HIV and must be combated directly. Enhanced enforcement of the National Youth Policy and Child Rights Bill should contribute to addressing this problem. The promotion of education for all—with a focus on gender balance—should likewise help to prevent high-risk behaviours. Information regarding HIV/AIDS should be integrated into educational curricula at all appropriate levels and IEC programs that promote delayed sex and the use of condoms should be intensified.

Orphans and Vulnerable Children

Key indicators	Estimates (percent)		Sub-Saharan Africa
	2005 (MICS3)	2000 (MICS2)	1998-2004
Prevalence of orphans	11	12	--
Children not living with biological parent	20	16	--
Prevalence of vulnerable children	18	--	--
School attendance ratio of orphans versus non-orphans	0.82	0.71	0.83
External support to children orphaned and made vulnerable by HIV/AIDS	1.3	--	--
Malnutrition ratio of OVC vs. non-OVC	0.96	--	--
Early sex ratio of OVC vs. non-OVC	1.51	--	--

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

To monitor these variations, a measurable definition of orphaned and vulnerable children (OVC) needed to be created. The UNAIDS Monitoring and Evaluation Reference Group developed proxy definition of children who have been affected by adult morbidity and mortality. This measure is designed to capture many of the children affected by AIDS in countries where a significant percentage of the adults are infected with HIV. This definition classifies children as orphaned and vulnerable if they have experienced the death of either parent, if either parent is chronically ill, or if an adult (aged 18-59) in the household either died (after being chronically ill) or was chronically ill in the year prior to the survey.

The percentage of children aged 0-17 years that live with neither parent, mother only, or father only is presented in Table HA.10. Twenty percent of children are not living with a biological parent; this indicator varies across provinces from 17 percent in the East to 28 percent in the Western Area. Higher percentages of children who are not living with a biological parent are found in urban areas, among older children, and among children coming from wealthier households. The MICS3 survey found that 11 percent of children aged 0-17 years have one or both parents dead. This figure ranges from eight percent in the Western Area to 15 percent in the East. Although this indicator varies little by gender of child, rural/urban location, or socioeconomic status, it is positively associated with increasing age of child.

Table HA.11 shows that 18 percent of children aged 0-17 years are defined as vulnerable[17]. The percentage of vulnerable children is highest in the East (23 percent) and North (19 percent), where the effect of the conflict was greatest, and lower in the South (19 percent) and Western Area (10 percent). Differences in this indicator among various population sub-

[17] Vulnerable is defined as children under age 18 that have a chronically ill parent, that live in a household where an adult aged 18-59 years has died in the past year, or that live in a household where an adult aged 18-59 years has been chronically ill in the past year.

groups as defined by the background variables are minor except when rural/urban differences are explored; a higher percentage of vulnerable children is found in rural areas (20 percent) than in urban areas (14 percent).

Combining the indicators discussed in the previous two paragraphs reveals that a total of 27 percent of children aged 0-17 in Sierra Leone is classified as OVC.

A key measure that has been developed to assess the status of OVC relative to their peers describes the school attendance of children 10-14 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, schools and communities are not ensuring that these children's rights are being met.

In Sierra Leone, 2.1 percent of children aged 10-14 years have lost both parents (Table HA.12). Among those children, only 63.5 per cent are currently attending school. Among children ages 10-14 who have not lost a parent and who live with at least one parent, 76.5 percent are attending school. These two figures can be used to form a ratio—*double orphans to non-orphans school attendance ratio*—that has a value of 0.83. This would suggest that double orphans are disadvantaged compared to children who are not orphans with respect to their access to educational opportunities.

In many countries there are few services that are available to families that have taken in OVC. Community-based organizations and governments need to ensure that families receive support to care for these children. Information on the level and types of support (medical; emotional and psychosocial; social/material; and, educational) that are provided to households caring for OVC is presented in Table HA.13. Only 1.3 percent of households that provide care to orphans and vulnerable children report receiving any material support for their efforts. Higher levels of support are reported by households in the East (2.3 percent) and South (1.8 percent), by households of low socioeconomic status, and by households caring for younger children.

The prevalence of malnutrition among OVC under five years of age is presented in Table HA.14. The key indicator tracked by the MICS3 survey is the ratio of the prevalence of underweight nutritional status among OVC to the prevalence of underweight nutritional status among non-OVC. A value of one signifies that there is no difference between the two groups for this indicator, a value of greater than one that OVC are more malnourished than non-OVC, and a value of less than one that non-OVC are more malnourished than OVC. The MICS3 survey has calculated the value of this indicator to be 0.98, indicating that there is little or no difference in the nutritional status of OVC and non-OVC.

Research suggests that orphans are more likely to be exploited sexually and have poorer sexual and reproductive health outcomes than other children. Table HA.15 presents information on the sexual behaviour of orphaned and vulnerable women aged 15-17 years. Thirty-five percent of female OVC aged 15-17 had sex before age 15 compared to 23.2 percent among non-OVC. The ratio of these two percentages is estimated at 1.51 (35.0: 23.2).

Discussion: Orphans and vulnerable children

The high prevalence of orphans and vulnerable children as identified through this survey demonstrates that a substantial percentage of the children in Sierra Leone are at risk of experiencing violations and abuse of their rights as children as well as exposure to HIV and other problems. The results presented above conclusively demonstrate that OVC have less access to education and participate to a greater extent in early sex than do their peers in the general population.

As has been discussed in previous sections of this report, the GoSL must enact and enforce the Child Rights Bill. HIV-related policy in the education sector should be disseminated and enforced. Give the low levels of support that caretakers of OVC report receiving, it is clear that support for programs that protect and support OVC must be increased. The GoSL and its partners should ensure that a policy and strategic plan of action on OVC is developed and that policy frameworks and appropriate mechanisms are put in place to guarantee to OVC their rights to life, development, and protection. Special attention should be given to ensure that OVC are supported at the community level and not within institutionalized settings.

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Appendix A. Sample Design

The major features of the sample design for the Sierra Leone MICS3 survey are described in this appendix. Sample design features described below include target sample size, sample allocation, sample frame and listing, sampling stages, stratification, and the calculation of sample weights.

Sierra Leone is divided into four provinces: the Western Area and the Northern, Southern and Eastern Provinces. The Western Area is divided into Western Urban and Western Rural districts, each of which is divided into wards and then in turn further divided into enumeration areas (EAs). The remaining three provinces are divided into districts of unequal sizes. Each district is divided into chiefdoms, which are in turn are divided into EAs. EAs contain 100 households on average and may contain several villages within their boundaries. EAs are the basic administrative unit that is used by Statistics Sierra Leone (SSL) for the purpose of conducting censuses or surveys. The 2004 Housing and Population Census divided Sierra Leone into 9,673 EAs.

The primary objective of the sample design for the Sierra Leone MICS3 was to produce statistically reliable estimates of most indicators at the national level, for urban and rural areas, and at the province level. The design of the sample allows the estimation of indicators at district level – however, such estimates are likely to be very imprecise, since the sample size was not determined to enable district-level estimates.

Sample Size and Sample Allocation

The target sample size for the Sierra Leone MICS was calculated as 8000 households. For the calculation of the sample size, the key indicator that was used was the proportion of children aged 12-23 months who are vaccinated with DPT3. The following formula was used to estimate the required sample size for these indicators:

$$n = \frac{[\,4\,(r)\,(1\text{-}r)\,(f)\,(1.1)\,]}{[\,(0.1r)^2\,(p)\,(n_h)\,]}$$

where

- n is the required sample size, expressed as number of households;
- *4* is a factor to achieve the 95 percent level of confidence;
- r is the predicted or anticipated prevalence (coverage rate) of the key indicator;
- f is the shortened symbol for *deff* (design effect);
- *1.1* is the factor necessary to raise the sample size by 10 per cent for non-response;
- $0.1r$[18] is the margin of error to be tolerated at the 95 per cent level of confidence, defined as 10 per cent of r (relative sampling error of r);
- p is the proportion of the total population upon which the indicator, r, is based; and,

[18] The margin of error was set at 0.1r, rather than 0.12r as recommended in the in MICS3 Manual. This was done in order to increase the precision of indicator estimates at both the national as well as at the level of the districts, in support of the government's national decentralization programme.

- n_h is the average household size in Sierra Leone.

For the calculation, *r* (DPT3 coverage rate) was estimated to be 35 percent. The value of *deff* (design effect) was taken as 1.75[19] based on estimates from previous surveys, *p* (percentage of children aged 12-23 months in the total population) was taken as 3 percent, and n_h (average household size) was taken as 6.0 households.

The resulting "*n*" or number of required households that was calculated using the formula above was 7944, which was rounded up to 8000 households. It was decided that the cluster size would be 25 households, based on a number of considerations that include the available budget and the estimated time that was required for a team to completely survey one cluster. Dividing the total number of households by the number of households per cluster, it was calculated that a total of 320 clusters was required.

Probability proportion to size (*pps*) method was used to allocate clusters to districts in order to create a self-weighting sample. Clusters and EAs were then selected within districts also according to *pps* methods as described in the box below. The table below shows the allocation of clusters to the districts.

Table 3: Distribution of EAs for Sierra Leone MICS3, by district

Local Council Area	EAs	EA Prop.	MICS EAs	Households
Kailahun District	704	0.0728	23	575
Kenema District	792	0.0819	26	650
Kenema Town	212	0.0219	7	175
Koidu Town	61	0.0063	2	50
Kono District	544	0.0562	18	450
Bombali District	688	0.0711	23	575
Makeni Town	122	0.0126	4	100
Kambia District	506	0.0523	17	425
Koinadugu District	510	0.0527	17	425
Port Loko District	890	0.0920	29	725
Tonkolili District	825	0.0853	27	675
Bo District	629	0.0650	21	525
Bo Town	209	0.0216	7	175
Bonthe District	346	0.0358	11	275
Bonthe Town	17	0.0018	1	25
Moyamba District	616	0.0637	20	500
Pujehun District	477	0.0493	16	400
Western Rural	176	0.0182	6	150
Western Urban	1,349	0.1395	45	1,125
SIERRA LEONE	**9,673**	**1.0000**	**320**	**8,000**
% of all EAs included in MICS3	**3.3%**			

[19] The design effect f was estimated at 1.75 (rather than 1.5, as recommended in the MICS3 Manual) to allow the selection of a larger sample size, and thus to increase the precision of estimates.

Sampling Frame and Selection of Clusters

A multi-stage, stratified cluster sampling approach was used to select the survey sample. The 2004 census frame was used for the selection of clusters. Census enumeration areas (EAs) were defined as primary sampling units (PSUs), and were selected in each district using *pps* sampling procedures. The stages of the sampling approach are described below.

Box 1: Description of sampling approach for Sierra Leone MICS3

Stage 1: Selection of EAs

1. The list of all EAs in Sierra Leone was ordered using implicit stratification according to the following variables: province; district; chiefdom; and, population size. 320 EAs were then selected using stratified systematic sampling, thus yielding a self-weighting sample. Selected EAs were then classified as *rural* (population of the settlement were the EA is located is < 2,000) or *urban* (population of the settlement where the EA is located is ≥ 2,000).

Stage 2: Selection of households

2. A list of all households in each of the 320 selected EAs as enumerated during the 2004 census was prepared using data contained in the 2004 Population and Housing Census registers.
3. A team of listers/verifiers visited each of the 320 EAs to update the household lists in the EA by verifying each of the households on the list and adding any new households that have been formed in order to control for out-movers, non-existent households, and/or new households. This task produced an updated listing of households in all selected EAs.
4. The newly updated listing of households in each EA was then sequentially numbered from 1 to *n* (the total number of households in the enumeration area of interest) at the Statistics Sierra Leone Office. Sampling experts then selected 25 households in each EA using systematic selection procedures.

Calculation of Sample Weights

Although the Sierra Leone MICS3 sample was self-weighted, weighting techniques were used to make adjustments to correct for modest inter-PSU differences due to non-response for the household and individual interviews. The adjustment for household non-response is equal to the inverse value of:

RR = Number of interviewed households / 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 Sierra Leone MICS3 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 = Completed women's (or under-5's) questionnaires / 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). Normalization of weights results in the sum of the interviewed sample units equalling 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) household weights varied between 0.99 and 1.02 in the 320 EAs. Adjusted woman's weights varied between 0.84 to 1.21 while children's weights varied between 0.88 and 1.16. Details regarding these weights are provided in the tables on the following pages.

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

The figure below presents a map of Sierra Leone that shows the locations of the 320 clusters that were selected for the MICS3 survey.

Figure 1: Location of clusters in Sierra Leone MICS3 survey

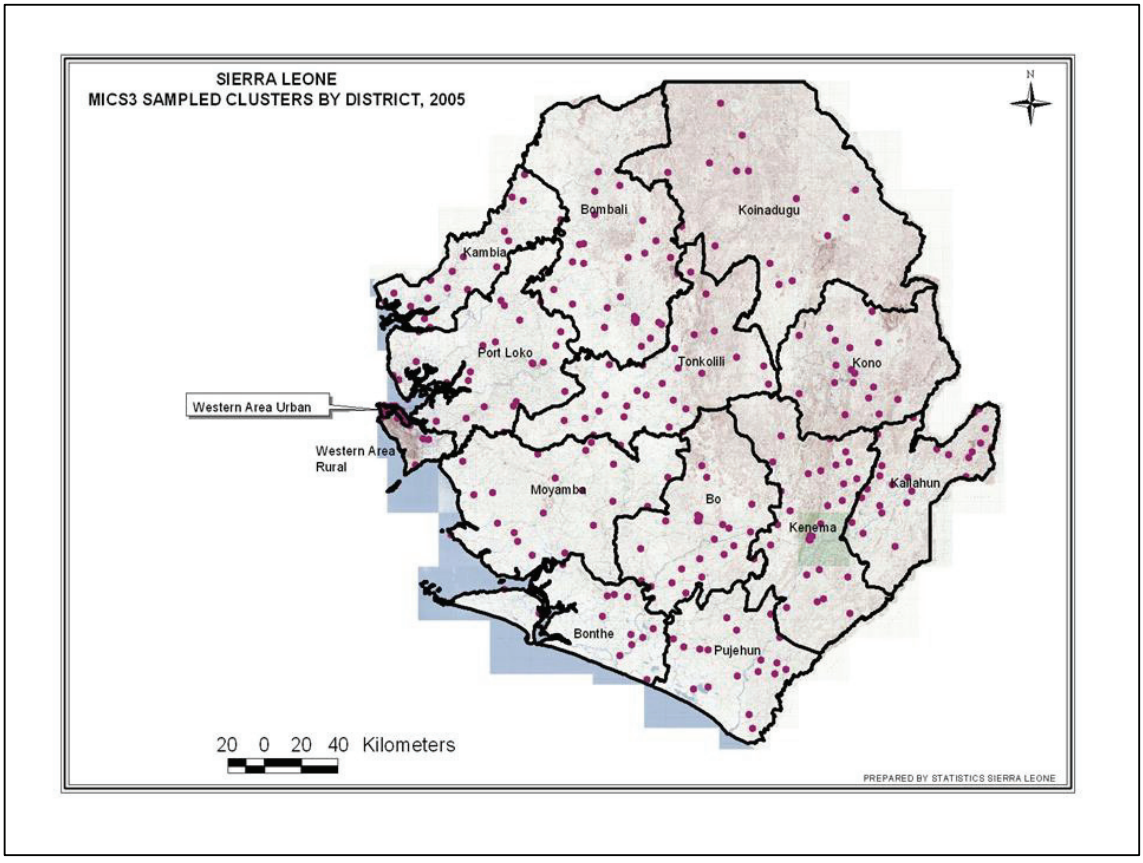

Table 4: Normalized household weights for MICS3 survey, Sierra Leone, 2005

MULTIPLE INDICATOR CLUSTER SURVEY										
Country	SAMPLE			HOUSEHOLDS						
Stratum	Sampling fraction	Design weight	Number of clusters selected in the stratum	Number of clusters completed in the stratum	Number of households with a complete interview in the stratum (HH9=1)	Number of households found in the stratum (HH9<>4)	Raw household weight	Weighted number of households with a complete interview in the stratum	**Normalized household weight**	Weighted number of households with a complete interview in the stratum
_										
1	0.009758	102.481750	57	57	1265	1269	102.805803	130049.34	0.996545	1260.63
2	0.009758	102.481750	99	99	2256	2283	103.708260	233965.84	1.005293	2267.94
3	0.009758	102.481750	68	68	1512	1514	102.617308	155157.37	0.994718	1504.01
4	0.009758	102.481750	1	1	20	20	102.481750	2049.64	0.993404	19.87
5	0.009758	102.481750	17	17	335	335	102.481750	34331.39	0.993404	332.79
6	0.009758	102.481750	15	15	308	319	106.141813	32691.68	1.028882	316.90
7	0.009758	102.481750	12	12	246	247	102.898342	25312.99	0.997442	245.37
8	0.009758	102.481750	51	51	1136	1138	102.662176	116624.23	0.995152	1130.49
TOTAL			320	320	7078	7125		730182.47		7078.00

Table 5: Normalized woman's weights for MICS3 survey, Sierra Leone, 2005

MULTIPLE INDICATOR CLUSTER SURVEY									
Country	SAMPLE			WOMEN					
Stratum	Sampling fraction	Design weight	Number of clusters selected in the stratum	Number of eligible women in the stratum (HH12)	Number of eligible women with a complete interview in the stratum (HH13)	Raw woman's weight	Weighted number of women with a complete interview in the stratum	**Normalized woman's weight**	Weighted number of women with a complete interview in the stratum
_									
1	0.009758	102.481750	57	1716	1161	1.472929	1710.07	1.217450	1413.46
2	0.009758	102.481750	99	3102	2558	1.219084	3118.42	1.007635	2577.53
3	0.009758	102.481750	68	1778	1588	1.113733	1768.61	0.920556	1461.84
4	0.009758	102.481750	1	28	27	1.030196	27.82	0.851509	22.99
5	0.009758	102.481750	17	565	425	1.320642	561.27	1.091577	463.92
6	0.009758	102.481750	15	446	413	1.111093	458.88	0.918374	379.29
7	0.009758	102.481750	12	424	319	1.325753	422.92	1.095802	349.56
8	0.009758	102.481750	51	1198	1163	1.025101	1192.19	0.847298	985.41
TOTAL			320	9257	7654		9260.17		7654.00

Table 6: Normalized children's weights for MICS3 survey, Sierra Leone, 2005

MULTIPLE INDICATOR CLUSTER SURVEY									
Country	SAMPLE			CHILDREN					
Stratum	Sampling fraction	Design weight	Number of clusters selected in the stratum	Number of eligible children in the stratum (HH14)	Number of eligible children with a complete interview in the stratum (HH15)	Raw children's weight	Weighted number of children with a complete interview in the stratum	**Normalized children's weight**	Weighted number of children with a complete interview in the stratum
_									
1	0.009758	102.481750	57	1204	913	1.314173	1199.84	1.167465	1065.90
2	0.009758	102.481750	99	2029	1860	1.096634	2039.74	0.974211	1812.03
3	0.009758	102.481750	68	1423	1289	1.098125	1415.48	0.975536	1257.47
4	0.009758	102.481750	1	14	14	0.993404	13.91	0.882505	12.36
5	0.009758	102.481750	17	274	236	1.153358	272.19	1.024603	241.81
6	0.009758	102.481750	15	244	239	1.050407	251.05	0.933145	223.02
7	0.009758	102.481750	12	215	196	1.094133	214.45	0.971989	190.51
8	0.009758	102.481750	51	501	499	0.999141	498.57	0.887602	442.91
TOTAL			320	5904	5246		5905.23		5246.00

Appendix B. List of Personnel Involved in the Survey

List of enumerators

Name	Name
1. Abu Moses Kamara	29. Isata N. Koroma
2. Adama Saidu	30. James Stevens
3. Admire During	31. Jannie Taylor
4. Agness Y. Kamara	32. Joseph B. Moiwo
5. Alhaji Swarray	33. Joseph Juana
6. Amadu Wurie Kargbo	34. Joseph M. B. Sesay
7. Angela Amara	35. Kadijatu Y. Fofanah
8. Augusta M. Brima	36. Karieta Kamara (Nurse)
9. Bernadette K. Amara	37. Kemoh Mansaray
10. Clarisa Green	38. Lahai M. Sei
11. Dauda Turay	39. Lois Fomba
12. David A. Njawa	40. Lovelyn Samai
13. David D. Jusu	41. Mabinty Turay
14. Deborah Conteh	42. Marian S. Umaru
15. Elizabeth George	43. Marina Spain-Cole
16. Emanuel Kamara	44. Massa Vandi
17. Eric P. B. Zorokong	45. Micheal Nallo
18. Francess Campbell	46. Mohamed Songu
19. Francess Jimmy	47. Momodu N. P. Massaquoi
20. Francis A. J. Fatoma	48. Morie Saffa
21. Francis Chernor Tholley	49. Musu Beatrice Kamara
22. Francis Keikura	50. Patricia B. Macauley
23. Frederick Komba Komba	51. Paul Silma
24. Hawa Kamara	52. Salamatu B. Kabba
25. Henrieta Koroma	53. Sarah Dumbuya
26. Ibrahim Kamara	54. Sia J. James
27. Idrisa Kamara	55. Syjesmun S. Ansumana
28. Idrisa Kamara II	56. Sylvia M. Kpaka

List of Drivers

NO.	NAME	NO.	Name
1	Brima Kamara	9	Alimamy Sankoh
2	Abdulai Kellah	10	Alie Bangura
3	Abdulai Kuyateh	11	Mohamed Kargbo
4	Momodu Nyoniyo	12	Momodu Kallon
5	Peter Moriba	13	Margai Mansary
6	Nabieu Turay	14	Mathew Bockarie
7	Musa Sannoh	15	Issa Sesay
8	Simeon Sesay	16	Francis Alpha

List of Field Supervisors

Name	Institution	Designation
1. Alimamy Yallancy	Statistics Sierra Leone	District Statistician
2. Alusine Kamara	Statistics Sierra Leone	District Statistician
3. Aminata Kamara	Port Loko Teachers College	Final year Student
4. Andrew Kamara	Statistics Sierra Leone	District Statistician
5. Emanuel Musa	Statistics Sierra Leone	District Statistician
6. Francis Tommy	Statistics Sierra Leone	District Statistician
7. Ibrahim G. Kargbo	Statistics Sierra Leone	District Statistician
8. Ibrahim Sannoh	Statistics Sierra Leone	District Statistician
9. Mohamed Moigua	Statistics Sierra Leone	District Statistician
10. Moses Williams	Statistics Sierra Leone	District Statistician
11. Peter Bangura	Statistics Sierra Leone	District Statistician
12. Sahr Yambasu	Statistics Sierra Leone	GIS expert
13. Samuel Turay	Statistics Sierra Leone	District Statistician
14. Wogba Kamara	Statistics Sierra Leone	District Statistician

Data Entry Personnel

Name of data entry clerk	Designation	Name of data entry clerk	Designation
1. Adama Bangura	Supervisor	17. Isatu Awalu	Operator
2. Admira Oldfield	Supervisor	18. Josephine M Bangura	Operator
3. Alice Gindeh	Operator	19. Kadiatu Barrie	Operator
4. Bernadette Rabin	Operator	20. Lydia Sesay	Operator
5. Christiana Davies	Operator	21. Mabinty Conteh	Operator
6. Dah Sannoh	Operator	22. Maddy Ansumana	Operator
7. Debora Caulker	Operator	23. Mariama Koroma	Operator
8. Eileen Wilson (Mrs.)	Operator	24. Memunatu Mansaray	Operator
9. Evelyn Cummings	Operator	25. Muriel Mansaray	Operator
10. Fanta Fofanah	Operator	26. Ruth Lamin	Operator
11. Fatama Kanu	Operator	27. Satta E.Ansumana	Operator
12. Fatmata Bundu	Operator	28. Sia Sartie	Operator
13. Fatmata Sensei	Operator	29. Tiangay Koroma	Operator
14. Haja Kaday Sesay	Operator	30. Winstenia Johnson	Operator
15. Hajaratu Fullah	Operator	31. Wuya Konneh	Operator
16. Hawa Sesar	Operator	32. Yvonne George	Operator

List of Technical Staff

Name of Technical Staff	Institution	Designation
1. Prof. Herbert Borbor Kandeh	Statistics Sierra Leone	Project Director
2. John S. N. Pessima	Statistics Sierra Leone	Field Coordinator
3. Moses Thekeka Conteh	Statistics Sierra Leone	Data processing / programming expert
4. Sheik Tejan Rogers	Statistics Sierra Leone	Questionnaire design / sampling officer
5. Sahr Yambasu	Statistics Sierra Leone	DevInfo expert
6. Paul Sengeh	UNICEF	Technical Coordinator
7. Robert McPherson	Independent	Consultant

Members of the Steering Committee

Institution	Number
1. Statistics Sierra Leone	3
2. Ministry of Development and Economic Planning	1
3. Ministry of Health and Sanitation	1
4. Ministry of Education, Science and Technology	1
5. Ministry Information and Broadcasting	1
6. Ministry of Women, Gender and Children's Affairs	1
7. Ministry of Local Government and Rural Development	1
8. Ministry of Energy and Power (Water Division)	1
9. UNICEF	1
10. UNFPA	1
11. WHO	1
12. FAO	1
13. UNHCR	1
14. Christian Health Association of Sierra Leone (CHASL)	1
15. Christian Children's Fund (CCF)	1
16. Action-Aid Sierra Leone	1
17. World Vision	1

Appendix C. Estimates of Sampling Errors

The sample of respondents selected in the Sierra Leone MICS3 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 that was 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 selected core 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 magnitude of 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 statistic 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 MICS3 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 at the national level, for each of the provinces, and for urban and rural areas. Three of the selected indicators are based on households, eight are based on household members, 13 are based on women, and 15 are based on children under five. 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.8 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, Sierra Leone, 2005

MICS Indicator		Base Population
	HOUSEHOLDS	
30	Household availability of insecticide treated nets	All households
41	Iodized salt consumption	All households
74	Child discipline	Children aged 2-14 years selected
	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
76	Prevalence of vulnerable children	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
83	Condom use with non-regular partners	Women aged 15-24 years that had a non-marital, non-cohabiting partner in the last 12 months
84	Age at first sex 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, Sierra Leone, 2005

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLDS										
Household availability of ITNs	CH.10	0.049	0.004	0.077	2.152	1.467	7078	7078	0.042	0.057
Iodized salt consumption	NU.5	0.446	0.010	0.022	2.795	1.672	7049	7049	0.427	0.466
Child discipline	CP.4	0.917	0.004	0.004	1.253	1.119	6018	6016	0.909	0.925
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.465	0.018	0.040	9.668	3.109	42719	7078	0.428	0.502
Use of improved sanitation facilities	EN.5	0.305	0.013	0.041	5.226	2.286	42719	7078	0.280	0.330
Net primary school attendance rate	ED.3	0.692	0.011	0.016	4.302	2.074	7795	7786	0.670	0.713
Net secondary school attendance rate	ED.4	0.193	0.008	0.041	2.262	1.504	5610	5603	0.177	0.209
Primary completion rate	ED.6	0.108	0.012	0.107	0.995	0.998	723	722	0.085	0.131
Child labour	CP.2	0.483	0.010	0.021	5.095	2.257	12776	12760	0.463	0.502
Prevalence of orphans	HA.10	0.113	0.003	0.030	2.427	1.558	21041	21022	0.106	0.119
Prevalence of vulnerable children	HA.11	0.182	0.007	0.040	7.464	2.732	21041	21022	0.168	0.197
WOMEN										
Skilled attendant at delivery	RH.4	0.432	0.014	0.033	1.933	1.390	2375	2356	0.403	0.460
Antenatal care	RH.2	0.811	0.014	0.017	2.858	1.691	2375	2356	0.784	0.839
Contraceptive prevalence	RH.1	0.053	0.004	0.067	1.516	1.231	6077	6049	0.046	0.060
Adult literacy	ED.8	0.248	0.013	0.052	2.038	1.427	2271	2279	0.222	0.274
Prevalence of female genital mutilation/cutting (FGM/C)	CP.7	0.940	0.004	0.004	2.107	1.451	7647	7654	0.932	0.948
Marriage before age 18	CP.5	0.620	0.007	0.012	1.553	1.246	6543	6545	0.605	0.635
Polygyny	CP.5	0.426	0.008	0.019	1.674	1.294	6077	6049	0.409	0.442
Comprehensive knowledge about HIV prevention among young people	HA.3	0.171	0.009	0.053	1.329	1.153	2271	2279	0.153	0.190
Condom use with non-regular partners	HA.9	0.204	0.017	0.083	1.235	1.111	683	699	0.171	0.238
Age at first sex among young people	HA.8	0.249	0.016	0.064	1.502	1.225	1103	1109	0.217	0.281
Attitude towards people with HIV/AIDS	HA.5	0.053	0.004	0.080	1.883	1.372	5157	5183	0.045	0.062
Women who have been tested for HIV	HA.6	0.055	0.003	0.058	1.501	1.225	7647	7654	0.049	0.062
Knowledge of mother- to-child transmission of HIV	HA.4	0.540	0.010	0.019	3.146	1.774	7647	7654	0.520	0.560
UNDER-5s										
Underweight prevalence	NU.1	0.304	0.008	0.027	1.342	1.158	4135	4143	0.288	0.321
Tuberculosis immunization coverage	CH.2	0.862	0.012	0.014	1.380	1.175	1072	1071	0.838	0.887
Polio immunization coverage	CH.2	0.645	0.018	0.028	1.529	1.237	1071	1069	0.608	0.681
Immunization coverage for DPT	CH.2	0.637	0.017	0.027	1.376	1.173	1060	1058	0.602	0.671
Measles immunization coverage	CH.2	0.766	0.015	0.020	1.414	1.189	1067	1065	0.735	0.797
Fully immunized children	CH.2	0.539	0.019	0.035	1.565	1.251	1072	1071	0.500	0.577
Acute respiratory infection in last two weeks	CH.6	0.109	0.006	0.053	1.816	1.348	5245	5246	0.097	0.120
Antibiotic treatment of suspected pneumonia	CH.7	0.209	0.015	0.071	0.766	0.875	570	567	0.179	0.239
Diarrhoea in last two weeks	CH.4	0.144	0.006	0.039	1.324	1.151	5245	5246	0.133	0.155
Received ORT or increased fluids and continued feeding	CH.5	0.312	0.020	0.063	1.340	1.158	754	755	0.273	0.351
Under-fives sleeping under insecticide treated nets	CH.11	0.053	0.005	0.101	3.019	1.737	5245	5246	0.042	0.064
Fever in last two weeks	CH.12	0.349	0.008	0.022	1.387	1.178	5245	5246	0.333	0.364
Antimalarial treatment	CH.12	0.450	0.014	0.030	1.365	1.168	1830	1829	0.423	0.477
Support for learning	CD.1	0.647	0.008	0.012	1.400	1.183	5245	5246	0.631	0.663
Birth registration	CP.1	0.478	0.011	0.024	2.696	1.642	5245	5246	0.456	0.501

Table SE.3: Sampling errors: Rural areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Sierra Leone, 2005

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits *r - 2se*	Confidence limits *r + 2se*
HOUSEHOLDS										
Household availability of ITNs	CH.10	0.049	0.005	0.096	2.410	1.552	5052	5053	0.040	0.059
Iodized salt consumption	NU.5	0.449	0.012	0.027	3.029	1.740	5031	5032	0.425	0.474
Child discipline	CP.4	0.921	0.004	0.005	1.176	1.084	4343	4342	0.912	0.930
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.318	0.024	0.076	13.764	3.710	30626	5053	0.270	0.367
Use of improved sanitation facilities	EN.5	0.171	0.015	0.087	7.978	2.825	30626	5053	0.141	0.201
Net primary school attendance rate	ED.3	0.631	0.014	0.023	5.032	2.243	5660	5656	0.602	0.660
Net secondary school attendance rate	ED.4	0.072	0.008	0.105	3.068	1.751	3578	3575	0.057	0.087
Primary completion rate	ED.6	0.055	0.011	0.200	1.099	1.048	474	473	0.033	0.077
Child labour	CP.2	0.567	0.012	0.021	5.013	2.239	9054	9047	0.544	0.590
Prevalence of orphans	HA.10	0.108	0.004	0.036	2.379	1.542	15280	15273	0.101	0.116
Prevalence of vulnerable children	HA.11	0.197	0.009	0.044	7.184	2.680	15280	15273	0.180	0.215
WOMEN										
Skilled attendant at delivery	RH.4	0.348	0.016	0.045	1.965	1.402	1894	1855	0.317	0.379
Antenatal care	RH.2	0.793	0.016	0.020	2.913	1.707	1894	1855	0.760	0.825
Contraceptive prevalence	RH.1	0.023	0.002	0.100	1.066	1.033	4707	4591	0.018	0.027
Adult literacy	ED.8	0.092	0.012	0.133	2.642	1.626	1506	1469	0.067	0.116
Prevalence of female genital mutilation/cutting (FGM/C)	CP.7	0.970	0.003	0.003	1.742	1.320	5475	5334	0.964	0.976
Marriage before age 18	CP.5	0.676	0.009	0.013	1.595	1.263	4766	4639	0.659	0.694
Polygyny	CP.5	0.471	0.010	0.021	1.773	1.332	4707	4591	0.451	0.491
Comprehensive knowledge about HIV prevention among young people	HA.3	0.091	0.008	0.088	1.133	1.064	1506	1469	0.075	0.107
Condom use with non-regular partners	HA.9	0.164	0.024	0.144	1.304	1.142	328	321	0.117	0.211
Age at first sex among young people	HA.8	0.297	0.022	0.073	1.569	1.253	709	695	0.254	0.340
Attitude towards people with HIV/AIDS	HA.5	0.031	0.004	0.125	1.550	1.245	3203	3085	0.023	0.039
Women who have been tested for HIV	HA.6	0.028	0.003	0.108	1.826	1.351	5475	5334	0.022	0.035
Knowledge of mother- to-child transmission of HIV	HA.4	0.467	0.012	0.027	3.321	1.822	5475	5334	0.442	0.492
UNDER-5s										
Underweight prevalence	NU.1	0.327	0.010	0.030	1.398	1.182	3161	3105	0.307	0.347
Tuberculosis immunization coverage	CH.2	0.849	0.015	0.018	1.438	1.199	849	835	0.819	0.879
Polio immunization coverage	CH.2	0.640	0.021	0.033	1.624	1.275	849	835	0.597	0.682
Immunization coverage for DPT	CH.2	0.627	0.020	0.033	1.475	1.214	840	826	0.586	0.668
Measles immunization coverage	CH.2	0.748	0.018	0.024	1.476	1.215	844	830	0.711	0.785
Fully immunized children	CH.2	0.534	0.022	0.042	1.664	1.290	850	836	0.489	0.578
Acute respiratory infection in last two weeks	CH.6	0.115	0.007	0.059	1.870	1.367	4144	4076	0.101	0.129
Antibiotic treatment of suspected pneumonia	CH.7	0.184	0.016	0.086	0.781	0.884	476	468	0.152	0.216
Diarrhoea in last two weeks	CH.4	0.143	0.006	0.044	1.344	1.159	4144	4076	0.130	0.155
Received ORT or increased fluids and continued feeding	CH.5	0.323	0.023	0.072	1.430	1.196	592	584	0.277	0.370
Under-fives sleeping under insecticide treated nets	CH.11	0.053	0.007	0.123	3.457	1.859	4144	4076	0.040	0.066
Fever in last two weeks	CH.12	0.350	0.009	0.025	1.372	1.171	4144	4076	0.333	0.368
Antimalarial treatment	CH.12	0.440	0.015	0.035	1.355	1.164	1451	1430	0.409	0.470
Support for learning	CD.1	0.627	0.009	0.014	1.330	1.153	4144	4076	0.609	0.644
Birth registration	CP.1	0.442	0.013	0.029	2.808	1.676	4144	4076	0.416	0.468

Table SE.4: Sampling errors: Urban areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Sierra Leone, 2005

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits *r* - 2*se*	Confidence limits *r* + 2*se*
HOUSEHOLDS										
Household availability of ITNs	CH.10	0.049	0.006	0.120	1.504	1.227	2026	2025	0.037	0.061
Iodized salt consumption	NU.5	0.440	0.016	0.037	2.182	1.477	2017	2017	0.407	0.472
Child discipline	CP.4	0.907	0.008	0.009	1.415	1.190	1676	1674	0.890	0.924
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.836	0.019	0.022	5.180	2.276	1209	2025	0.799	0.874
Use of improved sanitation facilities	EN.5	0.643	0.021	0.033	3.900	1.975	1209	2025	0.601	0.686
Net primary school attendance rate	ED.3	0.853	0.012	0.014	2.278	1.509	2135	2130	0.830	0.876
Net secondary school attendance rate	ED.4	0.406	0.015	0.036	1.771	1.331	2032	2028	0.377	0.435
Primary completion rate	ED.6	0.208	0.024	0.115	0.862	0.929	250	249	0.161	0.256
Child labour	CP.2	0.277	0.017	0.062	5.546	2.355	3722	3713	0.242	0.312
Prevalence of orphans	HA.10	0.123	0.007	0.056	2.510	1.584	5761	5749	0.110	0.137
Prevalence of vulnerable children	HA.11	0.142	0.014	0.095	8.636	2.939	5761	5749	0.115	0.169
WOMEN										
Skilled attendant at delivery	RH.4	0.764	0.027	0.035	2.002	1.415	480	501	0.710	0.817
Antenatal care	RH.2	0.885	0.021	0.024	2.144	1.464	480	501	0.843	0.927
Contraceptive prevalence	RH.1	0.156	0.012	0.079	1.670	1.292	1369	1458	0.131	0.180
Adult literacy	ED.8	0.556	0.022	0.039	1.563	1.250	765	810	0.512	0.600
Prevalence of female genital mutilation/cutting (FGM/C)	CP.7	0.864	0.011	0.013	2.435	1.561	2171	2320	0.842	0.886
Marriage before age 18	CP.5	0.470	0.014	0.030	1.567	1.252	1777	1906	0.441	0.498
Polygyny	CP.5	0.269	0.014	0.053	1.496	1.223	1369	1458	0.241	0.298
Comprehensive knowledge about HIV prevention among young people	HA.3	0.330	0.022	0.066	1.753	1.324	765	810	0.286	0.373
Condom use with non-regular partners	HA.9	0.242	0.024	0.099	1.172	1.083	355	378	0.194	0.290
Age at first sex among young people	HA.8	0.163	0.020	0.123	1.204	1.097	394	414	0.123	0.202
Attitude towards people with HIV/AIDS	HA.5	0.090	0.009	0.103	2.196	1.482	1953	2098	0.071	0.108
Women who have been tested for HIV	HA.6	0.123	0.007	0.060	1.163	1.079	2171	2320	0.108	0.138
Knowledge of mother- to-child transmission of HIV	HA.4	0.725	0.015	0.021	2.685	1.639	2171	2320	0.694	0.755
UNDER-5s										
Underweight prevalence	NU.1	0.233	0.014	0.061	1.176	1.084	974	1038	0.204	0.261
Tuberculosis immunization coverage	CH.2	0.914	0.017	0.018	0.820	0.905	223	236	0.881	0.947
Polio immunization coverage	CH.2	0.664	0.032	0.048	1.058	1.029	222	234	0.600	0.727
Immunization coverage for DPT	CH.2	0.675	0.029	0.043	0.905	0.951	220	232	0.616	0.733
Measles immunization coverage	CH.2	0.836	0.024	0.029	0.991	0.996	222	235	0.787	0.884
Fully immunized children	CH.2	0.557	0.035	0.062	1.136	1.066	222	235	0.487	0.626
Acute respiratory infection in last two weeks	CH.6	0.085	0.010	0.118	1.519	1.232	1101	1170	0.065	0.105
Antibiotic treatment of suspected pneumonia	CH.7	0.339	0.040	0.117	0.693	0.833	94	99	0.259	0.419
Diarrhoea in last two weeks	CH.4	0.148	0.012	0.078	1.234	1.111	1101	1170	0.125	0.171
Received ORT or increased fluids and continued feeding	CH.5	0.271	0.034	0.125	0.984	0.992	162	171	0.203	0.339
Under-fives sleeping under insecticide treated nets	CH.11	0.053	0.007	0.137	1.220	1.105	1101	1170	0.039	0.067
Fever in last two weeks	CH.12	0.344	0.017	0.048	1.428	1.195	1101	1170	0.311	0.378
Antimalarial treatment	CH.12	0.491	0.029	0.060	1.382	1.176	379	399	0.432	0.549
Support for learning	CD.1	0.724	0.018	0.024	1.833	1.354	1101	1170	0.689	0.759
Birth registration	CP.1	0.615	0.024	0.038	2.729	1.652	1101	1170	0.568	0.662

Table SE.5: Sampling errors: East

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Sierra Leone, 2005

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - *2se*	*r* + *2se*
HOUSEHOLDS										
Household availability of ITNs	CH.10	0.050	0.006	0.121	1.233	1.110	1593	1600	0.038	0.062
Iodized salt consumption	NU.5	0.588	0.021	0.036	2.862	1.692	1583	1590	0.546	0.630
Child discipline	CP.4	0.911	0.007	0.008	0.877	0.936	1379	1385	0.897	0.926
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.518	0.045	0.088	13.225	3.637	9793	1600	0.427	0.609
Use of improved sanitation facilities	EN.5	0.195	0.023	0.119	5.532	2.352	9793	1600	0.149	0.242
Net primary school attendance rate	ED.3	0.720	0.021	0.029	3.460	1.860	1635	1642	0.679	0.761
Net secondary school attendance rate	ED.4	0.143	0.013	0.090	1.563	1.250	1145	1150	0.117	0.169
Primary completion rate	ED.6	0.090	0.018	0.205	0.549	0.741	132	133	0.053	0.127
Child labour	CP.2	0.423	0.019	0.045	4.001	2.000	2644	2655	0.385	0.462
Prevalence of orphans	HA.10	0.153	0.008	0.050	2.123	1.457	4688	4708	0.138	0.168
Prevalence of vulnerable children	HA.11	0.233	0.016	0.071	7.125	2.669	4688	4708	0.200	0.265
WOMEN										
Skilled attendant at delivery	RH.4	0.666	0.028	0.042	1.717	1.310	561	481	0.610	0.723
Antenatal care	RH.2	0.859	0.020	0.024	1.664	1.290	561	481	0.818	0.900
Contraceptive prevalence	RH.1	0.038	0.008	0.206	2.157	1.469	1476	1267	0.023	0.054
Adult literacy	ED.8	0.205	0.032	0.155	2.925	1.710	545	475	0.141	0.268
Prevalence of female genital mutilation/cutting (FGM/C)	CP.7	0.967	0.003	0.003	0.551	0.742	1839	1586	0.961	0.974
Marriage before age 18	CP.5	0.625	0.017	0.027	1.692	1.301	1581	1359	0.591	0.659
Polygyny	CP.5	0.382	0.015	0.040	1.262	1.123	1476	1267	0.351	0.413
Comprehensive knowledge about HIV prevention among young people	HA.3	0.173	0.017	0.096	0.916	0.957	545	475	0.140	0.206
Condom use with non-regular partners	HA.9	0.112	0.028	0.247	1.030	1.015	151	135	0.057	0.167
Age at first sex among young people	HA.8	0.164	0.027	0.166	1.228	1.108	258	227	0.110	0.219
Attitude towards people with HIV/AIDS	HA.5	0.049	0.008	0.164	1.619	1.272	1350	1169	0.033	0.065
Women who have been tested for HIV	HA.6	0.026	0.005	0.186	1.484	1.218	1839	1586	0.017	0.036
Knowledge of mother- to-child transmission of HIV	HA.4	0.597	0.021	0.034	2.786	1.669	1839	1586	0.556	0.638
UNDER-5s										
Underweight prevalence	NU.1	0.335	0.016	0.047	1.015	1.008	1030	911	0.304	0.367
Tuberculosis immunization coverage	CH.2	0.824	0.027	0.033	1.240	1.113	271	240	0.769	0.879
Polio immunization coverage	CH.2	0.602	0.042	0.070	1.755	1.325	271	240	0.518	0.686
Immunization coverage for DPT	CH.2	0.588	0.037	0.063	1.349	1.161	271	240	0.514	0.662
Measles immunization coverage	CH.2	0.720	0.034	0.047	1.381	1.175	271	240	0.652	0.789
Fully immunized children	CH.2	0.495	0.045	0.091	1.936	1.392	271	240	0.405	0.585
Acute respiratory infection in last two weeks	CH.6	0.113	0.012	0.107	1.680	1.296	1300	1149	0.089	0.137
Antibiotic treatment of suspected pneumonia	CH.7	0.273	0.039	0.143	0.980	0.990	147	129	0.195	0.351
Diarrhoea in last two weeks	CH.4	0.140	0.012	0.085	1.356	1.164	1300	1149	0.116	0.164
Received ORT or increased fluids and continued feeding	CH.5	0.298	0.032	0.106	0.769	0.877	182	162	0.235	0.361
Under-fives sleeping under insecticide treated nets	CH.11	0.067	0.012	0.176	2.556	1.599	1300	1149	0.043	0.090
Fever in last two weeks	CH.12	0.350	0.018	0.051	1.604	1.266	1300	1149	0.314	0.385
Antimalarial treatment	CH.12	0.539	0.027	0.051	1.219	1.104	455	404	0.484	0.594
Support for learning	CD.1	0.699	0.019	0.028	2.047	1.431	1300	1149	0.660	0.738
Birth registration	CP.1	0.446	0.026	0.059	3.166	1.779	1300	1149	0.394	0.498

Table SE.6: Sampling errors: North

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Sierra Leone, 2005

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - *2se*	*r* + *2se*
HOUSEHOLDS										
Household availability of ITNs	CH.10	0.061	0.008	0.133	2.956	1.719	2585	2564	0.045	0.077
Iodized salt consumption	NU.5	0.447	0.019	0.042	3.603	1.898	2572	2551	0.410	0.485
Child discipline	CP.4	0.923	0.007	0.007	1.419	1.191	2342	2323	0.910	0.937
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.302	0.029	0.095	10.109	3.179	17282	2564	0.244	0.360
Use of improved sanitation facilities	EN.5	0.224	0.022	0.097	7.014	2.648	17282	2564	0.180	0.267
Net primary school attendance rate	ED.3	0.628	0.019	0.030	5.338	2.310	3490	3461	0.590	0.666
Net secondary school attendance rate	ED.4	0.106	0.012	0.112	3.536	1.881	2393	2371	0.082	0.130
Primary completion rate	ED.6	0.065	0.013	0.200	0.903	0.950	330	327	0.039	0.090
Child labour	CP.2	0.568	0.018	0.032	7.431	2.726	5691	5642	0.532	0.604
Prevalence of orphans	HA.10	0.110	0.005	0.049	2.611	1.616	8935	8860	0.100	0.121
Prevalence of vulnerable children	HA.11	0.188	0.013	0.068	9.440	3.072	8935	8860	0.163	0.214
WOMEN										
Skilled attendant at delivery	RH.4	0.250	0.023	0.090	2.645	1.626	976	975	0.205	0.295
Antenatal care	RH.2	0.734	0.028	0.038	3.907	1.977	976	975	0.678	0.790
Contraceptive prevalence	RH.1	0.044	0.004	0.098	1.108	1.053	2509	2508	0.035	0.052
Adult literacy	ED.8	0.148	0.021	0.141	2.987	1.728	856	861	0.106	0.190
Prevalence of female genital mutilation/cutting (FGM/C)	CP.7	0.970	0.005	0.005	2.239	1.496	2965	2971	0.961	0.979
Marriage before age 18	CP.5	0.694	0.011	0.016	1.554	1.246	2543	2546	0.671	0.717
Polygyny	CP.5	0.531	0.014	0.027	2.025	1.423	2509	2508	0.502	0.559
Comprehensive knowledge about HIV prevention among young people	HA.3	0.054	0.007	0.132	0.854	0.924	856	861	0.040	0.068
Condom use with non-regular partners	HA.9	0.208	0.034	0.164	1.438	1.199	203	206	0.140	0.276
Age at first sex among young people	HA.8	0.307	0.030	0.097	1.784	1.336	422	425	0.247	0.367
Attitude towards people with HIV/AIDS	HA.5	0.018	0.004	0.206	1.406	1.186	1751	1763	0.011	0.026
Women who have been tested for HIV	HA.6	0.039	0.005	0.130	2.034	1.426	2965	2971	0.029	0.049
Knowledge of mother- to-child transmission of HIV	HA.4	0.474	0.018	0.039	3.989	1.997	2965	2971	0.438	0.511
UNDER-5s										
Underweight prevalence	NU.1	0.337	0.015	0.046	1.595	1.263	1458	1502	0.306	0.368
Tuberculosis immunization coverage	CH.2	0.848	0.022	0.026	1.628	1.276	429	441	0.804	0.891
Polio immunization coverage	CH.2	0.651	0.028	0.044	1.565	1.251	429	442	0.594	0.708
Immunization coverage for DPT	CH.2	0.622	0.030	0.048	1.603	1.266	420	432	0.563	0.681
Measles immunization coverage	CH.2	0.738	0.025	0.034	1.435	1.198	425	437	0.688	0.789
Fully immunized children	CH.2	0.539	0.029	0.053	1.448	1.203	430	443	0.482	0.596
Acute respiratory infection in last two weeks	CH.6	0.104	0.009	0.090	1.985	1.409	2040	2099	0.085	0.123
Antibiotic treatment of suspected pneumonia	CH.7	0.133	0.019	0.145	0.697	0.835	212	218	0.094	0.171
Diarrhoea in last two weeks	CH.4	0.176	0.009	0.051	1.162	1.078	2040	2099	0.158	0.194
Received ORT or increased fluids and continued feeding	CH.5	0.314	0.030	0.095	1.508	1.228	360	370	0.254	0.373
Under-fives sleeping under insecticide treated nets	CH.11	0.060	0.010	0.170	3.878	1.969	2040	2099	0.040	0.081
Fever in last two weeks	CH.12	0.387	0.012	0.031	1.307	1.143	2040	2099	0.363	0.411
Antimalarial treatment	CH.12	0.353	0.021	0.058	1.503	1.226	789	812	0.312	0.394
Support for learning	CD.1	0.638	0.012	0.018	1.233	1.110	2040	2099	0.615	0.661
Birth registration	CP.1	0.286	0.016	0.056	2.678	1.637	2040	2099	0.254	0.318

Table SE.7: Sampling errors: South

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Sierra Leone, 2005

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - *2se*	*r* + *2se*
HOUSEHOLDS										
Household availability of ITNs	CH.10	0.049	0.006	0.130	1.520	1.233	1749	1758	0.036	0.062
Iodized salt consumption	NU.5	0.370	0.017	0.045	2.110	1.453	1744	1753	0.336	0.403
Child discipline	CP.4	0.928	0.007	0.007	0.936	0.967	1400	1407	0.914	0.941
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.460	0.036	0.079	9.364	3.060	9798	1758	0.387	0.533
Use of improved sanitation facilities	EN.5	0.319	0.027	0.084	5.791	2.406	9798	1758	0.265	0.372
Net primary school attendance rate	ED.3	0.677	0.023	0.034	3.942	1.986	1652	1660	0.631	0.722
Net secondary school attendance rate	ED.4	0.123	0.010	0.081	1.019	1.009	1094	1099	0.103	0.143
Primary completion rate	ED.6	0.093	0.029	0.310	1.471	1.213	150	151	0.035	0.150
Child labour	CP.2	0.496	0.017	0.034	2.971	1.724	2646	2659	0.463	0.530
Prevalence of orphans	HA.10	0.092	0.007	0.071	2.427	1.558	4767	4790	0.079	0.106
Prevalence of vulnerable children	HA.11	0.166	0.012	0.069	4.596	2.144	4767	4790	0.143	0.189
WOMEN										
Skilled attendant at delivery	RH.4	0.402	0.025	0.062	1.854	1.362	672	707	0.352	0.453
Antenatal care	RH.2	0.855	0.018	0.021	1.815	1.347	672	707	0.819	0.890
Contraceptive prevalence	RH.1	0.020	0.004	0.179	1.028	1.014	1483	1565	0.013	0.027
Adult literacy	ED.8	0.197	0.020	0.103	1.471	1.213	547	568	0.157	0.238
Prevalence of female genital mutilation/cutting (FGM/C)	CP.7	0.936	0.007	0.008	1.761	1.327	1820	1907	0.922	0.951
Marriage before age 18	CP.5	0.633	0.013	0.020	1.130	1.063	1545	1622	0.608	0.658
Polygyny	CP.5	0.417	0.016	0.039	1.716	1.310	1483	1565	0.385	0.450
Comprehensive knowledge about HIV prevention among young people	HA.3	0.137	0.019	0.142	1.819	1.349	547	568	0.098	0.176
Condom use with non-regular partners	HA.9	0.181	0.028	0.157	0.878	0.937	160	162	0.124	0.238
Age at first sex among young people	HA.8	0.297	0.030	0.102	1.258	1.121	275	285	0.237	0.358
Attitude towards people with HIV/AIDS	HA.5	0.048	0.012	0.241	3.226	1.796	1063	1096	0.025	0.071
Women who have been tested for HIV	HA.6	0.055	0.006	0.117	1.529	1.236	1820	1907	0.042	0.068
Knowledge of mother- to-child transmission of HIV	HA.4	0.437	0.019	0.042	2.663	1.632	1820	1907	0.400	0.474
UNDER-5s										
Underweight prevalence	NU.1	0.275	0.015	0.053	1.323	1.150	1219	1253	0.246	0.304
Tuberculosis immunization coverage	CH.2	0.902	0.018	0.020	1.062	1.030	297	305	0.866	0.937
Polio immunization coverage	CH.2	0.690	0.031	0.046	1.395	1.181	295	303	0.627	0.753
Immunization coverage for DPT	CH.2	0.691	0.030	0.043	1.242	1.115	296	304	0.632	0.750
Measles immunization coverage	CH.2	0.822	0.026	0.031	1.374	1.172	296	304	0.771	0.874
Fully immunized children	CH.2	0.579	0.035	0.061	1.535	1.239	296	304	0.509	0.649
Acute respiratory infection in last two weeks	CH.6	0.123	0.012	0.094	1.832	1.353	1444	1485	0.100	0.146
Antibiotic treatment of suspected pneumonia	CH.7	0.198	0.023	0.115	0.586	0.766	177	182	0.152	0.243
Diarrhoea in last two weeks	CH.4	0.112	0.010	0.094	1.643	1.282	1444	1485	0.091	0.133
Received ORT or increased fluids and continued feeding	CH.5	0.373	0.045	0.121	1.447	1.203	161	166	0.283	0.464
Under-fives sleeping under insecticide treated nets	CH.11	0.042	0.007	0.174	1.949	1.396	1444	1485	0.027	0.056
Fever in last two weeks	CH.12	0.325	0.014	0.043	1.344	1.159	1444	1485	0.296	0.353
Antimalarial treatment	CH.12	0.529	0.027	0.052	1.452	1.205	469	482	0.474	0.584
Support for learning	CD.1	0.560	0.013	0.023	0.964	0.982	1444	1485	0.534	0.585
Birth registration	CP.1	0.718	0.020	0.028	2.893	1.701	1444	1485	0.678	0.758

Table SE.8: Sampling errors: West

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Sierra Leone, 2005

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - *2se*	*r* + *2se*
HOUSEHOLDS										
Household availability of ITNs	CH.10	0.022	0.006	0.295	2.217	1.489	1150	1156	0.009	0.034
Iodized salt consumption	NU.5	0.365	0.022	0.059	2.303	1.518	1149	1155	0.322	0.408
Child discipline	CP.4	0.892	0.014	0.015	1.740	1.319	897	901	0.865	0.920
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.866	0.028	0.032	7.633	2.763	5846	1156	0.811	0.922
Use of improved sanitation facilities	EN.5	0.706	0.025	0.036	3.507	1.873	5846	1156	0.656	0.756
Net primary school attendance rate	ED.3	0.890	0.015	0.016	2.229	1.493	1018	1023	0.860	0.919
Net secondary school attendance rate	ED.4	0.542	0.023	0.042	2.014	1.419	978	983	0.497	0.587
Primary completion rate	ED.6	0.279	0.044	0.158	1.069	1.034	110	111	0.191	0.368
Child labour	CP.2	0.277	0.020	0.070	3.429	1.852	1795	1804	0.238	0.316
Prevalence of orphans	HA.10	0.085	0.008	0.099	2.413	1.553	2651	2664	0.068	0.102
Prevalence of vulnerable children	HA.11	0.102	0.011	0.112	3.781	1.945	2651	2664	0.079	0.125
WOMEN										
Skilled attendant at delivery	RH.4	0.829	0.033	0.040	1.466	1.211	166	193	0.763	0.895
Antenatal care	RH.2	0.928	0.018	0.019	0.915	0.957	166	193	0.892	0.963
Contraceptive prevalence	RH.1	0.203	0.019	0.093	1.560	1.249	609	709	0.165	0.241
Adult literacy	ED.8	0.675	0.029	0.043	1.420	1.192	322	375	0.617	0.733
Prevalence of female genital mutilation/cutting (FGM/C)	CP.7	0.808	0.020	0.025	3.080	1.755	1023	1190	0.768	0.849
Marriage before age 18	CP.5	0.374	0.022	0.058	2.051	1.432	875	1018	0.331	0.418
Polygyny	CP.5	0.119	0.012	0.097	0.899	0.948	609	709	0.095	0.142
Comprehensive knowledge about HIV prevention among young people	HA.3	0.539	0.035	0.065	1.823	1.350	322	375	0.469	0.608
Condom use with non-regular partners	HA.9	0.306	0.041	0.135	1.568	1.252	168	196	0.223	0.389
Age at first sex among young people	HA.8	0.139	0.023	0.163	0.737	0.858	148	172	0.094	0.185
Attitude towards people with HIV/AIDS	HA.5	0.127	0.012	0.098	1.620	1.273	993	1155	0.102	0.151
Women who have been tested for HIV	HA.6	0.156	0.010	0.063	0.868	0.932	1023	1190	0.136	0.175
Knowledge of mother- to-child transmission of HIV	HA.4	0.813	0.019	0.023	2.722	1.650	1023	1190	0.775	0.850
UNDER-5s										
Underweight prevalence	NU.1	0.205	0.023	0.110	1.495	1.223	428	477	0.160	0.251
Tuberculosis immunization coverage	CH.2	0.929	0.019	0.021	0.473	0.688	76	85	0.891	0.968
Polio immunization coverage	CH.2	0.583	0.039	0.066	0.510	0.714	75	84	0.506	0.661
Immunization coverage for DPT	CH.2	0.683	0.040	0.059	0.608	0.780	74	82	0.602	0.764
Measles immunization coverage	CH.2	0.869	0.031	0.036	0.708	0.842	75	84	0.807	0.931
Fully immunized children	CH.2	0.536	0.044	0.082	0.637	0.798	75	84	0.448	0.623
Acute respiratory infection in last two weeks	CH.6	0.074	0.012	0.162	1.077	1.038	460	513	0.050	0.098
Antibiotic treatment of suspected pneumonia	CH.7	(*)	(*)	(*)	(*)	(*)	34	38	(*)	(*)
Diarrhoea in last two weeks	CH.4	0.111	0.013	0.114	0.830	0.911	460	513	0.086	0.136
Received ORT or increased fluids and continued feeding	CH.5	0.158	0.050	0.320	1.074	1.036	51	57	0.057	0.259
Under-fives sleeping under insecticide treated nets	CH.11	0.018	0.009	0.510	2.382	1.544	460	513	0.000	0.035
Fever in last two weeks	CH.12	0.255	0.017	0.068	0.811	0.901	460	513	0.221	0.290
Antimalarial treatment	CH.12	0.443	0.040	0.090	0.829	0.910	118	131	0.363	0.522
Support for learning	CD.1	0.815	0.021	0.026	1.556	1.248	460	513	0.772	0.858
Birth registration	CP.1	0.673	0.026	0.039	1.628	1.276	460	513	0.620	0.725

Appendix D. Data Quality Tables

Table DQ.1: Age distribution of household population

Single-year age distribution of household population by sex (weighted), Sierra Leone, 2005

	Males		Females			Males		Females	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	565	2.7	540	2.5	43	83	0.4	74	0.3
1	575	2.7	565	2.6	44	72	0.3	54	0.2
2	576	2.7	594	2.7	45	536	2.5	333	1.5
3	655	3.1	724	3.3	46	97	0.5	72	0.3
4	565	2.7	545	2.5	47	79	0.4	32	0.1
5	884	4.2	847	3.9	48	122	0.6	67	0.3
6	792	3.8	774	3.6	49	57	0.3	35	0.2
7	771	3.7	706	3.3	50	314	1.5	616	2.8
8	697	3.3	702	3.2	51	47	0.2	135	0.6
9	522	2.5	541	2.5	52	100	0.5	224	1.0
10	824	3.9	744	3.4	53	64	0.3	92	0.4
11	398	1.9	325	1.5	54	62	0.3	68	0.3
12	628	3.0	585	2.7	55	271	1.3	256	1.2
13	448	2.1	463	2.1	56	78	0.4	77	0.4
14	444	2.1	683	3.1	57	46	0.2	27	0.1
15	746	3.5	447	2.1	58	67	0.3	81	0.4
16	359	1.7	252	1.2	59	36	0.2	24	0.1
17	346	1.6	210	1.0	60	336	1.6	322	1.5
18	536	2.5	459	2.1	61	20	0.1	31	0.1
19	251	1.2	195	0.9	62	55	0.3	74	0.3
20	533	2.5	559	2.6	63	40	0.2	34	0.2
21	222	1.1	174	0.8	64	18	0.1	26	0.1
22	254	1.2	283	1.3	65	209	1.0	190	0.9
23	187	0.9	221	1.0	66	27	0.1	20	0.1
24	154	0.7	188	0.9	67	30	0.1	15	0.1
25	539	2.6	930	4.3	68	52	0.2	53	0.2
26	172	0.8	269	1.2	69	14	0.1	14	0.1
27	173	0.8	271	1.3	70	162	0.8	131	0.6
28	241	1.1	439	2.0	71	15	0.1	17	0.1
29	135	0.6	162	0.7	72	32	0.2	26	0.1
30	524	2.5	737	3.4	73	18	0.1	22	0.1
31	121	0.6	113	0.5	74	7	0.0	7	0.0
32	216	1.0	279	1.3	75	117	0.6	98	0.5
33	148	0.7	145	0.7	76	18	0.1	23	0.1
34	92	0.4	98	0.5	77	8	0.0	7	0.0
35	634	3.0	756	3.5	78	32	0.2	25	0.1
36	167	0.8	209	1.0	79	12	0.1	10	0.0
37	141	0.7	151	0.7	80+	187	0.9	189	0.9
38	194	0.9	241	1.1	DK/Missing	170	0.8	151	0.7
39	117	0.6	99	0.5					
40	492	2.3	502	2.3	Total	21034	100.0	21685	100.0
41	94	0.4	63	0.3					
42	192	0.9	139	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, Sierra Leone, 2005

	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
	Number	Number	Percent	
Age				
10-14	2800	NA	NA	NA
15-19	1564	1100	14.4	70.3
20-24	1425	1170	15.3	82.1
25-29	2071	1763	23.0	85.1
30-34	1372	1174	15.3	85.6
35-39	1456	1275	16.7	87.6
40-44	833	726	9.5	87.1
45-49	539	449	5.9	83.3
50-54	1136	NA	NA	NA
15-49	9260	7658	100	82.7

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, Sierra Leone, 2005

	Household population of children age 0-7	Interviewed children age 0-4		Percentage of eligible children interviewed
	Number	Number	Percent	
Age				
0	1105	996	19.0	90.1
1	1140	1035	19.7	90.8
2	1170	1062	20.2	90.8
3	1379	1211	23.1	87.8
4	1110	942	18.0	84.9
5	1729	NA	NA	NA
6	1565	NA	NA	NA
7	1475	NA	NA	NA
0-4	5904	5246	100	88.9

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

Age distribution of under-5 children by 3-month groups (weighted), Sierra Leone, 2005

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Age in months						
0-2	101	3.9	107	4.0	208	4.0
3-5	145	5.6	157	5.9	302	5.8
6-8	164	6.3	148	5.6	312	6.0
9-11	112	4.3	90	3.4	202	3.9
12-14	140	5.4	151	5.7	290	5.5
15-17	151	5.8	152	5.8	303	5.8
18-20	139	5.3	146	5.5	284	5.4
21-23	105	4.0	94	3.5	199	3.8
24-26	116	4.5	150	5.7	266	5.1
27-29	179	6.9	165	6.2	343	6.5
30-32	151	5.8	147	5.6	298	5.7
33-35	89	3.4	73	2.8	162	3.1
36-38	137	5.2	162	6.1	298	5.7
39-41	173	6.6	194	7.3	366	7.0
42-44	158	6.1	183	6.9	341	6.5
45-47	77	3.0	100	3.8	178	3.4
48-50	121	4.6	118	4.5	239	4.6
51-53	141	5.4	140	5.3	281	5.4
54-56	140	5.4	109	4.1	249	4.8
57-59	67	2.6	56	2.1	123	2.3
Total	2605	100	2639	100	5245	100

Table DQ.5: Heaping on ages and periods

Age and period ratios at boundaries of eligibility by type of information collected (weighted), Sierra Leone, 2005

	Age and period ratios*				
	Males	Females	Total	Eligibility boundary (lower-upper)	Module or questionnaire
Age in household questionnaire					
1	1.0	1.0	1.0		
2	1.0	0.9	1.0	Lower	Child discipline and child disability
3	1.1	1.2	1.1		
4	0.8	0.8	0.8	Upper	Under-5 questionnaire
5	1.2	1.2	1.2	Lower	Child labour and education
6	1.0	1.0	1.0		
.	.	.	.		
8	1.1	1.1	1.1		
9	0.8	0.8	0.8	Upper	Child disability
10	1.4	1.4	1.4		
.	.	.	.		
13	0.9	0.8	0.8		
14	0.8	1.3	1.0	Upper	Child labour and child discipline
15	1.4	1.0	1.2	Lower	Women's questionnaire
16	0.7	0.8	0.8		
17	0.8	0.7	0.8	Upper	Orphaned and vulnerable children
18	0.9	0.7	0.8		
.	.	.	.		
23	0.9	1.0	1.0		
24	0.5	0.4	0.5	Upper	Education
25	1.9	2.0	2.0		
.	.	.	.		
48	1.4	1.5	1.4		
49	0.3	0.1	0.2	Upper	Women's questionnaire
50	2.3	2.4	2.3		
Age in women's questionnaire					
23	na	1.0	na		
24	na	0.4	na	Upper	Sexual behaviour
25	na	2.1	na		
Months since last birth in women's questionnaire					
6-11	na	0.9	na		
12-17	na	1.1	na		
18-23	na	0.9	na	Upper	Tetanus toxoid and maternal and child health
24-29	na	1.1	na		
30-35	na	0.8	na		

* Age or period ratios are calculated as $x / ((x_{n-1} + x_n + x_{n+1}) / 3)$, where x is age or period.

Table DQ.6: Completeness of reporting

Percentage of observations missing information for selected questions and indicators (weighted), Sierra Leone, 2005

Questionnaire and Subject	Reference group	Percent with missing information*	Number of cases
Household			
Salt testing	All households surveyed	0	7078
Women			
Date of Birth	All women age 15-49		
Month only		32.9	7647
Month and year missing		0.0	7647
Date of first birth	All women age 15-49 with at least one live birth		
Month only		19.1	6375
Month and year missing		16.8	6375
Completed years since first birth	All women age 15-49 with at least one live birth	2.2	1082
Date of last birth	All women age 15-49 with at least one live birth		
Month only		13.6	6375
Month and year missing		2.1	6375
Date of first marriage/union	All ever married women age 15-49		
Month only		12.0	6523
Month and year missing		41.0	6523
Age at first marriage/union	All ever married women age 15-49	5.6	6523
Age at first intercourse	All women age 15-24 who have ever had sex	0.0	2271
Time since last intercourse	All women age 15-24 who have ever had sex	0.5	1784
Under-5			
Date of Birth	All under five children surveyed		
Month only		10.3	5245
Month and year missing		2.7	5245
Anthropometry	All under five children surveyed		
Height		0.8	5245
Weight		0.7	5245
Height or Weight		0.9	5245

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), Sierra Leone, 2005

	Mother in the household				Mother not in the household				
	Mother interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Total	Number of children aged 0-4 years
Age									
0	92.0	1.4	2.3	0.3	0.5	3.4	0.2	100	1105
1	90.1	2.0	2.0	0.2	0.3	4.3	0.9	100	1140
2	83.5	2.2	1.7	0.3	0.9	9.8	1.5	100	1171
3	77.1	1.5	2.7	0.1	1.6	13.9	2.9	100	1378
4	72.9	3.8	2.0	0.8	2.3	15.3	3.0	100	1110
Total	82.9	2.2	2.1	0.3	1.1	9.5	1.7	100	5905

Table DQ.8: School attendance by single age

Distribution of household population age 5-24 by educational level and grade attended in the current year (weighted), Sierra Leone, 2005

		Primary school						Secondary school											
	Preschool	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Higher	Non-standard Curriculum	Don't know	Not attending school	Total	Number
Age																			
5	6.7	21.8	6.4	2.3	0.7	0.2	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.5	61.1	100	1731
6	5.2	32.1	15.8	4.5	0.7	0.3	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	40.8	100	1566
7	4.1	18.0	29.5	12.3	4.4	1.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	29.4	100	1476
8	1.6	10.5	27.1	20.4	9.5	3.1	0.9	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	26.3	100	1399
9	0.8	6.4	18.9	26.8	18.6	4.8	1.7	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	21.3	100	1062
10	0.4	3.9	11.5	20.1	20.6	12.1	4.7	0.8	0.3	0.2	0.1	0.0	0.0	0.0	0.3	0.1	24.9	100	1568
11	0.3	2.8	7.3	15.9	26.2	16.3	8.0	1.8	1.1	0.4	0.1	0.0	0.0	0.0	0.1	0.0	19.5	100	723
12	0.3	3.6	5.2	12.3	18.8	14.6	10.9	6.4	2.6	0.8	0.2	0.2	0.0	0.0	0.1	0.1	23.9	100	1212
13	0.1	2.9	3.6	9.2	14.0	18.8	14.9	5.6	7.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0	22.0	100	911
14	0.2	2.6	1.9	4.3	8.5	12.6	13.2	6.8	10.6	5.4	0.8	0.2	0.1	0.0	0.0	0.2	32.8	100	1126
15	0.2	3.1	2.3	3.8	7.5	11.0	12.9	5.0	6.1	5.4	0.4	0.3	0.2	0.0	0.0	0.2	41.7	100	1193
16	0.0	3.4	1.1	1.6	3.4	8.5	8.7	6.6	8.5	8.2	2.3	1.8	0.7	0.2	0.0	0.2	44.8	100	611
17	0.7	1.8	0.9	2.3	3.1	4.1	7.0	4.5	10.1	8.8	3.8	3.8	0.7	0.2	0.4	0.0	47.8	100	556
18	0.2	2.4	0.6	1.6	2.2	3.5	4.6	2.6	7.0	7.2	2.2	4.0	2.4	0.1	0.3	0.1	58.8	100	996
19	0.2	1.6	0.7	1.1	1.1	1.8	4.3	2.7	6.3	6.1	4.7	5.6	3.1	0.0	0.7	0.0	60.1	100	446
20	0.1	0.8	0.2	0.6	1.2	1.1	1.5	1.3	2.5	3.3	3.0	3.0	2.0	0.2	0.1	0.2	78.9	100	1092
21	0.0	1.0	0.8	0.3	0.5	1.3	1.3	1.8	4.3	4.8	3.5	2.5	5.0	2.3	0.0	0.0	70.7	100	396
22	0.2	0.8	0.4	0.4	0.4	0.4	0.6	0.7	1.3	3.0	2.1	2.4	3.5	1.3	0.0	0.0	82.7	100	537
23	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.7	3.2	1.5	1.7	2.4	2.4	0.2	0.0	86.7	100	408
24	0.3	0.3	0.0	0.6	0.6	0.3	0.0	0.9	0.9	1.7	0.6	1.8	1.5	1.8	0.0	0.0	88.9	100	342
Total	1.6	8.6	9.2	8.6	8.0	6.2	4.8	2.2	2.9	2.3	0.8	0.9	0.6	0.2	0.1	0.2	42.6	100	19353

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), Sierra Leone, 2005

	Children Ever Born			Children Living			Children deceased			
	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	Number of women
Age										
15-19	285	262	1.09	206	209	0.98	80	53	1.50	1103
20-24	1042	998	1.04	762	772	0.99	280	226	1.24	1168
25-29	3014	2779	1.08	2189	2088	1.05	825	691	1.19	1785
30-34	2766	2533	1.09	2002	1934	1.04	764	599	1.27	1177
35-39	3587	3457	1.04	2576	2506	1.03	1011	951	1.06	1253
40-44	2391	2258	1.06	1611	1614	1.00	780	643	1.21	711
45-49	1658	1499	1.11	1133	1020	1.11	524	479	1.09	450
Total	14743	13785	1.07	10479	10143	1.03	4264	3643	1.17	7647

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), Sierra Leone, 2005

	Months since last birth				
	Number	Percent		Number	Percent
0	81	2.5	16	120	3.7
1	90	2.8	17	101	3.1
2	117	3.6	18	145	4.5
3	87	2.7	19	109	3.4
4	123	3.8	20	81	2.5
5	119	3.7	21	87	2.7
6	126	3.9	22	46	1.4
7	123	3.8	23	61	1.9
8	100	3.1	24	104	3.2
9	58	1.8	25	65	2.0
10	63	2.0	26	71	2.2
11	76	2.4	27	91	2.8
12	108	3.4	28	96	3.0
13	122	3.8	29	81	2.5
14	106	3.3	30	90	2.8
15	91	2.8			
			Total	3217	100

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	Number of infants aged 12-15 months, and 20-23 months, that are currently breastfeeding	Total number of children aged 12-15 months and 20-23 months surveyed
17	Timely complementary feeding rate	Number of infants aged 6-9 months that are receiving breastmilk and complementary foods	Total number of infants aged 6-9 months surveyed
18	Frequency of complementary feeding	Number of infants aged 6-11 months that receive breastmilk and complementary food at least the minimum recommended number of times per day (two times per day for infants aged 6-8 months, three times per day for infants aged 9-11 months)	Total number of infants aged 6-11 months surveyed
19	Adequately fed infants	Number of infants aged 0-11 months that are appropriately fed: infants aged 0-5 months that are exclusively breastfed and infants aged 6-11 months that are breastfed and ate solid or semi-solid foods the appropriate number of times (see above) yesterday	Total number of infants aged 0-11 months surveyed
20	Antenatal care	Number of women aged 15-49 years that were attended at least once during pregnancy in the 2 years preceding the survey by skilled health personnel	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
21	Contraceptive prevalence	Number of women currently married or in union aged 15-49 years that are using (or whose partner is using) a contraceptive method (either modern or traditional)	Total number of women aged 15-49 years that are currently married or in union
22	Antibiotic treatment of suspected pneumonia	Number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks receiving antibiotics	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
23	Care-seeking for suspected pneumonia	Number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks that are taken to an appropriate health provider	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
24	Solid fuels	Number of residents in households that use solid fuels (wood, charcoal, crop residues and dung) as the primary source of domestic energy to cook	Total number of residents in households surveyed
25	Tuberculosis immunization coverage	Number of children aged 12-23 months receiving BCG vaccine before their first birthday	Total number of children aged 12-23 months surveyed
26	Polio immunization coverage	Number of children aged 12-23 months receiving OPV3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed
27	Immunization coverage for diphtheria, pertussis and tetanus (DPT)	Number of children aged 12-23 months receiving DPT3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed
28	Measles immunization coverage	Number of children aged 12-23 months receiving measles vaccine before their first birthday	Total number of children aged 12-23 months surveyed
30	Yellow fever immunization coverage	Number of children aged 12-23 months immunized against yellow fever before their first birthday	Total number of children aged 12-23 months surveyed
31	Fully immunized children	Number of children aged 12-23 months receiving DPT1-3, OPV-1-3, BCG and measles vaccines before their first birthday	Total number of children aged 12-23 months surveyed
32	Neonatal tetanus protection	Number of mothers with live births in the previous year that were given at least two doses of tetanus toxoid (TT) vaccine within the appropriate interval prior to giving birth	Total number of women surveyed aged 15-49 years with a birth in the year preceding the survey
33	Use of oral rehydration therapy (ORT)	Number of children aged 0-59 months with diarrhoea in the previous 2 weeks that received oral rehydration salts and/or an appropriate household solution	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks

INDICATOR		NUMERATOR	DENOMINATOR
34	Home management of diarrhoea	Number of children aged 0-59 months with diarrhoea in the previous 2 weeks that received more fluids AND continued eating somewhat less, the same or more food	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
35	Received ORT or increased fluids and continued feeding	Number of children aged 0-59 months with diarrhoea that received ORT (oral rehydration salts or an appropriate household solution) or received more fluids AND continued eating somewhat less, the same or more food	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
36	Household availability of insecticide-treated nets (ITNs)	Number of households with at least one mosquito net, either permanently treated or treated within the previous year	Total number of households surveyed
37	Under-fives sleeping under insecticide- treated nets	Number of children aged 0-59 months that slept under an insecticide-treated mosquito net the previous night	Total number of children aged 0-59 months surveyed
38	Under-fives sleeping under mosquito nets	Number of children aged 0-59 months that slept under a mosquito net the previous night	Total number of children aged 0-59 months surveyed
39	Antimalarial treatment (under-fives)	Number of children aged 0-59 months reported to have had fever in the previous 2 weeks that were treated with an appropriate antimalarial within 24 hours of onset	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)	Number of women receiving appropriate intermittent medication to prevent malaria (defined as at least 2 doses of SP/Fansidar) during the last pregnancy, leading to a live birth within the 2 years preceding the survey	Total number of women that have had a live birth within the 2 years preceding the survey
41	Iodized salt consumption	Number of households with salt testing 15 parts per million or more of iodine/iodate	Total number of households surveyed
42	Vitamin A supplementation (under-fives)	Number of children aged 6-59 months receiving at least one high-dose vitamin A supplement in the previous 6 months	Total number of children aged 6-59 months surveyed
43	Vitamin A supplementation (post-partum mothers)	Number of women with a live birth in the 2 years preceding the survey that received a high-dose vitamin A supplement within 8 weeks after birth	Total number of women that had a live birth in the 2 years preceding the survey
44	Content of antenatal care	Number of women with a live birth in the 2 years preceding the survey that received antenatal care during the last pregnancy	Total number of women with a live birth in the 2 years preceding the survey
45	Timely initiation of breastfeeding	Number of women with a live birth in the 2 years preceding the survey that put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey
46	Support for learning	Number of children aged 0-59 months living in households in which an adult has engaged in four or more activities to promote learning and school readiness in the past 3 days	Total number of children aged 0-59 months surveyed
47	Father's support for learning	Number of children aged 0-59 months whose father has engaged in one or more activities to promote learning and school readiness in the past 3 days	Total number of children aged 0-59 months
48	Support for learning: children's books	Number of households with three or more children's books	Total number of households surveyed
49	Support for learning: non-children's books	Number of households with three or more non-children's books	Total number of households surveyed
50	Support for learning: materials for play	Number of households with three or more materials intended for play	Total number of households surveyed
51	Non-adult care	Number of children aged 0-59 months left alone or in the care of another child younger than 10 years of age in the past week	Total number of children aged 0-59 months surveyed

INDICATOR		NUMERATOR	DENOMINATOR
52	Pre-school attendance	Number of children aged 36-59 months that attend some form of early childhood education programme	Total number of children aged 36-59 months surveyed
53	School readiness	Number of children in first grade that attended some form of pre-school the previous year	Total number of children in the first grade surveyed
54	Net intake rate in primary education	Number of children of school-entry age that are currently attending first grade	Total number of children of primary- school entry age surveyed
55	Net primary school attendance rate	Number of children of primary-school age currently attending primary or secondary school	Total number of children of primary- school age surveyed
56	Net secondary school attendance rate	Number of children of secondary-school age currently attending secondary school or higher	Total number of children of secondary-school age surveyed
57	Children reaching grade five	Proportion of children entering the first grade of primary school that eventually reach grade five	
58	Transition rate to secondary school	Number of children that were in the last grade of primary school during the previous school year that attend secondary school	Total number of children that were in the last grade of primary school during the previous school year surveyed
59	Primary completion rate	Number of children (of any age) attending the last grade of primary school (excluding repeaters)	Total number of children of primary school completion age (age appropriate to final grade of primary school) surveyed
60	Adult literacy rate	Number of women aged 15-24 years that are able to read a short simple statement about everyday life	Total number of women aged 15-24 years surveyed
61	Gender parity index	Proportion of girls in primary and secondary education	Proportion of boys in primary and secondary education
62	Birth registration	Number of children aged 0-59 months whose births are reported registered	Total number of children aged 0-59 months surveyed
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	Total number of women aged 15-49 years surveyed
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	Total number of women aged 15-49 years surveyed that have at least one living daughter
66	Approval for FGM/C	Number of women aged 15-49 years favouring the continuation of female genital mutilation/cutting	Total number of women aged 15-49 years surveyed
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	Total number of women aged 15-49 years and 20-49 years surveyed, 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	Total number of women aged 15-19 years surveyed
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	Total number of women aged 15-19 and 20-24 years surveyed that are currently married or in union
70	Polygyny	Number of women in a polygynous union	Total number of women aged 15-49 years surveyed that are currently married or in union

INDICATOR		NUMERATOR	DENOMINATOR
71	Child labour	Number of children aged 5-14 years that are involved in child labour	Total number of children aged 5-14 years surveyed
72	Labourer students	Number of children aged 5-14 years involved in child labour activities that attend school	Total number of children aged 5-14 years involved in child labour activities
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
74	Child discipline	Number of children aged 2-14 years that (1) experience only non-violent aggression, (2) experience psychological aggression as punishment, (3) experience minor physical punishment, (4) experience severe physical punishment	Total number of children aged 2-14 years selected and surveyed
75	Prevalence of orphans	Number of children under age 18 with at least one dead parent	Total number of children under age 18 surveyed
76	Prevalence of vulnerable children	Number of children under age 18 that have a chronically ill parent, that live in a household where an adult aged 18-59 years has died in the past year, or that live in a household where an adult aged 18-59 years has been chronically ill in the past year	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 and made vulnerable by HIV/AIDS	Proportion of orphaned or vulnerable children under age five that are moderately or severely underweight, of all orphaned and vulnerable children under age five that are weighed	Proportion of children not classified as orphaned or vulnerable under age five that are moderately or severely underweight, of all children not classified as orphaned or vulnerable under age five that are weighed
80	Early sex among children orphaned and made vulnerable by HIV/AIDS	Proportion of orphaned and vulnerable children aged 15-17 years that had sex before age 15, of all orphaned and vulnerable children aged 15-17 years surveyed	Proportion of children not classified as orphaned or vulnerable aged 15-17 years that had sex before age 15, of all children not classified as orphaned or vulnerable aged 15-17 years surveyed
81	External support to children orphaned and made vulnerable by HIV/AIDS	Number of orphaned and vulnerable children under age 18 whose households received free basic external support in caring for the child	Number of orphaned and vulnerable children under age 18 surveyed
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
83	Condom use with non-regular partners	Number of women aged 15-24 years reporting the use of a condom during sexual intercourse with their last non-marital, non-cohabiting sex partner in the previous 12 months	Total number of women aged 15-24 years surveyed that had a non-marital, non-cohabiting partner in the previous 12 months
84	Age at first sex among young people	Number of women aged 15-24 years that have had sex before age 15	Total number of women aged 15-24 surveyed

INDICATOR		NUMERATOR	DENOMINATOR
85	Higher risk sex in the last year	Number of sexually active women aged 15-24 years that have had sex with a non-marital, non-cohabitating partner in the previous 12 months	Total number of women aged 15-24 that were sexually active in the previous 12 months
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
90	Counselling coverage for the prevention of mother-to-child transmission of HIV	Number of women that gave birth in the previous 24 months and received antenatal care reporting that they received counselling on HIV/AIDS during this care	Total number of women that gave birth in the previous 24 months surveyed
91	Testing coverage for the prevention of mother-to-child transmission of HIV	Number of women that gave birth in the previous 24 months and received antenatal care reporting that they received the results of an HIV test during this care	Total number of women that gave birth in the previous 24 months surveyed
92	Age-mixing among sexual partners	Number of women aged 15-24 years that had sex in the past 12 months with a partner who was 10 or more years older than they were	Total number of sexually active women aged 15-24 years surveyed
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 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 (***Statistics, Sierra Leone***). 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/EA: ___ ___ ___	HH2. Household number: ___ ___ ___
HH3. Interviewer name and number: Name_____ ___ ___	HH4. Supervisor name and number: Name_____ ___ ___
HH5. Day/Month/Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___	
HH6. Area: Rural ..... 1 Urban 2	HH7. Region: *East* ..... 1 *North* ..... 2 South ..... 3 West 4
HH 7a: Kailahun.....11 Kenema.....12 Kono.....13 Bomabli.....21 Kambia.....22 Koinadugu.....23 Port Loko.....24 Tonkolili.....25 Bo.....31 Bonthe.....32 Moyamba.....33 Pujehun.....34 Western Rural.....41 Western Urban.....42	
HH 8. Name of head of household: _____	

After all questionnaires for the household have been completed, fill in the following information:

HH9. Result of HH interview: Completed ..... 1 Not at home ..... 2 Refused ..... 3 HH not found/destroyed ..... 4 Other (*specify*) _____ 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: *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.*	
HH16. Data entry clerk: ___ ___	

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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 is not enough room on this page. Tick here if continuation sheet used ☐

					Eligible for:									
					WOMEN'S INTERVIEW	CHILD LABOUR MODULE	UNDER-5 INTERVIEW	*If **age 18-59 years***	*For children **age 0-17 years** ask HL9-HL12A*					
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*	HL8A. HAS (*name*) BEEN VERY SICK FOR AT LEAST 3 MONTHS DURING THE PAST 12 MONTHS?	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 HOUSE-HOLD? *Record Line no. of mother or 00 for 'no'*	HL10A. *If mother does not live in household:* HAS *(name's)* MOTHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS?	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 HOUSE-HOLD? *Record Line no. of father or 00 for 'no'*	HL12A. *If father does not live in household:* HAS *(name's)* FATHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS?
LINE	NAME	REL.	M F	AGE	15-49	MOTHER	MOTHER	Y N DK	Y N DK	MOTHER	Y N DK	Y N DK	FATHER	Y N DK
01		0 1	1 2	___ ___	01	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
02		___ ___	1 2	___ ___	02	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
03		___ ___	1 2	___ ___	03	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
04		___ ___	1 2	___ ___	04	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
05		___ ___	1 2	___ ___	05	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
06		___ ___	1 2	___ ___	06	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
07		___ ___	1 2	___ ___	07	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
08		___ ___	1 2	___ ___	08	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
09		___ ___	1 2	___ ___	09	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8

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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*	HL8A. HAS (*name*) BEEN VERY SICK FOR AT LEAST 3 MONTHS DURING THE PAST 12 MONTHS?	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 HOUSE-HOLD? *Record Line no. of mother or 00 for 'no'*	HL10A. *If mother does not live in household:* HAS (*name's*) MOTHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS?	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 HOUSE-HOLD? *Record Line no. of father or 00 for 'no'*	HL12A. *If father does not live in household:* HAS (*name's*) FATHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS?
LINE	NAME	REL.	M F	AGE	15-49	MOTHER	MOTHER	Y N DK	Y N DK	MOTHER	Y N DK	Y N DK	FATHER	Y N DK
10		___ ___	1 2	___ ___	10	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
11		___ ___	1 2	___ ___	11	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
12		___ ___	1 2	___ ___	12	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
13		___ ___	1 2	___ ___	13	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
14		___ ___	1 2	___ ___	14	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	1 2 8	___ ___	1 2 8
15		___ ___	1 2	___ ___	15	___ ___	___ ___	1 2 8	1 2 8	___ ___	1 2 8	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	Very Sick (=1)	Mothers Dead (=2)		Mothers Very Sick (=1)	Fathers Dead (=2)		Fathers Very Sick (=1)
Totals	___ ___	___ ___	___ ___	___ ___	___ ___		___ ___	___ ___		___ ___

** 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 UnderFive.
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

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EDUCATION MODULE **ED**

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? 1 YES ⇨ ED3 2 NO ⇩ NEXT LINE	ED3. WHAT IS THE HIGHEST LEVEL OF SCHOOL (*name*) ATTENDED? WHAT IS THE HIGHEST GRADE (*name*) COMPLETED AT THIS LEVEL? LEVEL: 0 PRE-SCHOOL 1 PRIMARY 2 SECONDARY 3 HIGHER 6 NON-STANDARD CURRICULUM 8 DK GRADE: 98 DK *If less than 1 grade, enter 00.*		ED4. DURING THE *(2004-2005)* SCHOOL YEAR, DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 YES 2 NO ⇨ ED7	ED5. SINCE LAST *(day of the week)*, HOW MANY DAYS DID (*name*) ATTEND SCHOOL? *Insert number of days in space below.*	ED6. DURING THIS/THAT SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (*name*) ATTENDING? LEVEL: 0 PRESCHOOL 1 PRIMARY 2 SECONDARY 3 HIGHER 6 NON-STANDARD CURRICULUM 8 DK GRADE: 98 DK		ED7. DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME DURING THE PREVIOUS SCHOOL YEAR, THAT IS (*2003-2004*)? 1 YES 2 NO ⇩ NEXT LINE 8 DK ⇩ NEXT LINE			ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (*name*) ATTEND? LEVEL: 0 PRESCHOOL 1 PRIMARY 2 SECONDARY 3 HIGHER 6 NON-STANDARD CURRICULUM 8 DK GRADE: 98 DK	
LINE		YES NO	LEVEL	GRADE/CLASS	YES	NO	DAYS	LEVEL	GRADE/CLA	Y	N	DK	LEVEL	GRADE
01		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
02		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
03		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
04		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
05		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
06		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
07		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
08		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
09		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
10		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
11		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
12		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
13		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
14		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___
15		1 2⇨NEXT LINE	0 1 2 3 6 8	___ ___	1	2	___	0 1 2 3 6 8	___ ___	1	2	8	0 1 2 3 6 8	___ ___

WATER AND SANITATION MODULE		WS
WS1. WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?	Piped water Piped into dwelling ..... 11 Piped into yard or plot ..... 12 Public tap/standpipe ..... 13 Tubewell/borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 **Bottled water ..... 91** Other (*specify*) _____ 96	11⇨WS5 12⇨WS5 ⇨WS3 96⇨WS3
WS2. WHAT IS THE MAIN SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING?	Piped water Piped into dwelling ..... 11 Piped into yard or plot ..... 12 Public tap/standpipe ..... 13 Tubewell/borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Other (*specify*) _____ 96	11⇨WS5 12⇨WS5
WS3. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	No. of minutes ..... __ __ __ Water on premises ..... 995 DK 998	 995⇨WS5
WS4. WHO USUALLY GOES TO THIS SOURCE TO FETCH THE WATER FOR YOUR HOUSEHOLD? *Probe:* IS THIS PERSON UNDER AGE 15? WHAT SEX? *Circle code that best describes this person.*	Adult woman ..... 1 Adult man ..... 2 Female child (under 15) ..... 3 Male child (under 15) ..... 4 DK 8	
WS5. DO YOU TREAT YOUR WATER IN ANY WAY TO MAKE IT SAFER TO DRINK?	Yes ..... 1 No ..... 2 DK 8	 2⇨WS7 8⇨WS7

WS6. WHAT DO YOU USUALLY DO TO THE WATER TO MAKE IT SAFER TO DRINK? ANYTHING ELSE? *Record all items mentioned.*	Boil ..... A Add bleach/chlorine ..... B Strain it through a cloth ..... C Use water filter (ceramic, sand, composite, etc.) ..... D Solar disinfection ..... E Let it stand and settle ..... F Other (*specify*)_____ X DK ..... Z	
WS7. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE? *If "flush" or "pour flush", probe:* WHERE DOES IT FLUSH TO? *If necessary, ask permission to observe the facility.*	Flush / pour flush Flush to piped sewer system ..... 11 Flush to septic tank ..... 12 Flush to pit (latrine) ..... 13 Flush to somewhere else ..... 14 Flush to unknown place/not sure/DK where ..... 15 Ventilated Improved Pit latrine (VIP) ..... 21 Pit latrine with slab ..... 22 Pit latrine without slab / open pit ..... 23 Composting toilet ..... 31 Bucket ..... 41 Hanging toilet/hanging latrine ..... 51 No facilities or bush or field ..... 95 Other (*specify*)_____ 96	95⇨ NEXT MODULE
WS8. DO YOU SHARE THIS FACILITY WITH OTHER HOUSEHOLDS?	Yes ..... 1 No 2	2⇨ NEXT MODULE
WS9. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY?	No. of households (if less than 10) .... 0 ___ Ten or more households ..... 10 DK 98	

HOUSEHOLD CHARACTERISTICS MODULE		HC
HC1A. WHAT IS THE RELIGION OF THE HEAD OF THIS HOUSEHOLD?	*Christian* .....1 *Muslim* .....2 *Traditional* .....3 Other religion (*specify*) _____ 6 No religion 7	
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	No. of rooms ..... __ __	
HC3. Main material of the dwelling floor: *Record observation.*	Natural floor Earth/sand .....11 Dung .....12 Rudimentary floor Wood planks .....21 Palm/bamboo .....22 Finished floor Parquet or polished wood .....31 Vinyl or asphalt strips .....32 Ceramic tiles .....33 Cement .....34 Carpet .....35 Other (*specify*) _____ 96	
HC4. Main material of the roof. *Record observation.*	Natural roofing No Roof .....11 Thatch/palm leaf .....12 Sod .....13 Rudimentary Roofing Rustic mat .....21 Palm/bamboo .....22 Wood planks .....23 Plastic sheeting .....24 Finished roofing Metal .....31 Wood .....32 Calamine/cement fiber .....33 Ceramic tiles .....34 Cement .....35 Roofing shingles .....36 Other (*specify*) _____ 96	

HOUSEHOLD CHARACTERISTICS MODULE		HC
HC5. Main material of the walls. *Record observation.*	Natural walls No walls ..... 11 Cane/palm/trunks ..... 12 Dirt ..... 13 Rudimentary walls Bamboo with mud ..... 21 Stone with mud ..... 22 Uncovered adobe ..... 23 Plywood ..... 24 Carton ..... 25 Reused wood ..... 26 Finished walls Cement ..... 31 Stone with lime/cement ..... 32 Bricks ..... 33 Cement blocks ..... 34 Covered adobe ..... 35 Wood planks/shingles ..... 36 Other (*specify*) _____ 96	
HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD MAINLY USE FOR COOKING?	Electricity ..... 01 Liquid Propane Gas (LPG) ..... 02 Natural gas ..... 03 Biogas ..... 04 Kerosene ..... 05 Coal / Lignite ..... 06 Charcoal ..... 07 Wood ..... 08 Straw/shrubs/grass ..... 09 Animal dung ..... 10 Agricultural crop residue ..... 11 Other (*specify*) _____ 96	01⇨HC8 02⇨HC8 03⇨HC8 04⇨HC8
HC7. IN THIS HOUSEHOLD, IS FOOD COOKED ON AN OPEN FIRE, AN OPEN STOVE OR A CLOSED STOVE? *Probe for type.*	Open fire ..... 1 Open stove ..... 2 Closed stove ..... 3 Other (*specify*) _____ 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 (*specify*) _____ 6	
HC9. DOES YOUR HOUSEHOLD HAVE:	Yes No	
ELECTRICITY?	Electricity 1 2	
A RADIO?	Radio 1 2	
A TELEVISION/VCR/DVD?	Television/VCR/DVD 1 2	
A MOBILE/NON-MOBILE TELEPHONE?	Mobile/Non mobile Telephone 1 2	
SEWING MACHINE?	Sewing Machine 1 2	
A REFRIGERATOR?	Refrigerator 1 2	
A WATER PUMP?	Water Pump 1 2	
HC10. DOES ANY HOUSEHOLD MEMBER OWN:	Yes No	
A WATCH?	Watch/clock 1 2	
A BICYCLE?	Bicycle 1 2	
A MOTORCYCLE OR SCOOTER?	Motorcycle/Scooter 1 2	
AN ANIMAL-DRAWN CART?	Animal drawn-cart 1 2	
A CAR OR TRUCK?	Car/Truck 1 2	
A BOAT WITH A MOTOR?	Boat with motor 1 2	

ITN MODULE		TN
TN1. DOES YOUR HOUSEHOLD HAVE ANY MOSQUITO NETS THAT CAN BE USED WHILE SLEEPING?	Yes .....1 No.....2	2⇨NEXT MODULE
TN2. HOW MANY MOSQUITO NETS DOES YOUR HOUSEHOLD HAVE? *If 7 or more nets, record '7'.*	Number of nets ..... ___	
TN3. IS THE NET (ARE ANY OF THE NETS) ANY OF THE FOLLOWING BRANDS: *Read each brand name, show picture card, and circle codes for Yes or No for each brand. If possible, observe the net to verify brand.*	Y N DK	
LONG-LASTING TREATED NETS: TN3L1. *OLYSET*? TN3L2. *PERMANET*?	Long-lasting treated nets: OLYSET .....1 2 8 PERMANET.....1 2 8	
PRE-TREATED NETS: TN3P1. *OLYSET*? TN3P2. *PERMANET*?	Pre-treated nets: OLYSET .....1 2 8 PERMANET.....1 2 8	
OTHER NETS: TN3O1. *POLYESTER*? TN3O2. *NYLON*? TN3O3. COTTON? TN3O4. AN UNKNOWN BRAND OF NET?	Other nets: POLYESTER .....1 2 8 NYLON .....1 2 8 COTTON .....1 2 Unknown brand.....1 2	
TN4. *Check TN3 for brand of net(s). Go through the above list in order until **one** box is checked and follow instructions:* *1. ☐ Long-lasting treated net (brand A or brand B) mentioned? ⇨ Go to Next Module* *2. ☐ Pre-treated net (brand C or brand D) mentioned? ⇨ Go to TN6* *3. ☐ Other net (brand E, brand F or any other net, or an unknown brand) mentioned? ⇨ Continue with TN5*		
TN5. WHEN YOU GOT THE (MOST RECENT) NET, WAS IT ALREADY TREATED WITH AN INSECTICIDE TO KILL OR REPEL MOSQUITOES?	Yes .....1 No.....2 DK/not sure.....8	
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.*	Months ago.....__ __ More than 24 months ago.....95 Not sure.....98	
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?	Yes .....1 No.....2 DK 8	2⇨NEXT MODULE 8⇨NEXT MODULE
TN8. HOW LONG AGO WAS THE MOST RECENT SOAKING/DIPPING DONE? *If less than 1 month, record '00'.* *If answer is "12 months" or "1 year", probe to determine if net was treated exactly 12 months ago or earlier or later.*	Months ago.....__ __ More than 24 months ago.....95 Not sure.....98	

CHILDREN ORPHANED & MADE VULNERABLE BY HIV/AIDS — OV

OV1. *Check HL5: any children 0-17?*

☐ *Yes ⇨ Continue to OV2*

☐ *No ⇨ Next Module*

OV2. I WOULD LIKE YOU TO THINK BACK OVER THE PAST 12 MONTHS. HAS ANY USUAL MEMBER OF YOUR HOUSEHOLD DIED IN THE LAST 12 MONTHS?	Yes ..... 1 No 2	2⇨OV5
OV3. (OF THOSE WHO DIED IN THE PAST 12 MONTHS) WERE ANY OF THESE PEOPLE BETWEEN THE AGES OF 18 AND 59?	Yes ..... 1 No 2	2⇨OV5
OV4. (OF THOSE WHO DIED IN THE PAST 12 MONTHS AND WERE BETWEEN THE AGES OF 18 AND 59) WERE ANY OF THESE PEOPLE SERIOUSLY ILL FOR 3 OF THE 12 MONTHS BEFORE HE/SHE DIED?	Yes ..... 1 No 2	1⇨OV8

OV5. *Return to the Household Listing and check the following:*

1. Check totals for HL9 and HL11.
- ☐ *At least one mother or father dead. ⇨ Go to OV8*
- ☐ *No mother or father dead*

2. Check totals for HL8A.
- ☐ *At least one adult aged 18-59 very sick 3 of last 12 months ⇨ Go to OV8*
- ☐ *No adult aged 18-59 very sick 3 of last 12 months*

3. Check totals forHL10A and HL12A.
- ☐ *At least one mother or father ill 3 of last 12 months ⇨ Go to OV8*
- ☐ *No mother or father ill 3 of last 12 months ⇨ Go to Next Module*

OV8. *List all children aged 0-17 below. Record names, line numbers and ages of all children, beginning with the first child and continue in order in which listed in the household listing module. Use a continuation sheet if there are more than 4 children age 0-17 in the household. Ask all questions for one child before moving to the next child.*

	1ST CHILD	2ND CHILD	3RD CHILD	4TH CHILD
Name (from HL2)	_____	_____	_____	_____
Line number (from HL1)	___ ___	___ ___	___ ___	___ ___
Age (from HL5)	___ ___	___ ___	___ ___	___ ___

OV9. I WOULD LIKE TO ASK YOU ABOUT ANY FORMAL, ORGANIZED HELP OR SUPPORT THAT YOUR HOUSEHOLD MAY HAVE RECEIVED FOR (*name*) AND FOR WHICH YOU DID NOT HAVE TO PAY. BY FORMAL ORGANIZED SUPPORT I MEAN HELP PROVIDED BY SOMEONE WORKING FOR A PROGRAM. THIS PROGRAM COULD BE GOVERNMENT, PRIVATE, RELIGIOUS, CHARITY, OR COMMUNITY-BASED. REMEMBER THIS SHOULD BE SUPPORT FOR WHICH YOU DID NOT PAY.

OV10. NOW I WOULD LIKE TO ASK YOU ABOUT THE SUPPORT YOUR HOUSEHOLD RECEIVED FOR (*name*). IN THE LAST 12 MONTHS, HAS YOUR HOUSEHOLD RECEIVED ANY MEDICAL SUPPORT FOR (*name*), SUCH AS MEDICAL CARE, SUPPLIES OR MEDICINE?	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8

OV11. IN THE LAST 12 MONTHS, HAS YOUR HOUSEHOLD RECEIVED ANY EMOTIONAL OR PSYCHOLOGICAL SUPPORT FOR (*name*), SUCH AS COMPANIONSHIP, COUNSELING FROM A TRAINED COUSELOR, OR SPIRITUAL SUPPORT, WHICH YOU RECEIVED AT HOME?	Yes..... 1 No ..... 2 ⇨ OV13 DK..... 8	Yes ..... 1 No..... 2 ⇨ OV13 DK 8	Yes..... 1 No ..... 2 ⇨ OV13 DK..... 8	Yes ..... 1 No..... 2 ⇨ OV13 DK 8
OV12. DID YOUR HOUSEHOLD RECEIVE ANY OF THIS SUPPORT IN THE PAST 3 MONTHS?	Yes..... 1 No ..... 2 DK..... 8	Yes ..... 1 No..... 2 DK 8	Yes..... 1 No ..... 2 DK..... 8	Yes ..... 1 No..... 2 DK 8
OV13. IN THE LAST 12 MONTHS, HAS YOUR HOUSEHOLD RECEIVED ANY MATERIAL SUPPORT FOR (*name*), SUCH AS CLOTHING, FOOD OR FINANCIAL SUPPORT?	Yes..... 1 No ..... 2 ⇨OV15 DK..... 8	Yes ..... 1 No..... 2 ⇨OV15 DK 8	Yes..... 1 No ..... 2 ⇨OV15 DK..... 8	Yes ..... 1 No..... 2 ⇨OV15 DK 8
OV14. DID YOUR HOUSEHOLD RECEIVE ANY OF THIS SUPPORT IN THE PAST 3 MONTHS?	Yes..... 1 No ..... 2 DK..... 8	Yes ..... 1 No..... 2 DK 8	Yes..... 1 No ..... 2 DK..... 8	Yes ..... 1 No..... 2 DK 8
OV15. IN THE LAST 12 MONTHS, HAS YOUR HOUSEHOLD RECEIVED ANY SOCIAL SUPPORT FOR (*name*), SUCH AS HELP IN HOUSEHOLD WORK, TRAINING FOR A CAREGIVER, OR LEGAL SERVICES?	Yes..... 1 No ..... 2 ⇨ OV17 DK..... 8	Yes ..... 1 No..... 2 ⇨ OV17 DK 8	Yes..... 1 No ..... 2 ⇨ OV17 DK..... 8	Yes ..... 1 No..... 2 ⇨ OV17 DK 8
OV16. DID YOUR HOUSEHOLD RECEIVE ANY OF THIS SUPPORT IN THE PAST 3 MONTHS?	Yes..... 1 No ..... 2 DK..... 8	Yes ..... 1 No..... 2 DK 8	Yes..... 1 No ..... 2 DK..... 8	Yes ..... 1 No..... 2 DK 8
OV17. *Check OV8 for age of child:*	*☐ Age 0-4 ⇨ next child ☐ Age 5-17 ⇨ OV18*	*☐ Age 0-4 ⇨ next child ☐ Age 5-17 ⇨ OV18*	*☐ Age 0-4 ⇨ next child ☐ Age 5-17 ⇨ OV18*	*☐ Age 0-4 ⇨ next child ☐ Age 5-17 ⇨ OV18*
OV18. IN THE LAST 12 MONTHS, HAS YOUR HOUSEHOLD RECEIVED ANY SUPPORT FOR (*name's*) SCHOOLING, SUCH AS ALLOWANCE, FREE ADMISSION, BOOKS OR SUPPLIES?	Yes..... 1 No ..... 2 DK..... 8	Yes ..... 1 No..... 2 DK 8	Yes..... 1 No ..... 2 DK..... 8	Yes ..... 1 No..... 2 DK 8

SIERRA LEONE MULTI-INDICATOR CLUSTER SURVEY (MICS3) - 2005

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.

CL1. *Line no.*	CL2. *Name*	CL3. DURING THE PAST WEEK, DID (*name*) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If yes*: FOR PAY IN CASH OR KIND? 1 YES, FOR PAY (CASH OR KIND) 2 YES, UNPAID 3 NO ⇨TO CL5			CL4. *If yes:* SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If more than one job, include all hours at all jobs.* *Record response then ⇨ CL.6*	CL5. AT ANY TIME DURING THE PAST YEAR, DID (*name*) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If yes*: FOR PAY IN CASH OR KIND? 1 YES, FOR PAY (CASH OR KIND) 2 YES, UNPAID 3 NO			CL6. DURING THE PAST WEEK, DID (*name*) HELP WITH HOUSEHOLD CHORES SUCH AS SHOPPING, COLLECTING FIREWOOD, CLEANING, FETCHING WATER, OR CARING FOR CHILDREN? 1 YES 2 NO ⇨ TO CL8		CL7. *If yes*: SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE SPEND DOING THESE CHORES?	CL8. DURING THE PAST WEEK, DID (*name*) DO ANY OTHER FAMILY WORK (ON THE FARM OR IN A BUSINESS OR SELLING GOODS IN THE STREET?) 1 YES 2 NO ⇘ NEXT LINE		CL9. *If yes*: SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK?
LINE NO.	NAME	YES PAID	UNPAID	NO	PAID	YES PAID	UNPAID	NO	YES	NO	NO. HOURS	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	___ ___
04		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
05		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
06		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
07		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
08		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
09		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
10		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
11		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
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	___ ___

CHILD DISCIPLINE MODULE

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

Review the household listing and list each of the children aged 2-14 years below in order according to their line number (HL1). Do not include other household members outside of the age range 2-14 years. Record the line number, name, sex, age, and the line number of the mother or caretaker for each child. Then record the total number of children aged 2-14 in the box provided (CD7).

CD1. Rank no.	CD2. Line no. from HL1.	CD3. Name from HL2.	CD4. Sex from HL4.	CD5. Age from HL5.	CD6. Line no. of mother/ caretaker from HL7 or HL8.
LINE	LINE	NAME	M F	AGE	MOTHER
01	__ __		1 2	___ ___	___ ___
02	__ __		1 2	___ ___	___ ___
03	__ __		1 2	___ ___	___ ___
04	__ __		1 2	___ ___	___ ___
05	__ __		1 2	___ ___	___ ___
06	__ __		1 2	___ ___	___ ___
07	__ __		1 2	___ ___	___ ___
08	__ __		1 2	___ ___	___ ___
CD7.	TOTAL CHILDREN AGED 2-14 YEARS				___ ___

If there is only one child age 2-14 years in the household, then skip table 2 and go to CD9; write down the rank number of the child and continue with CD11

TABLE 2: SELECTION OF RANDOM CHILD FOR CHILD DISCIPLINE QUESTIONS

Use this table to select one child between the ages of 2 and 14 years, if there is more than one child in that age range in the household. Look for the last digit of the household number from the cover page. This is the number of the row you should go to in the table below. Check the total number of eligible children (2-14) in CD7 above. This is the number of the column you should go to. Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number of the child about whom the questions will be asked. Record the rank number in CD9 below. Finally, record the line number and name of the selected child in CD11 on the next page. Then, find the mother or primary caretaker of that child, and ask the questions, beginning with CD12.

CD8.	TOTAL NUMBER OF ELIGIBLE CHILDREN IN THE HOUSEHOLD							
Last digit of the questionnaire number	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

CD9. Record the rank number of the selected child	Rank number of child..... __ __

CHILD DISCIPLINE MODULE		CD
Identify eligible child aged 2 to 14 in the household using the tables on the preceding page, according to your instructions. Ask to interview the mother or primary caretaker of the selected child (identified by the line number in CD6).		
CD11. Write name and line no. of the child selected for the module from CD3 and CD2, based on the rank number in CD9.	Name _____ Line number __ __	
CD12. ALL ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED AND I WANT YOU TO TELL ME IF *YOU OR ANYONE ELSE IN YOUR HOUSEHOLD* HAS USED THIS METHOD WITH *(name)* IN THE PAST MONTH.		
CD12A. TOOK AWAY PRIVILEGES, FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE).	Yes 1 No 2	
CD12B. EXPLAINED WHY SOMETHING (THE BEHAVIOR) WAS WRONG.	Yes 1 No 2	
CD12C. SHOOK HIM/HER.	Yes 1 No 2	
CD12D. SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.	Yes 1 No 2	
CD12E. GAVE HIM/HER SOMETHING ELSE TO DO.	Yes 1 No 2	
CD12F. SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.	Yes 1 No 2	
CD12G. HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.	Yes 1 No 2	
CD12H. CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.	Yes 1 No 2	
CD12I. HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.	Yes 1 No 2	
CD12J. HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.	Yes 1 No 2	
CD12K. BEAT HIM/HER UP WITH AN IMPLEMENT (HIT OVER AND OVER AS HARD AS ONE COULD).	Yes 1 No 2	
CD13. DO YOU BELIEVE THAT IN ORDER TO BRING UP (RAISE, EDUCATE) (*name*) PROPERLY, YOU NEED TO PHYSICALLY PUNISH HIM/HER?	Yes 1 No 2 Don't know/no opinion 8	

DISABILITY **DA**

TO BE ADMINISTERED TO CARETAKERS OF ALL CHILDREN 2 THROUGH 9 YEARS OLD LIVING IN THE HOUSEHOLD. FOR HOUSEHOLD MEMBERS BELOW AGE 2 OR ABOVE AGE 9, LEAVE ROWS BLANK. I WOULD LIKE TO ASK YOU IF ANY CHILDREN IN THIS HOUSEHOLD AGED 2 THROUGH 9 HAS ANY OF THE HEALTH CONDITIONS I AM GOING TO MENTION TO YOU.

DA1. *Line no.*	DA2. *Child's name*	DA3. COMPARED WITH OTHER CHILDREN, DOES OR DID (*name*) HAVE ANY SERIOUS DELAY IN SITTING, STANDING, OR WALKING?	DA4. COMPARED WITH OTHER CHILDREN, DOES (*name*) HAVE DIFFICULTY SEEING, EITHER IN THE DAYTIME OR AT NIGHT?	DA5. DOES (*name*) APPEAR TO HAVE DIFFICULTY HEARING? (USES HEARING AID, HEARS WITH DIFFICULTY, COMPLETELY DEAF?)	DA6. WHEN YOU TELL (*name*) TO DO SOMETHING, DOES HE/SHE SEEM TO UNDERSTAND WHAT YOU ARE SAYING?	DA7. DOES (*name*) HAVE DIFFICULTY IN WALKING OR MOVING HIS/HER ARMS OR DOES HE/SHE HAVE WEAKNESS AND/OR STIFFNESS IN THE ARMS OR LEGS?	DA8. DOES (*name*) SOMETIMES HAVE FITS, BECOME RIGID, OR LOSE CONSC-IOUSNESS?	DA9. DOES (*name*) LEARN TO DO THINGS LIKE OTHER CHILDREN HIS/HER AGE?	DA10. DOES (*name*) SPEAK AT ALL (CAN HE/SHE MAKE HIM OR HERSELF UNDERSTOOD IN WORDS; CAN SAY ANY RECOGNIZABLE WORDS)?	DA11. *(For 3-9 year olds):* IS (*name*)'S SPEECH IN ANY WAY DIFFERENT FROM NORMAL (NOT CLEAR ENOUGH TO BE UNDERSTOOD BY PEOPLE OTHER THAN THE IMMEDIATE FAMILY)?	DA12. *(For 2-year-olds):* CAN (*name*) NAME AT LEAST ONE OBJECT (FOR EXAMPLE, AN ANIMAL, A TOY, A CUP, A SPOON)?	DA13. COMPARED WITH OTHER CHILDREN OF THE SAME AGE, DOES (*name*) APPEAR IN ANY WAY MENTALLY BACKWARD, DULL OR SLOW?
LINE	NAME	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
01		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
02		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
03		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
04		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
05		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
06		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
07		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
08		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
09		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
10		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
11		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2
12		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2	1 2

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 HL1)	MM5. HOW MANY SISTERS (BORN TO THE SAME MOTHER) HAVE YOU EVER HAD? 98= DON'T KNOW	MM6. HOW MANY OF THESE SISTERS EVER REACHED AGE 15? 98= DON'T KNOW	MM7. HOW MANY OF THESE SISTERS (WHO ARE AT LEAST 15 YEARS OLD) ARE ALIVE NOW? 98= DON'T KNOW	MM8. HOW MANY OF THESE SISTERS WHO REACHED AGE 15 OR MORE HAVE DIED? 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 2	__ __	__ __	__ __	__ __	__ __	__ __
02		1 2	__ __	__ __	__ __	__ __	__ __	__ __
03		1 2	__ __	__ __	__ __	__ __	__ __	__ __
04		1 2	__ __	__ __	__ __	__ __	__ __	__ __
05		1 2	__ __	__ __	__ __	__ __	__ __	__ __
06		1 2	__ __	__ __	__ __	__ __	__ __	__ __
07		1 2	__ __	__ __	__ __	__ __	__ __	__ __
08		1 2	__ __	__ __	__ __	__ __	__ __	__ __
09		1 2	__ __	__ __	__ __	__ __	__ __	__ __
10		1 2	__ __	__ __	__ __	__ __	__ __	__ __
11		1 2	__ __	__ __	__ __	__ __	__ __	__ __
12		1 2	__ __	__ __	__ __	__ __	__ __	__ __
13		1 2	__ __	__ __	__ __	__ __	__ __	__ __
14		1 2	__ __	__ __	__ __	__ __	__ __	__ __
15		1 2	__ __	__ __	__ __	__ __	__ __	__ __

SALT IODIZATION MODULE		SI
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? *Once you have examined the salt, circle number that corresponds to test outcome.*	Not iodized 0 PPM ..... 1 Less than 15 PPM ..... 2 15 PPM or more..... 3 No salt in home..... 6 Salt not tested..... 7	

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 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.

WOMEN'S INFORMATION PANEL	WM
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.*	
WM1. EA / 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

Questionnaire for individual women

Repeat greeting if not already read to this woman:

WE ARE FROM (***Statistics, Sierra Leone***). 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. 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. 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 Non-standard curriculum 6	
WM12. WHAT IS THE HIGHEST GRADE COMPLETED AT THAT LEVEL?	Grade ..... __ __	
WM13. *Check WM11:* ☐ *Secondary or higher.* ⇨ *Go to Next Module* ☐ *Primary or non-standard curriculum.* ⇨ *Continue with WM14*		
WM14. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. *Show sentences to respondent.* *If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME? *Example sentences for literacy test:* *1. The child is reading a book.* *2. The rains came late this year.* *3. Parents must care for their children.* *4. Farming is hard work.*	Cannot read at all ..... 1 Able to read only parts of sentence ..... 2 Able to read whole sentence ..... 3 No sentence in required language 4 *(specify language)* Blind/mute, visually/speech impaired 5	

CHILD MORTALITY MODULE		CM
This module is to be administered to all women age 15-49. *All questions refer only to LIVE births.*		
CM1. NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH? *If "No" probe by asking:* I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?	Yes ..... 1 No 2	2⇨ MARRIAGE /UNION MODULE
CM2A. WHAT WAS THE DATE OF YOUR FIRST BIRTH? I MEAN THE VERY FIRST TIME YOU GAVE BIRTH, EVEN IF THE CHILD IS NO LONGER LIVING, OR WHOSE FATHER IS NOT YOUR CURRENT PARTNER. *Skip to CM3 only if year of first birth is given. Otherwise, continue with CM2B.*	Date of first birth Day ..... __ __ DK day ..... 98 Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	⇨CM3 ⇩CM2B
CM2B. HOW MANY YEARS AGO DID YOU HAVE YOUR FIRST BIRTH?	Completed years since first birth ..... __ __	
CM3. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?	Yes ..... 1 No 2	2⇨CM5
CM4. HOW MANY SONS LIVE WITH YOU? HOW MANY DAUGHTERS LIVE WITH YOU?	Sons at home ..... __ __ Daughters at home ..... __ __	
CM5. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?	Yes ..... 1 No 2	2⇨CM7
CM6. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU? HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?	Sons elsewhere ..... __ __ Daughters elsewhere ..... __ __	

CHILD MORTALITY MODULE		CM
CM7. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED?	Yes ..... 1 No 2	2⇨CM9
CM8. HOW MANY BOYS HAVE DIED? HOW MANY GIRLS HAVE DIED?	Boys dead ..... __ __ Girls dead ..... __ __	
CM9. Sum answers to CM4, CM6, and CM8.	Sum ..... __ __	
CM10. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (*total number*) BIRTHS DURING YOUR LIFE. IS THIS CORRECT? ☐ *Yes. ⇨ Go to CM11* ☐ *No. ⇨ Check responses and make corrections before proceeding to CM11*		
CM11. OF THESE (*total number*) BIRTHS YOU HAVE HAD, WHEN DID YOU DELIVER THE LAST ONE (EVEN IF HE OR SHE HAS DIED)? If day is not known, enter '98' in space for day.	Date of last birth Day/Month/Year ..... __ __/__ __/__ __ __ __	
CM12. *Check CM11: Did the woman's last birth occur within the last 2 years, that is, since (day and month of interview in 2003)?* *If child has died, take special care when referring to this child by name in the following modules.* ☐ *No live birth in last 2 years. ⇨ Go to MARRIAGE/UNION module.* ☐ *Yes, live birth in last 2 years. ⇨ Continue with CM13* *Name of child* _____		
CM13. AT THE TIME YOU BECAME PREGNANT WITH (*name*), DID YOU WANT TO BECOME PREGNANT THEN, DID YOU WANT TO WAIT UNTIL LATER, OR DID YOU WANT NO (MORE) CHILDREN AT ALL?	Then ..... 1 Later ..... 2 No more 3	

TETANUS TOXOID (TT) MODULE		TT
This module is to be administered to all women with a live birth in the 2 years preceding date of interview.		
TT1. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? *If a card is presented, use it to assist with answers to the following questions.*	Yes (card seen) ..... 1 Yes (card not seen)..... 2 No ..... 3 DK..... 8	
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. *If yes:* HOW MANY TIMES DID YOU RECEIVE THIS ANTI-TETANUS INJECTION DURING YOUR LAST PREGNANCY?	No. of times.....__ __ DK.....98	 98⇨TT5
TT4. *How many TT doses during last pregnancy were reported in TT3?* ☐ *At least two TT injections during last pregnancy. ⇨ Go to Next Module* ☐ *Fewer than two TT injections during last pregnancy. ⇨ Continue with TT5*		
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.....__ __	
TT7. IN WHAT MONTH AND YEAR DID YOU RECEIVE THE LAST ANTI-TETANUS INJECTION BEFORE THAT LAST PREGNANCY? *Skip to next module only if year of injection is given. Otherwise, continue with TT8.*	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 .....__ __	

MATERNAL AND NEWBORN HEALTH MODULE		MN
This module is to be administered to all women with a live birth in the 2 years preceding date of interview. Check child mortality module CM12 and record name of last-born child here _____. Use this child's name in the following questions, where indicated.		
MN1. IN THE FIRST TWO MONTHS AFTER YOUR LAST BIRTH [THE BIRTH OF *name*], DID YOU RECEIVE A VITAMIN A DOSE LIKE THIS? *Show 200,000 IU capsule or dispenser.*	Yes ..... 1 No ..... 2 DK 8	
MN2. DID YOU SEE ANYONE FOR ANTENATAL CARE FOR THIS PREGNANCY? *If yes*: WHOM DID YOU SEE? ANYONE ELSE? *Probe for the type of person seen and circle all answers given.*	Health professional: Doctor ..... A Nurse/midwife ..... B Auxiliary midwife/MCH Aide ..... C Other person Traditional birth attendant ..... F Community health worker ..... G Relative/friend ..... H Other (*specify*) X No one ..... Y	Y⇨MN7
MN3. AS PART OF YOUR ANTENATAL CARE, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE? MN3A. WERE YOU WEIGHED? MN3B. WAS YOUR BLOOD PRESSURE MEASURED? MN3C. DID YOU GIVE A URINE SAMPLE? MN3D. DID YOU GIVE A BLOOD SAMPLE?	Yes No Weight ..... 1 2 Blood pressure ..... 1 2 Urine sample ..... 1 2 Blood sample 1 2	
MN4. DURING ANY OF THE ANTENATAL VISITS FOR THE PREGNANCY, WERE YOU GIVEN ANY INFORMATION OR COUNSELED ABOUT AIDS OR THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK 8	
MN5. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR HIV/AIDS AS PART OF YOUR ANTENATAL CARE?	Yes ..... 1 No ..... 2 DK 8	2⇨MN7 8⇨MN7
MN6. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 DK 8	
MN6A. DURING THIS PREGNANCY, DID YOU TAKE ANY MEDICINE IN ORDER TO PREVENT YOU FROM GETTING MALARIA?	Yes ..... 1 No ..... 2 DK 8	2⇨MN7 8⇨MN7

MATERNAL AND NEWBORN HEALTH MODULE		MN
MN6B. WHICH MEDICINES DID YOU TAKE TO PREVENT MALARIA? *Circle all medicines taken. If type of medicine is not determined, show typical anti-malarial to respondent.*	SP/Fansidar ..... A Chloroquine ..... B Other (*specify*) _____ X DK..... Z	
MN6c. *Check MN6B for medicine taken:* ☐ *SP/Fansidar taken.* ⇨ *Continue with MN6D* ☐ *SP/Fansidar not taken.* ⇨ *Go to MN7*		
MN6D. HOW MANY TIMES DID YOU TAKE SP/FANSIDAR DURING THIS PREGNANCY TO PREVENT MALARIA?	Number of times .....__ __	
MN7. WHO ASSISTED WITH THE DELIVERY OF YOUR LAST CHILD (*name*)? ANYONE ELSE? *Probe for the type of person assisting and circle all answers given.*	Health professional: Doctor ..... A Nurse/midwife ..... B Auxiliary midwife/ MCH Aide ..... C Other person Traditional birth attendant ..... F Community health worker ..... G Relative/friend ..... H Other (*specify*) X No one ..... Y	

MATERNAL AND NEWBORN HEALTH MODULE		MN
MN8. WHERE DID YOU GIVE BIRTH TO (*name*)? *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.* _____ *(Name of place)*	Home Your home .....11 Other home .....12 Public sector Govt. hospital .....21 Govt. clinic/health center .....22 Other public (*specify*) 26 Private Medical Sector Private hospital .....31 Private clinic .....32 Private maternity home .....33 Other private medical (*specify*) 36 Other (*specify*) 96	
MN9. WHEN YOUR LAST CHILD (*name*) WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?	Very large ..... 1 Larger than average ..... 2 Average ..... 3 Smaller than average ..... 4 Very small ..... 5 DK 8	
MN10. WAS (*name*) WEIGHED AT BIRTH?	Yes ..... 1 No ..... 2 DK 8	2⇨MN12 8⇨MN12
MN11. HOW MUCH DID (*name*) WEIGH? *Record weight from health card, if available.*	From card ..... 1 (kilograms) __ . __ __ __ From recall ..... 2 (kilograms) __ . __ __ __ DK 99998	
MN12. DID YOU EVER BREASTFEED (*name*)?	Yes ..... 1 No 2	2⇨ NEXT MODULE
MN13. HOW LONG AFTER BIRTH DID YOU FIRST PUT (*name*) TO THE BREAST? *If less than 1 hour, record '00' hours.* *If less than 24 hours, record hours.* *Otherwise, record days.*	Immediately .....000 Hours .....1 __ __ *or* Days .....2 __ __ Don't know/remember 998	

MARRIAGE/UNION MODULE		MA
MA1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A MAN AS IF MARRIED?	Yes, currently married ..... 1 Yes, living with a man ..... 2 No, not in union 3	3⇨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	2⇨MA5
MA2B. HOW MANY OTHER WIVES DOES HE HAVE?	Number ..... __ __ DK 98	⇨MA5 98⇨MA5
MA3. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN?	Yes, formerly married ..... 1 Yes, formerly lived with a man ..... 2 No 3	3⇨NEXT MODULE
MA4. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed ..... 1 Divorced ..... 2 Separated 3	
MA5. HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once ..... 1 More than once 2	
MA6. IN WHAT MONTH AND YEAR DID YOU FIRST MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	
MA7. *Check MA6:* ☐ *Both month and year of marriage/union known? ⇨ Go to Next Module* ☐ *Either month or year of marriage/union not known? ⇨ Continue with MA8*		
MA8. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?	Age in years ..... __ __	

CONTRACEPTION MODULE		CP
CP1. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING – AND YOUR REPRODUCTIVE HEALTH. ARE YOU PREGNANT NOW?	Yes, currently pregnant ..... 1 No ..... 2 Unsure or DK 8	1⇨ NEXT MODULE
CP2. SOME PEOPLE USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?	Yes ..... 1 No 2	2⇨ NEXT MODULE
CP3. WHICH METHOD ARE YOU USING? *Do not prompt.* *If more than one method is mentioned, circle each one.*	Female sterilization ..... A Male sterilization ..... B Pill ..... C IUD ..... D Injections ..... E Implants ..... F Condom ..... G Female condom ..... H Diaphragm ..... I Foam/jelly ..... J Lactational amenorrhoea method (LAM) ..... K Periodic abstinence ..... L Withdrawal ..... M Other (*specify*) X	

FEMALE SECRET SOCIETY MODULE		FG
FG1. HAVE YOU EVER HEARD OF BONDO SOCIETY?	Yes ..... 1 No 2	2⇨NEXT MODULE
FG3. ARE YOU A MEMBER?	Yes ..... 1 No 2	2⇨FG8
FG7. WHO INITIATED YOU?	Traditional persons Traditional 'circumciser' .....11 Traditional birth attendant .....12 Other traditional (*specify*) 16 Health professional Doctor .....21 Nurse/midwife .....22 Other health professional (*specify*) 26 DK.....98	
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?* ☐ *Yes.* ⇨ *Continue with FG9* ☐ *No.* ⇨ *Go to FG16*		
FG9. ARE ANY OF YOUR DAUGHTERS MEMBERS OF THE BONDO SOCIETY? IF YES, HOW MANY?	Number of daughters : .....__ __ No daughters initiated 00	00⇨FG16
FG10. WHICH OF YOUR DAUGHTERS WAS INITIATED MOST RECENTLY? *Record the daughter's name.*	Name of daughter: _____	
FG14. HOW OLD WAS (NAME) WHEN THIS OCCURRED? IF THE RESPONDENT DOES NOT KNOW THE AGE, PROBE TO GET AN ESTIMATE.	Daughter's age at initiation .....__ __ DK.....98	
FG15. WHO DID THE INITIATION?	Traditional persons Traditional 'initiator' .....11 Traditional birth attendant .....12 Other Traditional (specify).....16 Health professional Doctor .....21 Nurse/midwife .....22 Other health professional (specify) ..... 26 DK.....98	
FG16. DO YOU THINK THE BONDO SOCIETY SHOULD BE CONTINUED OR DISCONTINUED?	Continued ..... 1 Discontinued ..... 2 Depends ..... 3 DK..... 8	

ATTITUDES TOWARD DOMESTIC VIOLENCE		
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: DV1A. IF SHE GOES OUT WITH OUT TELLING HIM? DV1B. IF SHE NEGLECTS THE CHILDREN? DV1C. IF SHE ARGUES WITH HIM? DV1D. IF SHE REFUSES SEX WITH HIM? DV1E. IF SHE BURNS THE FOOD? DV1F. IF SHE REFUSES TO COOK DV1G. IF SHE GOES OUT WITH A BOY FRIEND DV1H. IF SHE REFUSES TO CLEAN THE HOUSE	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 Refuses to cook……1 2 8 Goes out with Boyfriend……1 2 8 Refuses to clean the house……..1 2 8	

SEXUAL BEHAVIOUR MODULE		SB
CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, ENSURE PRIVACY.		
SB0. *Check WM9: Age of respondent is between 15 and 24?* ☐ *Age 25-49.* ⇨ *Go to Next Module* ☐ *Age 15-24.* ⇨ *Continue with SB1*		
SB1. NOW I NEED TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME FAMILY LIFE ISSUES. THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL.	Never had intercourse.....00 Age in years.....__ __ First time when started living with (first) husband/partner.....95	00⇨NEXT MODULE

SEXUAL BEHAVIOUR MODULE		SB
HOW OLD WERE YOU WHEN YOU FIRST HAD SEXUAL INTERCOURSE (IF EVER)?		
SB2. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE? *Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more the answer must be recorded in years.*	Days ago .....1 __ __ Weeks ago.....2 __ __ Months ago.....3 __ __ Years ago .....4 __ __	4⇨NEXT MODULE
SB3. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WAS A CONDOM USED?	Yes ..... 1 No..... 2	
SB4. WHAT IS YOUR RELATIONSHIP TO THE MAN WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE? *If man is 'boyfriend' or 'fiancée', ask:* WAS YOUR BOYFRIEND/FIANCÉE LIVING WITH YOU WHEN YOU LAST HAD SEX? *If 'yes', circle 1 .If 'no', circle 2.*	Spouse / cohabiting partner ..... 1 Man is boyfriend / fiancée ..... 2 Other friend..... 3 Casual acquaintance ..... 4 Other (*specify*) _____ 6	1⇨SB6
SB5. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner.....__ __ DK.....98	
SB6. HAVE YOU HAD SEX WITH ANY OTHER MAN IN THE LAST 12 MONTHS?	Yes ..... 1 No..... 2	2⇨NEXT MODULE
SB7. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH THIS OTHER MAN, WAS A CONDOM USED?	Yes ..... 1 No..... 2	
SB8. WHAT IS YOUR RELATIONSHIP TO THIS MAN? *If man is 'boyfriend' or 'fiancée', ask:* WAS YOUR BOYFRIEND/FIANCÉE LIVING WITH YOU WHEN YOU LAST HAD SEX? *If 'yes', circle 1. If 'no', circle 2.*	Spouse / cohabiting partner ..... 1 Man is boyfriend / fiancée ..... 2 Other friend..... 3 Casual acquaintance ..... 4 Other (*specify*) _____ 6	1⇨SB10
SB9. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner.....__ __ DK.....98	
SB10. OTHER THAN THESE TWO MEN, HAVE YOU HAD SEX WITH ANY OTHER MAN IN THE LAST 12 MONTHS?	Yes ..... 1 No..... 2	2⇨NEXT MODULE
SB11. IN TOTAL, WITH HOW MANY DIFFERENT MEN HAVE YOU HAD SEX IN THE LAST 12 MONTHS?	No. of partners .....__ __	

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	 2⇨ NEXT MODULE
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	
HA7A. CAN PEOPLE GET THE AIDS VIRUS BY GETTING INJECTIONS WITH A NEEDLE THAT WAS ALREADY USED BY SOMEONE ELSE?	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?	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	

HIV/AIDS MODULE		HA
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	
HA14. *Check MN5: Tested for HIV during antenatal care?* ☐ *Yes.* ⇨ *Go to HA18A* ☐ *No.* ⇨ *Continue with HA15*		
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	1⇨NEXT MODULE 2⇨NEXT MODULE 3⇨NEXT MODULE
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? HA18A. *If tested for HIV during antenatal care:* OTHER THAN AT THE ANTENATAL CLINIC, DO YOU KNOW OF A PLACE WHERE YOU CAN GO TO GET A TEST TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes ..... 1 No 2	

Follow instructions in your Interviewer's Manual.

UNDER-FIVE CHILD INFORMATION PANEL	UF
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). A separate questionnaire should be used for each eligible child. 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.	
UF1. Cluster number/EA: ___ ___ ___	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 STATISICS OFFICE FROM STATISTICS SIERRA LEONE. 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 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? *Probe:* WHAT IS HIS/HER BIRTHDAY? If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day.	Date of birth: Day .....__ __ DK day .....98 Month .....__ __ DK month .....98 Year .....__ __ __ __ DK year 9998	
UF11. HOW OLD WAS (*name*) AT HIS/HER LAST BIRTHDAY?	Age in completed years .....__	

Record 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
BR2. HAS (*name's*) BIRTH BEEN REGISTERED WITH THE CIVIL AUTHORITIES?	Yes ..... 1 No ..... 2 DK 8					1⇨BR5 8⇨BR4
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 Did not want to pay fine ..... 4 Does not know where to register ..... 5 Other (*specify*) 6 DK 8					
BR4. DO YOU KNOW HOW TO REGISTER YOUR CHILD'S BIRTH?	Yes ..... 1 No 2					
BR5. *Check age of child in UF11: Child is 3 to 5 years old?* ☐ *Yes.* ⇨ *Continue with BR6* ☐ *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*): *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)? *Circle all that apply.*		Mother	Father	Other	No one	
BR8A. READ BOOKS OR LOOK AT PICTURE BOOKS WITH (*name*)?	Books	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	

CHILD DEVELOPMENT		CE
Question CE1 is to be administered only once to each caretaker		
CE1. HOW MANY BOOKS ARE THERE IN THE HOUSEHOLD? PLEASE INCLUDE SCHOOLBOOKS, BUT NOT OTHER BOOKS MEANT FOR CHILDREN, SUCH AS PICTURE BOOKS If 'none' enter 00	Number of non-children's books .....0 __ Ten or more non-children's books 10	
CE2. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR (*name*)? If 'none' enter 00	Number of children's books.....0 __ Ten or more books 10	
CE3. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT (*name*) PLAYS WITH WHEN HE/SHE IS AT HOME. WHAT DOES (*name*) PLAY WITH? DOES HE/SHE PLAY WITH HOUSEHOLD OBJECTS, SUCH AS BOWLS, PLATES, CUPS OR POTS? OBJECTS AND MATERIALS FOUND OUTSIDE THE LIVING QUARTERS, SUCH AS STICKS, ROCKS, ANIMALS, SHELLS, OR LEAVES? HOMEMADE TOYS, SUCH AS DOLLS, CARS AND OTHER TOYS MADE AT HOME? TOYS THAT CAME FROM A STORE? If the respondent says "YES" to any of the prompted categories, then probe to learn specifically what the child plays with to ascertain the response Code Y if child does not play with any of the items mentioned.	Household objects (bowls, plates, cups, pots) ..... A Objects and materials found outside the living quarters (sticks, rocks, animals, shells, leaves) ..... B Homemade toys (dolls, cars and other toys made at home) C Toys that came from a store ..... D No playthings mentioned ..... Y	
CE4. SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN WITH OTHERS. SINCE LAST (*day of the week*) HOW MANY TIMES WAS (*name*) LEFT IN THE CARE OF ANOTHER CHILD (THAT IS, SOMEONE LESS THAN 10 YEARS OLD)? If 'none' enter 00	Number of times .....__ __	
CE5. IN THE PAST WEEK, HOW MANY TIMES WAS (*name*) LEFT ALONE?	Number of times .....__ __	

CHILD DEVELOPMENT		CE
If 'none' enter 00		

VITAMIN A MODULE		VA
VA1. HAS (*name*) EVER RECEIVED A VITAMIN A CAPSULE (SUPPLEMENT) LIKE THIS ONE? 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.	Yes ..... 1 No ..... 2 DK 8	2⇨NEXT MODULE 8⇨NEXT MODULE
VA2. HOW MANY MONTHS AGO DID (*name*) TAKE THE LAST DOSE?	Months ago ..... __ __ DK 98	
VA3. WHERE DID (*name*) GET THIS LAST DOSE?	On routine visit to health facility ..... 1 Sick child visit to health facility ..... 2 National Immunization Day campaign ..... 3 Other (*specify*) 6 DK 8	

BREASTFEEDING MODULE		**BF**
BF1. HAS (*name*) 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: Read each item aloud and record response before proceeding to the next item. BF3A. VITAMIN, MINERAL SUPPLEMENTS OR MEDICINE? BF3B. PLAIN WATER? BF3C. SWEETENED, FLAVOURED WATER OR FRUIT JUICE OR TEA OR INFUSION? BF3D. ORAL REHYDRATION SOLUTION (ORS)? BF3E. INFANT FORMULA? BF3F. TINNED, POWDERED OR FRESH MILK? BF3G. ANY OTHER LIQUIDS? BF3H. SOLID OR SEMI-SOLID (MUSHY) FOOD?	Y N DK A. Vitamin supplements .....1 2 8 B. Plain water.....1 2 8 C. Sweetened water or juice .....1 2 8 D. ORS .....1 2 8 E. Infant formula .....1 2 8 F. Milk.....1 2 8 G. Other liquids.....1 2 8 H. Solid or semi-solid food 1 2 8	
BF4. Check BF3H: Child received solid or semi-solid (mushy) food? ☐ Yes. ⇨ Continue with BF5 ☐ *No or DK. ⇨ Go to Next Module*		
BF5. SINCE THIS TIME YESTERDAY, HOW MANY TIMES DID (*name*) EAT SOLID, SEMISOLID, OR SOFT FOODS OTHER THAN LIQUIDS? If 7 or more times, record '7'.	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? Diarrhoea is determined as perceived by mother or caretaker, or as three or more loose or watery stools per day, or blood in stool.	Yes ..... 1 No ..... 2 DK..... 8	 2⇨CA5 8⇨CA5
CA2. DURING THIS LAST EPISODE OF DIARRHOEA, DID (*name*) DRINK ANY OF THE FOLLOWING: Read each item aloud and record response before proceeding to the next item. CA2A. A FLUID MADE FROM A SPECIAL PACKET CALLED **ORS** ***packet solution?*** CA2B. GOVERNMENT-RECOMMENDED HOMEMADE SSS FLUID? CA2C. A PRE-PACKAGED ORS FLUID FOR DIARRHOEA?	Yes No DK A. Fluid from **ORS** packet .....1 2 8 B. Recommended homemade **SSS** ..1 2 8 C. Pre-packaged ORS fluid.....1 2 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? If "less", probe: MUCH LESS OR A LITTLE LESS?	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 (*specify*) 6 DK..... 8	 2⇨CA12 6⇨CA12
CA8. DID YOU SEEK ADVICE OR TREATMENT FOR THE ILLNESS OUTSIDE	Yes ..... 1 No 2	 2⇨CA10

THE HOME?	DK..... 8	8⇨CA10
CA9. FROM WHERE DID YOU SEEK CARE? ANYWHERE ELSE? Circle all providers mentioned, but do NOT prompt with any suggestions. 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. _____ (Name of place)	Public sources Govt. hospital ..... A Govt. health centre/post ..... B Govt. MCH post ..... C Village health worker ..... D Govt. Mobile/outreach clinic ..... E Other public (*specify*) H Private sources Private hospital/clinic..... I Private physician ..... J Pharmacy ..... K Mobile clinic ..... L Other private medical (*specify*) O Other source Relative or friend ..... P Shop ..... Q Traditional practitioner ..... R Other (*specify*) X	
CA10. WAS (*name*) GIVEN MEDICINE TO TREAT THIS ILLNESS?	Yes ..... 1 No ..... 2 DK..... 8	2⇨CA12 8⇨CA12
CA11. WHAT MEDICINE WAS (*name*) GIVEN? Circle all medicines given.	Antibiotic (like procaine, amoxicillin, tetracycline, ampicyline, etc) ..... A Paracetamol/Panadol/Acetaminophen ..... P Aspirin ..... Q Ibupropfen ..... R Other (*specify*) X DK..... Z	
CA12. Check UF11: Child aged under 3? ☐ Yes. ⇨ Continue with CA13 ☐ *No. ⇨ Go to CA14*		
CA13. THE LAST TIME *(name)* PASSED STOOLS, WHAT WAS DONE TO DISPOSE OF THE STOOLS?	Child used toilet/latrine ..... 01 Put/rinsed into toilet or latrine ..... 02 Put/rinsed into drain or ditch ..... 03 Thrown into garbage (solid waste) ..... 04 Buried ..... 05 Left in the open ..... 06 Other (*specify*) 96 DK..... 98	

CARE OF ILLNESS MODULE		CA
Ask the following question (CA14) only once for each caretaker. 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? Keep asking for more signs or symptoms until the caretaker cannot recall any additional symptoms. Circle all symptoms mentioned, But do NOT prompt with any suggestions.	Child not able to drink or breastfeed ..... A Child becomes sicker..... B Child develops a fever ..... C Child has fast breathing ..... D Child has difficult breathing..... E Child has blood in stool..... F Child is drinking poorly.....G Other (*specify*) X Other (*specify*) Y Other (*specify*) Z	

MALARIA MODULE FOR UNDER-FIVES		ML
ML1. IN THE LAST TWO WEEKS, THAT IS, SINCE (*day of the week*) OF THE WEEK BEFORE LAST, HAS (*name*) BEEN ILL WITH A FEVER?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML10 8⇨ML10
ML2. WAS (*name*) SEEN AT A HEALTH FACILITY DURING THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML6 8⇨ML6
ML3. DID (*name*) TAKE A MEDICINE FOR FEVER OR MALARIA THAT WAS PROVIDED OR PRESCRIBED AT THE HEALTH FACILITY?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML5 8⇨ML5
ML4. WHAT MEDICINE DID (*name*) TAKE THAT WAS PROVIDED OR PRESCRIBED AT THE HEALTH FACILITY? *Circle all medicines mentioned.*	Anti-malarials: SP/Fansidar ..... A Chloroquine ..... B Amodiaquine ..... C Quinine ..... D Artemisinin-based combinations ..... E Other anti-malarial (*specify*) H Other medications: Paracetamol/Panadol/Acetaminophen ... P Aspirin ..... Q Ibuprofen ..... R Other (*specify*) X DK ..... Z	
ML5. WAS (*name*) GIVEN MEDICINE FOR THE FEVER OR MALARIA BEFORE BEING TAKEN TO THE HEALTH FACILITY?	Yes ..... 1 No ..... 2 DK 8	1⇨ML7 2⇨ML8 8⇨ML8
ML6. WAS (*name*) GIVEN MEDICINE FOR FEVER OR MALARIA DURING THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML8 8⇨ML8

MALARIA MODULE FOR UNDER-FIVES		ML
ML7. WHAT MEDICINE WAS (*name*) GIVEN? *Circle all medicines given. Ask to see the medication if type is not known. If type of medication is still not determined, show typical anti-malarials to respondent.*	Anti-malarials: SP/Fansidar ..... A Chloroquine..... B Amodiaquine ..... C Quinine ..... D Artemisinin-based combinations ..... E Other anti-malarial *(specify)* H Other medications: Paracetamol/Panadol/Acetaminophen ... P Aspirin..... Q Ibuprofen..... R Other (*specify*) X DK..... Z	
ML8. *Check ML4 and ML7: Anti-malarial mentioned (codes A - H)?* ☐ *Yes.* ⇨ *Continue with ML9* ☐ *No.* ⇨ *Go to ML10*		
ML9. HOW LONG AFTER THE FEVER STARTED DID (*name*) FIRST TAKE (*name of anti-malarial from ML4 or ML7*)? *If multiple anti-malarials mentioned in ML4 or ML7, name all anti-malarial medicines mentioned.* *Record the code for the day on which the first anti-malarial was given.*	Same day ..... 0 Next day ..... 1 2 days after the fever ..... 2 3 days after the fever ..... 3 4 or more days after the fever..... 4 DK..... 8	
ML10. DID (*name*) SLEEP UNDER A MOSQUITO NET LAST NIGHT?	Yes ..... 1 No..... 2 DK..... 8	2⇨NEXT MODULE 8⇨NEXT MODULE
ML11. HOW LONG AGO DID YOUR HOUSEHOLD OBTAIN THE MOSQUITO NET? *If less than 1 month, record '00'.* *If answer is "12 months" or "1 year", probe to determine if net was treated exactly 12 months ago or earlier or later.*	Months ago..... __ __ More than 24 months ago .....95 Not sure 98	

MALARIA MODULE FOR UNDER-FIVES		ML
ML12. WHAT BRAND IS THIS NET? *If the respondent does not know the brand of the net, show pictorials, or if possible, observe the net.* *LONG LASTING TREATED NETS*: ***OLYSET*** ***PERMANET*** *PRE-TREATED NETS*: ***OLYSET*** ***PERMANET*** *OTHER NETS:* ***POLYESTER*** ***NYLON*** ***COTTON***	Long lasting treated net: **OLYSET** .....11 **PERMANET**.....12 Pre-treated net: **OLYSET** .....21 **PERMANET**.....22 Other net: **POLYESTER** .....31 **NYLON** .....32 **COTTON** (*specify brand*) _____ 36 DK brand 98	11⇨NEXT MODULE 12⇨NEXT MODULE 21⇨ML14 22⇨ML14
ML13. WHEN YOU GOT THAT NET, WAS IT ALREADY TREATED WITH AN INSECTICIDE TO KILL OR REPEL MOSQUITOES?	Yes ..... 1 No..... 2 DK/not sure..... 8	
ML14. SINCE YOU GOT THE MOSQUITO NET, WAS IT EVER SOAKED OR DIPPED IN A LIQUID TO KILL/REPEL MOSQUITOES OR BUGS?	Yes ..... 1 No..... 2 DK..... 8	2⇨ NEXT MODULE 8⇨ NEXT MODULE
ML15. HOW LONG AGO WAS THE NET LAST SOAKED OR DIPPED? *If less than 1 month, record '00'.* *If answer is "12 months" or "1 year", probe to determine if net was treated exactly 12 months ago or earlier or later.*	Months ago.....__ __ More than 24 months ago .....95 DK.....98	

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									

IMMUNIZATION MODULE											IM
IM3C. POLIO 2	OPV2										
IM3D. POLIO 3	OPV3										
IM4A. DPT1	DPT1										
IM4B. DPT2	DPT2										
IM4C. DPT3	DPT3										
IM6. MEASLES (OR MMR)	MEASLES										
IM7. YELLOW FEVER	YF										
IM8A. VITAMIN A (1)	VITA1										
IM8B. VITAMIN A (2)	VITA2										
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? 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.		Yes ..... 1 (Probe for vaccinations and write '66' in the corresponding day column on IM2 to IM8B.) No ..... 2 DK 8								1⇨IM19 2⇨IM19 8⇨IM19	
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⇨IM19 8⇨IM19	
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 ..... __ __									

IMMUNIZATION MODULE		IM
IM15. HAS (*name*) 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 (*name*) 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	
IM18. HAS (*name*) EVER BEEN GIVEN "YELLOW FEVER VACCINATION INJECTIONS" – THAT IS, A SHOT IN THE ARM AT THE AGE OF **9** MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING YELLOW FEVER? (SOMETIMES GIVEN AT THE SAME TIME AS MEASLES)	Yes ..... 1 No ..... 2 DK 8	
IM19. PLEASE TELL ME IF (*name*) HAS PARTICIPATED IN ANY OF THE FOLLOWING CAMPAIGNS, NATIONAL IMMUNIZATION DAYS AND/OR VITAMIN A OR CHILD HEALTH DAYS:	Y N DK	
IM19A. *NID **APRIL 2005** (CAMPAIGN A)*	*Campaign A* 1 2 8	
*IM19B. NID **FEBRUARY 2005** (CAMPAIGN B)*	*Campaign B* 1 2 8	
*IM19C. NID **NOVEMBER 2004** (CAMPAIGN C)*	*Campaign C* 1 2 8	

M20. *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
After questionnaires for all children are complete, the measurer weighs and measures each child. Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child. Check the child's name and line number on the household listing before recording measurements.	

AN1. Child's weight.	Kilograms (kg).....__ __ . __	
AN2. Child's length or height. Check age of child in UF11: ☐ Child under 2 years old. ⇨ Measure length (lying down). ☐ Child age 2 or more years. ⇨ Measure height (standing up).	Length (cm) Lying down.....1 __ __ __ . __ Height (cm) Standing up.....2 __ __ __ . __	
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?

☐ Yes. ⇨ Record measurements for next child.

☐ No. ⇨ End the interview with this household by thanking all participants for their cooperation.

Gather together all questionnaires for this household and check that all identification numbers are inserted on each page. Tally on the Household Information Panel the number of interviews completed.

Table HH.1: Results of household and individual interviews

Numbers 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, Sierra Leone, 2005

	Area		Region				Total
	Rural	Urban	East	North	South	West	
Sampled households	5625	2375	1850	2850	2000	1300	8000
Occupied households	5086	2039	1604	2602	1761	1158	7125
Interviewed households	5053	2025	1600	2564	1758	1156	7078
Household response rate	99.4	99.3	99.8	98.5	99.8	99.8	99.3
Eligible women	6624	2633	2281	3548	2202	1226	9257
Interviewed women	5334	2320	1586	2971	1907	1190	7654
Women response rate	80.5	88.1	69.5	83.7	86.6	97.1	82.7
Women's overall response rate	80.0	87.5	69.4	82.5	86.5	96.9	82.1
Eligible children under 5	4670	1234	1478	2273	1638	515	5904
Mother/Caretaker Interviewed	4076	1170	1149	2099	1485	513	5246
Child response rate	87.3	94.8	77.7	92.3	90.7	99.6	88.9
Children's overall response rate	86.7	94.2	77.5	91.0	90.5	99.4	88.3

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, Sierra Leone

		Sex				Total	
		Male		Female			
		Number	Percent	Number	Percent	Number	Percent
Age	0-4	2937	14.0	2968	13.7	5905	13.8
	5-9	3665	17.4	3569	16.5	7234	16.9
	10-14	2742	13.0	2800	12.9	5542	13.0
	15-19	2238	10.6	1564	7.2	3802	8.9
	20-24	1350	6.4	1425	6.6	2775	6.5
	25-29	1260	6.0	2071	9.6	3331	7.8
	30-34	1101	5.2	1372	6.3	2473	5.8
	35-39	1253	6.0	1456	6.7	2710	6.3
	40-44	933	4.4	833	3.8	1766	4.1
	45-49	890	4.2	539	2.5	1429	3.3
	50-54	587	2.8	1136	5.2	1723	4.0
	55-59	499	2.4	466	2.1	964	2.3
	60-64	469	2.2	488	2.2	957	2.2
	65-69	332	1.6	292	1.3	624	1.5
	70+	609	2.9	555	2.6	1164	2.7
	Missing/DK	170	.8	151	.7	320	.7
Dependency age groups	<15	9344	44.4	9337	43.1	18681	43.7
	15-64	10580	50.3	11349	52.3	21929	51.3
	65+	941	4.5	847	3.9	1788	4.2
	Missing/DK	170	.8	151	.7	320	.7
Age	Children aged 0-17	10794	51.3	10247	47.3	21041	49.3
	Adults 18+/Missing/ DK	10240	48.7	11438	52.7	21678	50.7
Total		**21034**	**100.0**	**21685**	**100.0**	**42719**	**100.0**

Table HH.3: Household composition

Percent distribution of households by selected characteristics, Sierra Leone, 2005

		Weighted percent	Number of households weighted	Number of households unweighted
Sex of household head	Male	77.1	5455	5455
	Female	22.9	1623	1623
Region	East	22.5	1593	1600
	North	36.5	2585	2564
	South	24.7	1749	1758
	West	16.3	1150	1156
Area	Rural	71.4	5052	5053
	Urban	28.6	2026	2025
Number of household members	1	2.4	171	172
	2-3	14.4	1016	1018
	4-5	31.1	2199	2200
	6-7	27.3	1930	1930
	8-9	15.3	1079	1078
	10+	9.6	682	680
Religion of Household Head	Christian	22.6	1601	1603
	Muslim	77.1	5458	5456
	Other/Missing	*	19	19
Total		**100.0**	**7078**	**7078**

Table HH.3: Household composition

Percent distribution of households by selected characteristics, Sierra Leone, 2005

	Weighted percent	Number of households weighted	Number of households unweighted
At least one child aged < 18 years	90.2	7078	7078
At least one child aged < 5 years	56.9	7078	7078
At least one woman aged 15-49 years	85.4	7078	7078

Table HH.4: Women's background characteristics

Percent distribution of women aged 15-49 years by background characteristics, Sierra Leone, 2005

		Weighted percent	Number of women weighted	Number of women unweighted
Region	East	24.0	1839	1586
	North	38.8	2965	2971
	South	23.8	1820	1907
	West	13.4	1023	1190
Area	Rural	71.6	5475	5334
	Urban	28.4	2171	2320
Age	15-19	14.4	1103	1109
	20-24	15.3	1168	1170
	25-29	23.3	1785	1773
	30-34	15.4	1177	1191
	35-39	16.4	1253	1256
	40-44	9.3	711	710
	45-49	5.9	450	445
Marital/Union status	Currently married/in union	79.5	6077	6049
	Formerly married/in union	5.8	446	453
	Never married/in union	14.7	1124	1152
Motherhood status	Ever gave birth	83.4	6375	6365
	Never gave birth	16.6	1271	1289
Education	None	73.7	5632	5556
	Primary	11.0	841	844
	Secondary +	15.1	1152	1233
	Non-standard curriculum	*	22	21
Wealth index quintiles	Poorest	19.4	1482	1423
	Second	20.3	1556	1524
	Middle	19.8	1517	1480
	Fourth	19.7	1510	1529
	Richest	20.7	1582	1698
Religion of Household Head	Christian	21.9	1678	1683
	Muslim	77.8	5950	5954
	Other/Missing	*	18	17
Total		**100.0**	**7647**	**7654**

Table HH.5: Children's background characteristics

Percent distribution of children under five years of age by background characteristics, Sierra Leone, 2005

		Weighted percent	Number of under-5 children weighted	Number of under-5 children unweighted
Sex	Male	49.7	2605	2609
	Female	50.3	2639	2637
Region	East	24.8	1300	1149
	North	38.9	2040	2099
	South	27.5	1444	1485
	West	8.8	460	513
Area	Rural	79.0	4144	4076
	Urban	21.0	1101	1170
Age	< 6 months	9.6	503	500
	6-11 months	9.8	513	517
	12-23 months	20.6	1074	1073
	24-35 months	20.5	1069	1071
	36-47 months	22.6	1181	1177
	48-59 months	16.9	884	889
Mother's education	None	80.6	4226	4199
	Primary	10.3	541	543
	Secondary	9.0	473	500
Wealth index quintiles	Poorest	21.1	1109	1083
	Second	23.5	1231	1212
	Middle	22.0	1156	1140
	Fourth	19.4	1020	1036
	Richest	13.9	729	775
Religion of Household Head	Christian	19.0	995	992
	Muslim	80.8	4240	4245
	Other/Missing	*	9	9
Total		**100.0**	**5245**	**5246**

** Cases of Non-Standard Curriculum = 2 and Missing/DK = 2 for mother's education deleted from the table

Table CM.1: Child mortality

Infant and under-five mortality rates by background and demographic characteristics [BASED ON NORTH], Sierra Leone, 2005

		Infant Mortality Rate*	Under-five Mortality Rate**
Sex	Male	172	283
	Female	143	249
Region	East	166	280
	North	149	252
	South	189	317
	West	79	126
Area	Rural	165	279
	Urban	123	207
Mother's education	None	165	279
	Primary	146	247
	Secondary+	100	164
Poverty Status	Poor 60%	163	275
	Rich 40%	144	243
Religion	Christian	127	214
	Muslim	166	279
Total		158	267

* MICS indicator 2; MDG indicator 14
** MICS indicator 1; MDG indicator 13

Table CM.2: Children ever born and proportion dead

Mean number of children ever born and proportion dead by age of women, Sierra Leone, 2005

		Mean number of Children Ever Born	Proportion dead	Mean number of children surviving	Number of women
Age	15-19	.496	.243	.376	1103
	20-24	1.747	.248	1.314	1168
	25-29	3.245	.262	2.396	1785
	30-34	4.504	.257	3.346	1177
	35-39	5.622	.279	4.056	1253
	40-44	6.537	.306	4.535	711
	45-49	7.016	.318	4.786	450
Total		**3.731**	**.277**	**2.697**	**7647**

Table NU.1: Child malnourishment

Percentage of under-five children who are severely or moderately undernourished, Sierra Leone, 2005

		Weight for age: % below -2 SD*	Weight for age: % below -3 SD	Height for age: % below -2 SD**	Height for age: % below -3 SD	Weight for height: % below -2 SD***	Weight for height: % below -3 SD	Weight for height: % above +2 SD	Number of children
Sex	Male	31.8	8.6	41.5	21.3	10.0	2.2	2.9	2043
	Female	29.2	8.2	38.7	19.1	7.6	1.7	2.9	2092
Region	East	33.5	7.9	38.7	22.0	11.3	1.8	2.4	1030
	North	33.7	10.5	45.4	23.0	7.8	2.2	2.5	1458
	South	27.5	7.2	39.2	17.3	8.8	2.0	2.9	1219
	West	20.5	5.7	28.1	14.5	5.9	1.5	5.5	428
Area	Rural	32.7	8.9	42.5	22.1	9.2	2.1	2.7	3161
	Urban	23.3	6.5	32.2	14.0	7.3	1.7	3.7	974
Age	< 6 months	3.6	.5	9.9	2.4	3.2	.7	11.1	417
	6-11 months	30.8	10.9	22.1	7.8	15.0	2.6	2.7	439
	12-23 months	45.8	14.0	46.3	21.7	16.0	3.6	2.5	898
	24-35 months	35.0	10.0	45.8	24.4	7.5	1.3	1.7	859
	36-47 months	28.8	7.1	51.2	28.5	5.3	1.9	1.0	892
	48-59 months	22.1	3.3	40.3	20.8	4.3	1.1	2.6	631
Mother's education	None	31.7	8.6	42.4	22.1	8.6	1.7	2.6	3259
	Primary	27.7	8.0	32.3	13.4	11.3	3.2	3.1	452
	Secondary	23.5	6.8	30.0	12.8	7.7	2.8	4.8	421
Wealth index quintiles	Poorest	36.3	9.3	43.6	23.7	8.7	2.8	3.0	830
	Second	32.1	8.6	44.4	22.8	8.5	1.5	2.9	919
	Middle	30.8	8.8	41.9	22.1	10.1	2.2	2.7	883
	Fourth	29.7	8.4	41.1	17.7	7.8	1.6	1.9	834
	Richest	21.4	6.2	26.3	12.8	8.7	1.7	4.3	669
Religion of Household Head	Christian	26.8	8.8	35.0	19.4	9.1	2.2	3.7	814
	Muslim	31.3	8.3	41.3	20.3	8.7	1.9	2.7	3314
	Other/Missing	*	*	*	*	*	*	*	7
Total		30.4	8.4	40.1	20.2	8.8	2.0	2.9	4135

* MICS indicator 6; MDG indicator 4
** MICS indicator 7
*** MICS indicator 8

**** Cases of Non-Standard Curriculum = 2 and Missing/DK = 2 for mother's education deleted from the table

Table NU.2: Initial breastfeeding

Percentage of women aged 15-49 years with a birth in the 2 years preceding the survey who breastfed their baby within one hour of birth and within one day of birth, Sierra Leone, 2005

		Percentage who started breastfeeding within one hour of birth*	Percentage who started breastfeeding within one day of birth	Number of women with live birth in the two years preceding the survey
Region	East	37.0	81.5	561
	North	38.0	76.9	976
	South	22.2	85.9	672
	West	34.7	80.3	166
Area	Rural	32.9	81.4	1894
	Urban	33.8	78.2	480
Months since last birth	< 6 months	33.5	76.2	615
	6-11 months	34.7	82.4	553
	12-23 months	32.0	82.3	1186
Education	None	34.2	81.4	1919
	Primary	24.7	80.3	231
	Secondary +	33.4	75.3	218
	Non-standard curriculum	(*)	(*)	6
Wealth index quintiles	Poorest	41.3	81.2	481
	Second	35.2	81.4	546
	Middle	28.3	80.6	529
	Fourth	31.8	82.7	505
	Richest	26.8	75.9	313
Religion of Household Head	Christian	38.0	82.1	428
	Muslim	32.1	80.5	1943
	Other/Missing	(*)	(*)	4
Total		**33.1**	**80.8**	**2375**

* MICS indicator 45

Table NU.3: Breastfeeding

Percent of living children according to breastfeeding status at each age group, Sierra Leone, 2005

		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
Sex	Male	9.9	155	7.3	252	54.3	203	89.4	183	61.5	135
	Female	11.0	146	8.5	259	49.9	175	85.7	196	51.8	130
Region	East	12.6	80	8.8	128	50.5	80	91.5	110	55.3	55
	North	13.9	119	12.1	202	49.4	154	91.0	139	68.9	116
	South	4.6	85	2.6	148	61.0	115	83.0	109	47.2	70
	West	5.3	17	2.7	33	37.5	29	65.2	21	29.6	24
Area	Rural	10.2	263	8.0	433	54.6	302	88.6	310	60.8	204
	Urban	12.6	38	7.4	78	42.9	75	82.4	69	43.4	61
Mother's education	None	11.5	246	8.9	420	53.8	304	88.4	308	61.5	208
	Primary	6.7	33	4.3	51	47.3	39	82.1	41	42.7	25
	Secondary	4.1	22	2.2	40	44.7	34	84.7	29	34.4	30
Wealth index quintiles	Poorest	15.6	77	11.8	119	62.3	70	90.4	81	57.5	44
	Second	8.6	81	9.6	126	44.4	84	86.2	99	66.2	55
	Middle	5.2	60	3.5	117	58.7	93	92.5	78	65.5	63
	Fourth	12.7	51	8.1	92	50.5	86	82.6	68	48.2	65
	Richest	9.1	31	5.0	57	41.3	43	83.7	52	42.3	38
Religion of Household Head	Christian	16.8	54	12.8	86	44.7	71	89.4	65	45.6	53
	Muslim	8.7	246	6.7	423	53.9	305	87.0	312	59.5	212
	Other/Missing	(*)	1	(*)	2	(*)	1	(*)	1	.	0
Total		10.5	301	7.9	511	52.3	377	87.4	378	56.8	265

* MICS indicator 15 / ** MICS indicator 17 / *** MICS indicator 16

Cases of non-standard curriculum = 1 for mother's education deleted from the table

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, Sierra Leone, 2005

		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**	Number of infants aged 0-11 months
Sex	Male	7.3	42.0	31.0	37.4	22.9	522
	Female	8.5	40.6	30.9	36.9	22.2	502
Region	East	8.8	46.4	43.0	45.0	25.6	239
	North	12.1	30.1	18.5	25.8	18.9	401
	South	2.6	56.3	34.4	47.5	25.6	303
	West	2.7	28.0	37.0	32.7	20.2	80
Area	Rural	8.0	44.2	27.4	38.1	22.2	819
	Urban	7.4	30.2	38.6	34.5	24.2	205
Mother's education	None	8.9	43.5	28.8	37.7	23.1	826
	Primary	4.3	35.4	34.9	35.2	20.1	104
	Secondary	2.2	29.3	40.4	35.0	21.2	95
Wealth index quintiles	Poorest	11.8	50.5	32.0	42.6	25.5	214
	Second	9.6	35.1	16.9	29.6	18.4	225
	Middle	3.5	52.1	25.0	43.3	23.6	236
	Fourth	8.1	33.6	36.8	34.9	23.1	209
	Richest	5.0	29.8	37.7	34.4	22.4	140
Religion of Household Head	Christian	12.8	36.8	23.7	31.0	22.7	188
	Muslim	6.7	42.2	32.9	38.6	22.4	833
	Other/Missing	(*)	(*)	(*)	(*)	(*)	3
Total		**7.9**	**41.4**	**30.9**	**37.2**	**22.6**	**1024**

* MICS indicator 18
** MICS indicator 19

Table NU.5: Iodized salt consumption

Percentage of households consuming adequately iodized salt, Sierra Leone, 2005

		Percent of households in which salt was tested	Number of households interviewed	Percent of households with salt test result			Total	Number of households in which salt was tested or with no salt
				Percent of households with no salt	< 15 PPM	15+ PPM*		
Region	East	91.7	1593	7.7	33.5	58.8	100.0	1583
	North	94.7	2585	4.8	50.5	44.7	100.0	2572
	South	95.4	1749	4.3	58.7	37.0	100.0	1744
	West	94.0	1150	5.9	57.6	36.5	100.0	1149
Area	Rural	94.3	5052	5.3	49.7	44.9	100.0	5031
	Urban	93.6	2026	6.0	50.1	44.0	100.0	2017
Wealth index quintiles	Poorest	94.5	1519	5.2	47.9	47.0	100.0	1514
	Second	94.2	1493	5.4	50.2	44.4	100.0	1487
	Middle	94.6	1341	5.0	50.2	44.7	100.0	1335
	Fourth	93.2	1319	6.5	53.2	40.3	100.0	1314
	Richest	93.9	1407	5.6	48.0	46.3	100.0	1400
Religion of Household Head	Christian	93.6	1601	5.9	41.5	52.6	100.0	1593
	Muslim	94.2	5458	5.4	52.3	42.3	100.0	5437
	Other/Missing	(*)	19	(*)	(*)	(*)	(*)	19
Total		**94.1**	**7078**	**5.5**	**49.8**	**44.6**	**100.0**	**7049**

*MICS indicator 41

Table NU.6: Children's vitamin A supplementation

Percent distribution of children aged 6-59 months by whether they received a high dose Vitamin A supplement in the last 6 months, Sierra Leone, 2005

		Percent of children who received Vitamin A:					Total	
		Within last 6 months*	Prior to last 6 months	Not sure when	Not sure if received	Never received Vitamin A	Total	Number of children aged 6-59 months
Sex	Male	50.1	17.0	15.3	.9	16.8	100.0	2354
	Female	48.4	18.7	14.9	.8	17.2	100.0	2380
Region	East	55.0	13.9	4.1	.6	26.4	100.0	1172
	North	50.5	17.3	17.8	.9	13.4	100.0	1839
	South	42.3	21.0	20.9	.5	15.3	100.0	1297
	West	48.9	21.9	15.5	1.9	11.8	100.0	427
Area	Rural	49.8	16.9	15.1	.6	17.6	100.0	3711
	Urban	47.3	21.4	14.7	1.8	14.7	100.0	1023
Age	6-11 months	58.9	9.9	7.8	.9	22.4	100.0	513
	12-23 months	54.8	15.8	13.6	.3	15.6	100.0	1076
	24-35 months	50.5	17.6	14.2	1.0	16.6	100.0	1069
	36-47 months	44.4	20.8	17.4	.7	16.7	100.0	1183
	48-59 months	41.9	21.2	18.8	1.5	16.6	100.0	892
Mother's education	None	49.3	17.0	15.3	.9	17.5	100.0	3806
	Primary	51.3	18.1	12.2	.6	17.8	100.0	491
	Secondary	47.0	24.7	15.8	.6	11.9	100.0	433
Wealth index quintiles	Poorest	46.1	15.2	15.2	.8	22.7	100.0	990
	Second	46.3	16.4	15.6	.3	21.4	100.0	1105
	Middle	53.2	17.5	14.3	.8	14.2	100.0	1039
	Fourth	52.0	19.7	15.5	1.0	11.8	100.0	928
	Richest	48.8	22.3	14.5	1.6	12.9	100.0	672
Religion of Household Head	Christian	47.6	19.4	13.0	.5	19.5	100.0	909
	Muslim	49.6	17.5	15.5	.9	16.4	100.0	3817
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	7
Total		**49.2**	**17.9**	**15.1**	**.8**	**17.0**	**100.0**	**4734**

* MICS indicator 42

Cases of non-standard curriculum =2 and missing/DK = 2 for mother's education deleted from the table

Table NU.7: Post-partum mother's Vitamin A supplementation

Percentage of women aged 15-49 years with a birth in the 2 last years preceding the survey whether they received a high dose Vitamin A supplement before the infant was 8 weeks old, Sierra Leone, 2005

		Received Vitamin A supplement*	Not sure if received Vitamin A	Number of women aged 15-49 years
Region	East	57.6	3.7	561
	North	52.8	3.6	976
	South	51.1	3.0	672
	West	69.9	2.6	166
Area	Rural	52.4	3.2	1894
	Urban	63.3	4.0	480
Education	None	53.2	3.5	1919
	Primary	51.8	3.5	231
	Secondary +	70.1	2.2	218
	Non-standard curriculum	(*)	(*)	6
Wealth index quintiles	Poorest	48.6	4.4	481
	Second	48.7	2.5	546
	Middle	52.5	4.1	529
	Fourth	60.4	3.3	505
	Richest	68.6	2.1	313
Religion of Household Head	Christian	58.9	3.2	428
	Muslim	53.8	3.4	1943
	Other/Missing	(*)	(*)	4
Total		**54.6**	**3.4**	**2375**

* MICS indicator 43

Table NU.8: Low birth weight infants

Percentage of live births in the 2 years preceding the survey that weighed below 2500 grams at birth, Sierra Leone, 2005

		Percent of live births below 2500 grams *	Percent of live births weighed at birth **	Number of live births
Region	East	23.1	42.7	561
	North	24.3	15.3	976
	South	23.3	31.8	672
	West	21.2	56.5	166
Area	Rural	23.6	24.2	1894
	Urban	23.1	49.4	480
Education	None	23.7	25.2	1919
	Primary	23.1	40.0	231
	Secondary +	22.7	54.3	218
	Non-standard curriculum	(*)	(*)	6
Wealth index quintiles	Poorest	24.2	18.3	481
	Second	23.4	22.8	546
	Middle	23.6	22.6	529
	Fourth	23.5	38.1	505
	Richest	22.8	54.8	313
Religion of Household Head	Christian	23.5	38.6	428
	Muslim	23.5	27.3	1943
	Other/Missing	(*)	(*)	4
Total		**23.5**	**29.3**	**2375**

* MICS Indicator 9
** MICS Indicator 10

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, Sierra Leone, 2005

	BCG *	DPT 1	DPT 2	DPT 3 **	Polio 0	Polio 1	Polio 2	Polio 3 ****	Measles ****	Yellow Fever**	All *****	None	Number of children aged 12-23 months
Vaccination card	49.8	47.7	43.3	37.8	43.3	48.7	44.3	38.5	33.5	31.2	48.7	.1	1076
Mother's report	36.5	35.5	34.4	25.8	23.2	38.7	36.1	25.9	43.1	44.5	5.1	10.8	1076
Either	86.2	83.2	77.7	63.7	66.6	87.4	80.3	64.5	76.6	75.7	53.9	10.9	1076
Vaccinated by 12 months of age	84.4	79.4	74.1	56.4	65.4	84.4	75.7	57.4	62.8	60.7	34.9	10.9	1076

* MICS Indicator 25 / ** MICS Indicator 26 / *** MICS Indicator 27
**** MICS Indicator 28 ; MDG Indicator 15 / ***** MICS Indicator 31

Table CH.2: Vaccinations by background characteristics

Percentage of children aged 12-23 months currently vaccinated against childhood diseases, Sierra Leone, 2005

		BCG	DPT1	DPT2	DPT3	Polio 0	Polio 1	Polio 2	Polio 3	MMR	Yellow Fever	All	None	Percent with health card	Number of children aged 12-23 months
Sex	Male	85,7	83,3	78,0	63,8	68,4	86,6	80,3	66,4	77,8	76,2	55,7	10,8	54,1	534
	Female	86,8	83,1	77,5	63,5	64,8	88,1	80,3	62,6	75,4	75,1	52,0	10,9	51,5	542
Region	East	82,4	78,3	71,0	58,8	65,0	81,2	73,6	60,2	72,0	72,3	49,5	16,3	52,9	271
	North	84,8	80,7	74,4	62,2	60,3	88,0	82,3	65,1	73,8	72,5	53,9	9,9	52,8	432
	South	90,2	89,2	85,5	69,1	75,3	90,4	85,8	69,0	82,2	80,3	57,9	8,9	56,1	297
	West	92,9	91,5	90,2	68,3	73,8	94,0	71,4	58,3	86,9	86,9	53,6	4,7	40,0	76
Area	Rural	84,9	81,5	76,1	62,7	64,9	86,3	80,3	64,0	74,8	73,6	53,4	11,9	53,5	852
	Urban	91,4	89,9	84,0	67,5	73,1	91,7	80,4	66,4	83,6	83,6	55,7	6,9	50,0	224
Mother's education	None	84,9	81,3	75,4	61,4	63,6	86,1	79,5	63,3	74,6	73,6	51,9	11,9	51,7	859
	Primary	89,2	88,4	83,8	73,7	80,7	91,7	84,6	71,8	81,9	81,1	65,0	8,2	65,0	115
	Secondary	94,3	93,3	91,3	71,6	77,3	93,2	82,4	65,4	86,8	86,7	57,9	5,7	48,9	101
Wealth index quintiles	Poorest	75,5	72,3	69,8	54,0	57,0	77,4	71,8	50,0	65,8	64,3	42,2	20,6	41,8	209
	Second	85,0	79,2	70,8	53,6	60,9	85,3	77,3	59,9	73,1	71,0	45,9	12,6	48,1	257
	Middle	87,8	85,3	79,7	72,1	70,5	89,7	85,0	71,8	79,1	77,8	62,0	8,4	60,1	238
	Fourth	91,3	90,2	85,6	72,6	72,9	92,5	87,5	73,7	83,6	84,8	62,0	5,7	60,2	226
	Richest	93,6	91,6	86,0	67,9	74,0	93,5	79,0	66,6	83,5	82,8	58,6	5,8	53,4	146
Religion of Household Head	Christian	84,9	83,5	76,9	62,8	67,9	85,8	76,6	59,2	76,5	75,0	51,5	13,1	45,6	205
	Muslim	86,5	83,1	77,9	63,8	66,2	87,7	81,2	65,7	76,6	75,8	54,4	10,4	54,4	870
Total		**86,2**	**83,2**	**77,7**	**63,7**	**66,6**	**87,4**	**80,3**	**64,5**	**76,6**	**75,7**	**53,9**	**10,9**	**52,8**	**1076**

Table CH.3: Neonatal tetanus protection

Percentage of mothers with a birth in the last 12 months protected against neonatal tetanus, Sierra Leone, 2005

		Received at least 2 doses during last pregnancy	Received at least 2 doses, the last within prior 3 years	Received at least 3 doses, the last within 5 years	Received at least 4 doses, the last within 10 years	Received at least 5 doses during lifetime	Protected against tetanus *	Number of mothers
Region	East	82.4	2.9	.6	.0	.0	86.0	561
	North	66.6	2.2	.0	.0	.0	68.8	976
	South	79.1	1.8	.1	.1	.0	81.2	672
	West	83.9	3.1	.0	.0	.0	87.1	166
Area	Rural	73.8	2.2	.2	.0	.0	76.2	1894
	Urban	80.0	3.0	.2	.0	.0	83.2	480
Age	15-19	77.3	1.9	.4	.0	.0	79.6	228
	20-24	79.0	2.7	.0	.0	.0	81.7	496
	25-29	72.3	1.9	.5	.0	.0	74.6	755
	30-34	75.5	2.8	.0	.0	.0	78.3	362
	35-39	74.0	2.2	.0	.0	.0	76.2	360
	40-44	72.1	4.0	.0	.7	.0	76.9	129
	45-49	(81.4)	.0	.0	.0	.0	(81.4)	44
Education	None	72.9	2.3	.2	.0	.0	75.4	1919
	Primary	82.2	2.3	.5	.0	.0	85.0	231
	Secondary +	86.9	3.1	.0	.0	.0	90.0	218
	Non-standard curriculum	(*)	.0	.0	.0	.0	(*)	6
Wealth index quintiles	Poorest	69.7	2.1	.2	.0	.0	72.0	481
	Second	73.3	2.2	.4	.0	.0	76.0	546
	Middle	72.0	2.7	.2	.0	.0	74.9	529
	Fourth	80.2	1.5	.0	.2	.0	81.9	505
	Richest	83.3	3.6	.0	.0	.0	86.9	313
Religion of Household Head	Christian	78.4	2.7	.2	.2	.0	81.5	428
	Muslim	74.4	2.3	.2	.0	.0	76.8	1943
	Other/Missing	(*)	.0	.0	.0	.0	(*)	4
Total		**75.1**	**2.3**	**.2**	**.0**	**.0**	**77.6**	**2375**

* MICS Indicator 32

Table CH.4: Oral rehydration treatment

Percentage of aged 0-59 months with diarrhoea in the last two weeks and treatment with oral rehydration solution (ORS) or other oral rehydration treatment (ORT), Sierra Leone, 2005

		Had diarrhoea in last two weeks	Number of children aged 0-59 months	Fluid from ORS packet	Recommended homemade fluid	Pre-packaged ORS fluid	No treatment	ORT use rate *	Number of children aged 0-59 months with diarrhoea
Sex	Male	15.1	2605	50.7	12.3	8.1	41.4	58.6	393
	Female	13.7	2639	51.5	12.5	5.9	38.3	61.7	361
Region	East	14.0	1300	49.9	16.4	17.3	33.2	66.8	182
	North	17.6	2040	48.8	10.0	3.0	45.2	54.8	360
	South	11.2	1444	53.0	12.1	4.2	41.6	58.4	161
	West	11.1	460	64.9	15.8	8.8	21.1	78.9	51
Area	Rural	14.3	4144	46.4	11.4	6.2	44.6	55.4	592
	Urban	14.8	1101	68.0	15.9	10.1	22.8	77.2	162
Age	< 6 months	8.3	503	(44.8)	(14.3)	(2.8)	(42.8)	(57.2)	42
	6-11 months	17.8	513	53.0	11.9	4.4	39.4	60.6	91
	12-23 months	21.6	1074	54.0	9.3	6.7	39.5	60.5	232
	24-35 months	14.9	1069	49.6	16.0	6.4	40.8	59.2	159
	36-47 months	11.1	1181	50.4	11.2	5.7	42.5	57.5	131
	48-59 months	10.7	884	50.5	15.5	14.4	33.7	66.3	95
Mother's education	None	14.9	4226	49.0	11.8	6.2	41.6	58.4	628
	Primary	14.2	541	58.8	18.2	17.0	30.4	69.6	77
	Secondary	10.1	473	66.4	10.3	2.0	31.5	68.5	49
Wealth index quintiles	Poorest	14.2	1109	37.5	13.1	8.5	45.9	54.1	157
	Second	13.8	1231	46.0	10.6	8.8	49.6	50.4	169
	Middle	15.5	1156	44.5	10.7	4.1	46.8	53.2	179
	Fourth	15.1	1020	65.3	17.0	5.8	26.0	74.0	154
	Richest	13.0	729	71.9	9.9	9.2	22.1	77.9	95
Religion of Household Head	Christian	12.7	995	51.7	12.4	6.7	38.3	61.7	127
	Muslim	14.8	4240	50.9	12.4	7.2	40.3	59.7	627
Total		**14.4**	**5245**	**51.1**	**12.4**	**7.1**	**39.9**	**60.1**	**754**

* MICS Indicator 33

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, Sierra Leone, 2005

		Had diarrhoea in last two weeks	Number of children aged 0-59 months	Children with diarrhoea who drank more	Children with diarrhoea who drank the same or less	Children with diarrhoea who ate somewhat less, same or more	Children with diarrhoea who ate much less or none	Home management of diarrhoea *	Received ORT or increased fluids AND continued feeding **	Number of children aged 0-59 months with diarrhoea
Sex	Male	15.1	2605	51.7	47.6	37.9	61.3	22.1	29.6	393
	Female	13.7	2639	51.1	47.0	41.8	57.7	24.3	32.9	361
Region	East	14.0	1300	53.4	45.5	38.0	61.4	22.5	29.8	182
	North	17.6	2040	52.6	46.5	41.4	57.8	24.8	31.4	360
	South	11.2	1444	56.6	40.4	44.6	54.8	24.1	37.3	161
	West	11.1	460	19.3	80.7	19.3	80.7	10.5	15.8	51
Area	Rural	14.3	4144	52.9	46.0	42.3	57.1	24.0	32.3	592
	Urban	14.8	1101	46.1	52.1	30.6	68.8	20.0	27.1	162
Age	0-11 months	13.1	1016	42.4	57.6	38.5	61.5	18.6	26.2	133
	12-23 months	21.6	1074	54.0	44.3	35.5	63.6	22.2	27.7	232
	24-35 months	14.9	1069	55.5	41.4	45.6	53.1	29.6	38.2	159
	36-47 months	11.1	1181	48.6	51.4	48.3	51.0	22.1	38.1	131
	48-59 months	10.7	884	53.4	45.5	30.9	69.1	22.4	25.7	95
Mother's education	None	14.9	4226	52.0	46.9	39.7	59.5	22.8	31.2	628
	Primary	14.2	541	41.9	55.6	39.6	60.4	22.2	30.1	77
	Secondary	10.1	473	(58.0)	(39.9)	(42.0)	(58.0)	(29.9)	(34.2)	48
Wealth index quintiles	Poorest	14.2	1109	56.2	42.0	45.5	53.3	29.6	35.8	157
	Second	13.8	1231	57.0	42.4	37.2	62.8	21.7	30.1	169
	Middle	15.5	1156	45.1	53.3	42.9	56.1	20.8	28.1	179
	Fourth	15.1	1020	52.8	45.9	35.0	64.4	20.7	30.9	154
	Richest	13.0	729	43.1	55.9	36.7	63.3	23.5	31.7	95
Religion of Household Head	Christian	12.7	995	51.5	47.7	32.0	67.2	21.7	26.5	127
	Muslim	14.8	4240	51.3	47.3	41.2	58.1	23.3	32.1	627
Total		**14.4**	**5245**	**51.4**	**47.3**	**39.8**	**59.6**	**23.2**	**31.2**	**754**

* MICS indicator 34
** MICS indicator 35

Table CH.6: Care seeking for suspected pneumonia

Percentage of children aged 0-59 months in the last two weeks taken to a health provider, Sierra Leone, 2005

		Had ARI	# aged 0-59 mo.	Govt. HOS	Govt. HC	Govt. HP	VHW	Mob out clinic	Pub	Priv. HC	Priv phy	Pharm	Mob clinic	Oth priv med	Rel or fri	Trad prac	Other	Any app prov *	# aged 0-59 with susp pneu
Sex	Male	11.3	2605	9.4	21.6	8.3	5.5	3.4	0.7	5.3	0.7	5.5	2.3	0.7	1.4	3.5	1.1	50.1	294
	Female	10.5	2639	8.6	21.3	5.9	5.4	1.5	1.8	5.2	0	3.4	1.6	0	1	1.8	1	45.4	276
Region	East	11.3	1300	8.2	25.2	7.8	11.9	7	2.3	2.3	0.8	9.7	6.2	0.7	1.6	3.2	0.8	47.4	147
	North	10.4	2040	7.3	21.1	7.4	5.1	0.9	0.4	4.1	0	0.9	0.9	0.4	0.5	3.2	0	47.2	212
	South	12.3	1444	10.4	21.4	7.7	1.6	1.1	0	7.1	0.5	2.7	0	0	0.5	1.6	2.2	50	177
	West	7.4	460	15.8	7.9	0	0	0	7.9	15.8	0	13.2	0	0	7.9	2.6	2.6	42.1	34
Area	Rural	11.5	4144	6.6	23.5	8.1	6.5	2.8	0.5	5	0.2	2.5	2.1	0	0.9	2.8	1.1	48.3	476
	Urban	8.5	1101	21.4	11.1	2.1	0	1.1	4.9	7	1	14.4	1.1	2.1	2.9	2	1	45.6	94
Age	0-11	15.9	1016	12.1	19.1	11.4	8.6	3.5	0.7	5.3	0.7	5.1	2	0.6	0.6	1.8	2.4	56.3	162
	12-23	12.7	1074	11.1	27.7	8.7	3.1	2.3	0.7	5.8	0.7	5.1	2.4	0	0.7	2.1	0.9	55.4	136
	24-35	9.3	1069	4.8	21.2	3.1	4.3	3.1	4	7.6	0	4	0	1	0	4.3	0.9	42.7	100
	36-47	8.9	1181	5.6	24.5	4.8	7	2.2	0.9	3.9	0	3.2	2.2	0	3.1	4	0	42.4	105
	48-59	7.4	884	9.1	10.7	3.3	0	0	0	3	0	2.8	1.5	0	2.8	1.5	0	27.6	65
Mother's education	None	11	4226	7.5	23.3	7.7	6.2	3.1	1.1	5.5	0.2	3.2	1.9	0.4	0.9	3.1	0.9	48.7	466
	Primary	11.8	541	10.6	15.8	4.6	1.8	0	1.4	1.5	1.5	10.5	1.5	0	2.9	1.5	3	38.8	64
	Secondary	8.6	473	(23.9)	(9.2)	(4.8)	(2.9)	0	(2.5)	(9.2)	0	(9.7)	(2.9)	0	(2.2)	0	0	(52.5)	41
Wealth index quintiles	Poorest	11.6	1109	7.3	26.5	3	4.2	0.9	1.8	3.8	0	0.8	1.8	0	0.8	5.5	1.5	43	128
	Second	11.3	1231	6.6	18.5	12.7	6.3	3.2	0.6	0.8	0	4.2	2.4	0	0	1.4	2.2	43.6	140
	Middle	10.3	1156	9.9	29.9	3.3	9.3	4.6	0.8	4.3	0	1	3.7	0	2.8	3.7	0	53.2	119
	Fourth	12.8	1020	8.8	18.5	10.9	4.5	0.7	1.5	9.6	0	5.3	0.8	0.7	0.7	1.4	0.7	54.5	131
	Richest	7.2	729	18.1	5.3	1.9	0	4.1	1.7	12.3	4	20.2	0	1.9	3.4	0	0	42.2	53
Religion of Household Head	Christian	9.3	995	13.1	14	4.4	13.2	1.3	2.2	7.4	0	8.9	5	1	3.5	5.6	0	49.1	92
	Muslim	11.3	4240	8.2	22.9	7.7	3.9	2.7	1	4.9	0.4	3.6	1.4	0.2	0.8	2.1	1.2	47.6	478
Total		**10.9**	**5245**	**9**	**21.5**	**7.1**	**5.5**	**2.5**	**1.2**	**5.3**	**0.4**	**4.5**	**1.9**	**0.3**	**1.2**	**2.7**	**1**	**47.8**	**570**

* MICS indicator 23

Table CH.7: Antibiotic treatment of pneumonia

Percentage of children aged 0-59 months with suspected pneumonia who received antibiotic treatment, Sierra Leone, 2005

		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
Sex	Male	21.2	294
	Female	20.7	276
Region	East	27.3	147
	North	13.3	212
	South	19.8	177
	West	47.4	34
Area	Rural	18.4	476
	Urban	33.9	94
Age	0-11 months	15.0	162
	12-23 months	28.4	136
	24-35 months	19.7	100
	36-47 months	20.4	105
	48-59 months	21.7	65
Mother's education	None	19.2	466
	Primary	26.0	64
	Secondary	(33.0)	41
Wealth index quintiles	Poorest	19.8	128
	Second	17.5	140
	Middle	13.0	119
	Fourth	26.8	131
	Richest	36.1	53
Religion of Household Head	Christian	30.3	92
	Muslim	19.1	478
Total		**20.9**	**570**

* MICS indicator 22

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, Sierra Leone, 2005

		Percentage of mother/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 difficulty breathing	Has blood in stool	Is drinking poorly	Has other symptoms		
Region	East	12.0	26.3	80.7	7.6	12.2	20.1	4.7	49.0	2.8	1300
	North	23.4	50.7	81.3	17.6	21.3	18.1	4.0	39.9	6.8	2040
	South	31.6	30.1	84.9	39.2	46.8	38.9	18.6	37.2	33.3	1444
	West	11.5	52.4	92.8	19.9	26.7	25.5	19.5	34.3	15.4	460
Area	Rural	22.2	37.7	82.0	21.1	26.7	24.7	8.0	42.1	13.4	4144
	Urban	20.2	44.5	87.3	22.1	26.1	25.8	15.6	36.7	15.5	1101
Mother's education	None	22.2	39.1	82.3	21.0	26.5	24.9	8.8	41.1	13.4	4230
	Primary	22.5	38.7	86.2	23.1	28.3	25.9	13.5	44.5	17.4	541
	Secondary	17.2	40.1	87.1	22.0	24.9	24.3	12.4	34.7	14.2	473
Wealth index quintiles	Poorest	23.6	39.3	81.9	24.5	28.2	24.7	7.2	38.1	15.9	1109
	Second	22.6	38.9	81.9	23.0	27.9	25.2	7.2	40.8	15.2	1231
	Middle	21.5	37.0	82.5	17.5	23.7	25.1	7.0	46.3	10.6	1156
	Fourth	20.0	37.9	83.8	19.3	26.6	24.4	12.2	42.8	12.8	1020
	Richest	20.5	44.3	87.3	22.4	26.1	25.3	17.6	34.4	15.2	729
Religion of Household Head	Christian	20.5	37.0	85.5	20.9	25.6	25.0	9.3	35.6	12.9	995
	Muslim	22.0	39.7	82.6	21.4	26.8	25.0	9.7	42.2	14.1	4240
	Other/ Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9
Total		**21.8**	**39.1**	**83.2**	**21.3**	**26.6**	**25.0**	**9.6**	**40.9**	**13.8**	**5245**

Table CH.8: Solid fuel use

Percent distribution of households according to type of cooking fuel, and percentage of households used solid fuels for cooking, Sierra Leone, 2005

		Type of fuel using for cooking										Total	Solid fuels for cooking *	Number of households
		Electricity	Natural gas	Biogas	Kero - sine	Coal/ lignite	Charcoal	Wood	Straw/ shrubs/ grass	Agricultural crop residue	Other			
Region	East	.0	.0	.0	.0	.0	4.4	95.3	.2	.0	.2	100.0	99.8	1593
	North	.0	.0	.0	.0	.0	.7	98.9	.1	.1	.3	100.0	99.7	2585
	South	.1	.0	.0	.1	.0	1.4	98.3	.0	.0	.2	100.0	99.7	1749
	West	.2	.1	.3	2.5	.2	40.6	55.6	.0	.0	.6	100.0	96.4	1150
Area	Rural	.0	.0	.0	.0	.0	.6	99.1	.1	.0	.2	100.0	99.8	5052
	Urban	.1	.0	.1	1.4	.1	27.0	70.5	.1	.0	.5	100.0	97.7	2026
Education of household head	None	.0	.0	.0	.2	.0	3.6	95.8	.1	.0	.3	100.0	99.6	4959
	Primary	.0	.0	.0	.2	.0	5.9	93.7	.0	.0	.2	100.0	99.7	621
	Secondary +	.3	.0	.2	1.4	.1	24.6	72.8	.1	.0	.4	100.0	97.7	1454
	Non-standard curriculum	.0	.0	.0	.0	.0	(2.4)	(97.6)	.0	.0	.0	100.0	(100.0)	41
	Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Wealth index quintiles	Poorest	.0	.0	.0	.0	.0	.0	100.0	.0	.0	.0	100.0	100.0	1519
	Second	.0	.0	.0	.0	.0	.0	99.8	.1	.0	.1	100.0	99.9	1493
	Middle	.0	.0	.0	.0	.0	.0	99.7	.0	.0	.3	100.0	99.7	1341
	Fourth	.0	.0	.0	.1	.0	1.6	97.7	.1	.2	.5	100.0	99.5	1319
	Richest	.3	.1	.2	2.1	.1	39.6	56.9	.1	.0	.6	100.0	96.7	1407
Religion of Household Head	Christian	.0	.0	.1	.7	.1	13.6	85.0	.1	.1	.4	100.0	98.9	1601
	Muslim	.1	.0	.0	.3	.0	6.6	92.6	.1	.0	.2	100.0	99.3	5458
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	19
Total		**.1**	**.0**	**.0**	**.4**	**.0**	**8.2**	**90.9**	**.1**	**.0**	**.3**	**100.0**	**99.2**	**7078**

* MICS indicator 24; MDG indicator 29

Table CH.9: Solid fuel use by type of stove or fire

Percent of households using solid fuels for cooking by type of stove or fire, Sierra Leone, 2005

		Percentage 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	Total	Number of households using solid fuels for cooking
Region	East	.1	20.7	79.3	.0	100.0	1590
	North	.0	2.1	97.8	.0	100.0	2578
	South	.0	10.6	89.4	.1	100.0	1743
	West	3.4	6.1	90.4	.1	100.0	1109
Area	Rural	.0	9.0	90.9	.0	100.0	5041
	Urban	2.0	9.1	88.9	.1	100.0	1979
Education of household head	None	.2	9.0	90.8	.0	100.0	4937
	Primary	.0	11.3	88.7	.0	100.0	619
	Secondary +	2.2	8.2	89.6	.1	100.0	1422
	Non-standard curriculum	.0	(9.8)	(90.2)	.0	100.0	41
Wealth index quintiles	Poorest	.0	8.7	91.2	.1	100.0	1519
	Second	.0	9.5	90.5	.0	100.0	1492
	Middle	.1	10.0	89.9	.0	100.0	1337
	Fourth	.2	7.9	91.9	.0	100.0	1312
	Richest	2.7	9.1	88.1	.1	100.0	1361
Religion of Household Head	Christian	1.3	10.8	87.9	.1	100.0	1583
	Muslim	.4	8.6	91.1	.0	100.0	5420
	Other/Missing	(*)	(*)	(*)	(*)	100.0	17
Total		**.6**	**9.0**	**90.4**	**.0**	**100.0**	**7020**

Cases of Missing/DK = 2 for education of household head deleted from the table

Table CH.10: Availability of insecticide treated nets

Percent of households with at least one insecticide treated net (ITN), Sierra Leone, 2005

		Percentage of households with at least one mosquito net	Percentage of households with at least one insecticide treated net (ITN)*	Number of households
Region	East	11.2	5.0	1593
	North	26.7	6.1	2585
	South	26.7	4.9	1749
	West	7.7	2.2	1150
Area	Rural	22.3	4.9	5052
	Urban	14.8	4.9	2026
Education of household head	None	20.1	4.4	4959
	Primary	21.3	3.9	621
	Secondary +	19.6	7.3	1454
	Non-standard curriculum	(24.4)	4.9	41
Wealth index quintiles	Poorest	14.0	2.8	1519
	Second	18.4	3.5	1493
	Middle	26.9	5.8	1341
	Fourth	24.7	6.4	1319
	Richest	18.0	6.5	1407
Religion of Household Head	Christian	14.4	5.1	1601
	Muslim	21.8	4.9	5458
	Other/Missing	(*)	(*)	19
Total		**20.2**	**4.9**	**7078**

* MICS Indicator 36

Table CH.11: Children sleeping under bed nets

Percentage of children aged 0-59 months who slept under an insecticide treated net during the previous night, Sierra Leone, 2005

		Slept under a bednet *	Sleep under an insecticide treated net **	Slept under an untreated net	Slept under a net but don't know if treated	Don't know if slept under a net	Did not sleep under a bednet	Number of children aged 0-59 months
Sex	Male	20.6	5.4	14.5	.8	.5	78.8	2605
	Female	19.8	5.2	13.6	1.0	.4	79.8	2639
Region	East	13.2	6.7	6.5	.1	.4	86.4	1300
	North	27.2	6.0	19.6	1.6	.7	72.1	2040
	South	21.3	4.2	16.5	.7	.3	78.3	1444
	West	5.5	1.8	3.5	.2	.2	94.3	460
Area	Rural	21.7	5.3	15.5	.9	.5	77.8	4144
	Urban	14.5	5.3	8.6	.6	.5	85.0	1101
Age	0-11 months	24.8	7.4	16.5	.9	.4	74.9	1016
	12-23 months	21.2	6.3	13.8	1.2	.5	78.3	1074
	24-35 months	20.0	5.1	14.1	.8	.6	79.4	1069
	36-47 months	18.0	4.6	12.7	.7	.6	81.4	1181
	48-59 months	17.0	2.9	13.4	.7	.3	82.7	884
Wealth index quintiles	Poorest	14.1	3.7	9.4	1.1	.4	85.5	1109
	Second	19.2	4.2	13.9	1.0	.6	80.2	1231
	Middle	26.6	5.7	20.0	.9	.5	72.9	1156
	Fourth	22.1	6.4	15.1	.6	.6	77.4	1020
	Richest	18.5	7.5	10.5	.5	.3	81.2	729
Religion of Household Head	Christian	14.7	5.6	8.4	.8	.4	84.9	995
	Muslim	21.5	5.2	15.4	.9	.5	78.0	4240
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	9
Total		**20.2**	**5.3**	**14.1**	**.9**	**.5**	**79.3**	**5245**

* MICS indicator 38
** MICS indicator 37; MDG indicator 22

Table CH.12: Treatment of children with anti-malarial drugs

Percentage of children 0-59 months of age who were ill with fever in the last two weeks who received anti-malarial drugs, Sierra Leone, 2005

				Children with a fever in the last two weeks who were treated with							
		Had a fever in last two weeks	Number of children aged 0-59 months	Anti-malarials: SP/ Fansidar	Anti-malarials: Chloroquine	Anti-malarials: Armodiaquine	Anti-malarials: Quinine	Anti-malarials: Artimisine based combinations	Any appropriate anti-malarial drug within 24 hours of onset of symptoms *	Sleep under an insecticide treated net **	Number of children with fever in last two weeks
Sex	Male	35.5	2605	1.1	46.5	1.6	4.4	0.9	45.7	7.0	924
	Female	34.3	2640	1.3	45.8	2.2	6.1	1.4	44.3	5.3	906
Region	East	35.0	1300	1.0	54.3	4.4	11.9	2.6	53.9	6.9	455
	North	38.7	2040	1.1	40.3	1.0	1.6	0.6	35.3	6.8	789
	South	32.5	1444	1.2	50.6	1.2	6.0	0.6	52.9	5.2	469
	West	25.5	460	2.3	35.9	0.8	0.8	1.5	44.3	3.1	118
Area	Rural	35.0	4144	0.7	45.7	1.8	5.1	0.7	44.0	5.9	1451
	Urban	34.4	1101	3.0	47.7	2.1	6.0	3.1	49.1	7.2	379
Age	0-11	35.5	1016	0.0	43.6	2.3	5.9	1.7	44.0	7.0	361
	12-23	40.7	1074	1.5	50.6	2.9	5.8	1.6	49.9	7.3	437
	24-35	34.7	1069	1.6	44.9	1.2	4.3	0.3	42.9	6.2	371
	36-47	32.2	1181	1.5	46.5	1.4	4.8	1.5	45.5	6.0	380
	48-59	31.1	884	1.1	44.4	1.5	5.0	0.7	41.4	3.6	275
Mother's education	None	34.6	4226	0.8	43.8	1.8	5.0	0.8	42.2	5.4	1464
	Primary	38.1	541	2.8	57.5	1.6	7.6	2.0	53.7	8.3	206
	Secondary	33.5	473	2.4	53.1	3.2	4.3	3.0	59.7	11.0	158
Wealth index quintiles	Poorest	33.4	1109	0.6	45.3	3.3	6.4	0.6	44.7	4.7	370
	Second	31.9	1231	0.5	40.4	1.4	3.4	0.5	35.1	3.6	393
	Middle	37.5	1156	0.7	43.6	1.0	3.9	1.2	42.2	6.7	434
	Fourth	37.9	1020	1.8	52.3	1.5	4.7	0.7	52.2	6.7	387
	Richest	33.8	729	3.2	51.2	2.8	9.7	3.6	54.9	10.6	246
Religion of Household Head	Christian	34.2	995	1.4	55.5	4.0	7.4	0.8	55.5	6.4	340
	Muslim	35.1	4240	1.1	44.0	1.4	4.8	1.2	42.6	6.1	1487
Total		**34.9**	**5245**	**1.2**	**46.1**	**1.9**	**5.2**	**1.2**	**45.0**	**6.2**	**1830**

MICS indicator 39; MDG indicator 22

Table CH.12 Continued: Treatment of children with anti-malarial drugs

Percentage of children 0-59 months of age who were ill with fever in the last two weeks who received anti-malarial drugs, Sierra Leone, 2005

		Children with a fever in the last two weeks who were treated with:								
		Anti-malarials: Other Anti-malarial	Any appropriate anti-malarial drug	Other medications: Paracetamol/ Panadol/ Acetaminophen	Other medications: Aspirin	Other medications: Ibuprofen	Other medications : Other	Don't know	Any appropriate anti-malarial drug within 24 hours of onset of symptoms *	Number of children with fever in last two weeks
Sex	Male	3.9	51.9	69.5	23.9	1.3	25.0	6.6	45.7	924
	Female	3.9	51.8	66.6	18.2	2.4	25.1	7.4	44.3	906
Region	East	3.1	61.0	73.6	23.8	0.8	25.3	3.5	53.9	455
	North	3.2	44.8	59.4	19.8	1.0	19.2	12.0	35.3	789
	South	4.4	56.6	76.6	23.6	4.8	30.3	3.1	52.9	469
	West	9.9	45.0	71.0	8.4	0.0	42.0	2.3	44.3	118
Area	Rural	2.7	50.4	65.6	20.3	1.8	22.7	8.2	44.0	1451
	Urban	8.5	57.6	77.4	23.9	2.0	33.7	2.5	49.1	379
Age in Months	0-11	5.8	50.9	63.8	20.3	1.1	26.6	10.4	44.0	361
	12-23	2.7	56.8	69.1	21.7	1.4	23.8	6.9	49.9	437
	24-35	3.6	49.0	67.9	21.5	1.8	26.0	5.6	42.9	371
	36-47	4.1	52.1	70.5	19.8	2.9	28.0	5.8	45.5	380
	48-59	3.5	49.7	69.5	22.1	2.2	20.1	6.0	41.4	275
Mother's education	None	3.4	48.7	66.6	19.5	1.8	23.0	8.0	42.2	1464
	Primary	2.4	63.3	73.2	27.7	3.3	32.5	4.9	53.7	206
	Secondary	10.7	66.5	74.5	26.1	0.0	33.5	0.6	59.7	158
Wealth index quintiles	Poorest	2.7	49.1	61.8	20.0	1.6	23.6	8.6	44.7	370
	Second	1.8	43.8	59.8	17.1	0.7	21.4	8.9	35.1	393
	Middle	2.8	48.8	69.4	23.3	2.4	22.4	8.2	42.2	434
	Fourth	4.5	58.6	73.8	20.8	2.3	25.1	5.6	52.2	387
	Richest	10.0	63.5	79.5	25.1	2.4	37.6	1.5	54.9	246
Religion of HH Head	Christian	5.8	62.0	73.6	25.6	2.0	23.5	3.4	55.5	340
	Muslim	3.5	49.6	66.8	20.0	1.8	25.4	7.8	42.6	1487
Total		**3.9**	**51.9**	**68.1**	**21.0**	**1.8**	**25.0**	**7.0**	**45.0**	**1830**

MICS indicator 39; MDG indicator 22

Table CH.13: Intermittent preventive treatment for malaria

Percent distribution of women aged 15-49 years with a birth in two years preceding the survey who received intermittent preventive therapy (IPT) for malaria during pregnancy ,Sierra Leone, 2005

		Medicine to prevent malaria during pregnancy	SP/Fansidar only one time	SP/Fansidar two or more times *	SP/Fansidar but number of times unknown	Chloroquine	Other medicines	Don't know medicine	Number of women who gave birth in the preceding two years
Region	East	3.4	.2	.6	.0	2.8	.4	.0	561
	North	5.2	.3	2.2	.1	2.2	.3	.6	976
	South	5.6	.0	.9	.1	4.1	1.0	.9	672
	West	18.1	2.1	7.2	.0	8.8	1.0	2.6	166
Area	Rural	3.6	.1	1.1	.1	1.8	.4	.6	1894
	Urban	14.2	1.1	4.6	.0	9.2	1.0	1.1	480
Education	None	3.7	.2	1.1	.1	1.8	.3	.7	1919
	Primary	9.0	.0	1.2	.0	7.7	1.3	.0	231
	Secondary +	21.1	2.0	9.2	.0	12.4	2.1	.8	218
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6
Wealth index quintiles	Poorest	1.4	.0	.0	.2	.6	.4	.4	481
	Second	4.1	.0	.8	.2	1.5	.4	1.3	546
	Middle	4.6	.4	1.3	.0	2.9	.7	.5	529
	Fourth	6.6	.4	3.0	.0	4.0	.4	.2	505
	Richest	16.2	1.1	5.4	.0	10.5	1.2	1.1	313
Religion of Household Head	Christian	9.6	.6	4.1	.0	5.1	1.1	.6	428
	Muslim	5.0	.2	1.3	.1	3.0	.4	.7	1943
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	4
Total		**5.8**	**.3**	**1.8**	**.1**	**3.3**	**.6**	**.7**	**2375**

* MICS Indicator 40

Table EN.1: Use of improved water sources

Percent distribution of household population according to main source of drinking water and percentage of household members using improved drinking water sources, Sierra Leone, 2005

		Improved sources								Number of household members
		Piped into dwelling	Piped into yard or plot	Public tap/ standpipe	Tubewell / borehole	Protected well	Rainwater collection	Protected spring	Improved source of drinking water	
Region	East	0.5	3.7	14.9	5.4	26.8	0.0	0.4	51.8	9793
	North	0.3	0.6	4.7	2.5	20.9	0.2	0.9	30.2	17282
	South	0.0	0.0	9.0	16.8	19.3	0.0	0.9	46.0	9798
	West	9.5	28.1	39.6	0.0	7.9	0.0	1.5	86.6	5846
Area	Rural	0.1	0.9	6.7	7.5	15.9	0.1	0.6	31.8	30626
	Urban	5.2	15.1	28.3	2.6	30.8	0.0	1.5	83.6	12092
Education of household head	None	0.6	2.8	9.7	5.7	18.6	0.1	0.8	38.3	30563
	Primary	0.9	3.9	13.0	9.4	23.7	0.1	0.8	51.9	3669
	Secondary +	5.6	13.7	24.4	5.8	24.0	0.0	1.3	74.8	8196
	Non-standard curriculum	0.0	0.0	8.4	12.8	22.3	0.0	0.0	43.6	272
	Missing/DK	(25.8)	(15.5)	0.0	0.0	(58.7)	0.0	0.0	100.0	19
Wealth index quintiles	Poorest	0.0	0.0	0.9	2.6	7.0	0.0	0.2	10.8	8542
	Second	0.0	0.1	4.2	5.1	13.4	0.0	0.5	23.3	8544
	Middle	0.1	0.8	7.4	11.0	23.4	0.2	0.6	43.5	8542
	Fourth	0.1	2.9	20.1	9.1	30.0	0.1	1.3	63.7	8546
	Richest	7.6	20.9	31.4	2.7	26.8	0.1	1.7	91.2	8545
Religion of Household Head	Christian	2.8	7.0	15.0	5.1	16.1	0.2	1.3	47.5	9143
	Muslim	1.2	4.4	12.2	6.4	21.2	0.0	0.8	46.2	33482
	Other/Missing	0.0	0.0	10.8	0.0	29.0	0.0	0.0	39.8	93
Total		**1.6**	**4.9**	**12.8**	**6.1**	**20.1**	**0.1**	**0.9**	**46.5**	**42719**

MICS indicator 11; MDG indicator 30

Table EN.1b: Use of Unimproved water sources

Percent distribution of household population according to main source of drinking water and percentage of household members using improved drinking water sources, Sierra Leone, 2005

		Unimproved sources								
		Unprotected well	Unprotected spring	Tanker-truck	Cart with small tank/drum	Surface water	Bottled water	Other	Unimproved source of drinking water	Number of household members
Region	East	7.8	8.8	0.0	0.0	31.3	0.3	0.0	48.2	9793
	North	10.7	4.6	0.0	0.1	54.1	0.1	0.1	69.8	17282
	South	7.7	9.9	0.0	0.1	36.3	0.0	0.0	54.0	9798
	West	3.6	2.4	0.0	0.0	5.9	0.0	1.5	13.4	5846
Area	Rural	8.8	8.5	0.0	0.1	50.7	0.1	0.1	68.2	30626
	Urban	7.3	1.4	0.0	0.1	6.5	0.3	0.7	16.4	12092
Education of household head	None	9.3	7.0	0.0	0.1	45.1	0.2	0.2	61.7	30563
	Primary	6.4	7.4	0.0	0.2	34.1	0.0	0.1	48.1	3669
	Secondary +	6.1	4.5	0.0	0.1	13.7	0.1	0.7	25.2	8196
	Non-standard curriculum	4.4	0.0	0.0	0.0	52.0	0.0	0.0	56.4	272
	Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	19
Wealth index quintiles	Poorest	7.8	11.8	0.0	0.1	69.4	0.1	0.0	89.2	8542
	Second	7.9	8.0	0.0	0.0	60.7	0.1	0.0	76.7	8544
	Middle	12.0	6.7	0.0	0.1	37.4	0.1	0.2	56.5	8542
	Fourth	10.3	4.8	0.0	0.2	20.5	0.4	0.2	36.3	8546
	Richest	3.9	1.0	0.0	0.1	2.9	0.0	0.9	8.8	8545
Religion of Household Head	Christian	5.6	7.5	0.0	0.1	39.0	0.1	0.2	52.5	9143
	Muslim	9.2	6.2	0.0	0.1	37.9	0.1	0.3	53.8	33482
	Other/Missing	0.0	10.7	0.0	0.0	49.5	0.0	0.0	60.2	93
Total		**8.4**	**6.5**	**0.0**	**0.1**	**38.2**	**0.1**	**0.3**	**53.5**	**42719**

MICS indicator 11; MDG indicator 30

Table EN.2: Household water treatment:

Percentage distribution of household population according to drinking water treatment method used in the household and percentage of household members that applied an appropriate water treatment method, Sierra Leone, 2005

		None	Boil	Add bleach/ chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Don't know
Region	East	94.5	0.4	3.4	2.0	0.1	0.0	0.6	0.2
	North	88.9	0.3	6.2	0.9	0.1	0.0	5.3	0.7
	South	93.4	0.4	4.9	0.3	0.2	0.0	0.1	1.2
	West	96.9	0.3	1.5	0.4	0.3	0.1	0.6	0.3
Area	Rural	95.0	0.1	2.2	0.5	0.0	0.0	2.2	0.7
	Urban	85.5	0.8	10.8	2.0	0.4	0.0	2.8	0.6
Education of household head	None	93.5	0.2	3.4	0.9	0.1	0.0	2.5	0.5
	Primary	92.7	0.7	4.1	1.8	0.0	0.0	1.0	0.9
	Secondary +	87.4	0.7	9.5	0.9	0.3	0.0	2.7	1.1
	Non-standard curriculum	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Missing/DK	15.5	0.0	58.7	0.0	25.8	0.0	0.0	0.0
Wealth index quintiles	Poorest	97.2	0.0	0.1	0.4	0.0	0.0	2.3	0.1
	Second	97.0	0.0	0.6	0.3	0.0	0.0	1.8	0.4
	Middle	94.1	0.2	3.6	0.5	0.0	0.0	2.6	0.7
	Fourth	89.5	0.4	6.6	1.0	0.1	0.0	2.9	1.3
	Richest	83.9	1.1	12.1	2.6	0.6	0.0	2.3	0.7
Religion of Household Head	Christian	92.8	0.3	4.4	0.4	0.1	0.0	2.7	0.6
	Muslim	92.2	0.4	4.7	1.1	0.1	0.0	2.3	0.7
Total		**92.3**	**0.3**	**4.6**	**0.9**	**0.1**	**0.0**	**2.4**	**0.7**

MICS indicator 13

Table EN.2 Continued: Household water treatment:

Percentage distribution of household population according to drinking water treatment method used in the household and percentage of household members that applied an appropriate water treatment method, Sierra Leone, 2005

		All drinking water sources: Appropriate water treatment method *	Number of household members	Improved drinking water sources: Appropriate water treatment method	Number of household members	Unimproved drinking water sources: Appropriate water treatment method	Number of household members
Region	East	3.9	9793	7.2	5066	0.4	4727
	North	6.4	17282	19.2	5220	0.8	12063
	South	5.3	9798	10.7	4505	0.7	5293
	West	2.1	5846	2.3	5064	0.8	782
Area	Rural	2.3	30626	6.5	9742	0.3	20885
	Urban	11.8	12092	13.1	10113	5.1	1980
Education of household head	None	3.6	30563	8.6	11684	0.5	18879
	Primary	4.6	3669	8.6	1904	0.3	1765
	Secondary +	10.2	8196	12.7	6128	3.0	2068
	Non-standard curriculum	0.0	272	0.0	118	0.0	153
Wealth index quintiles	Poorest	0.1	8542	0.3	921	0.1	7621
	Second	0.6	8544	2.0	1993	0.2	6551
	Middle	3.7	8542	7.6	3709	0.8	4833
	Fourth	7.0	8546	9.6	5440	2.3	3105
	Richest	13.5	8545	14.4	7790	4.7	755
Religion of Household Head	Christian	4.6	9143	9.2	4341	0.6	4803
	Muslim	5.1	33482	10.1	15477	0.8	18006
	Other/Missing	6.5	93	16.3	37	0.0	56
Total		**5.0**	**42719**	**9.9**	**19854**	**0.7**	**22865**

* MICS indicator 13

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, Sierra Leone, 2005

		Time to source of drinking water								
		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	DK	Total	Mean time to source of drinking water (excluding those on premises)	Number of households
Region	East	6.1	58.4	16.4	14.8	4.1	.2	100.0	15.6	1593
	North	1.9	44.4	26.6	22.3	4.3	.5	100.0	19.2	2585
	South	.6	60.0	22.8	13.9	2.4	.3	100.0	14.4	1749
	West	40.5	26.3	11.9	16.9	3.8	.7	100.0	20.2	1150
Area	Rural	1.8	51.5	24.1	18.5	3.8	.4	100.0	17.2	5052
	Urban	26.4	40.8	13.2	15.6	3.4	.6	100.0	17.0	2026
Education of household head	None	4.7	49.2	23.2	18.5	4.0	.4	100.0	17.5	4959
	Primary	6.3	54.5	18.7	15.9	4.2	.5	100.0	16.5	621
	Secondary +	24.0	43.5	14.6	15.0	2.5	.4	100.0	16.0	1454
	Non-standard curriculum	.0	(53.7)	(14.6)	(29.3)	(2.4)	.0	100.0	(19.8)	41
Wealth index quintiles	Poorest	.1	45.6	30.6	20.2	3.0	.4	100.0	18.2	1519
	Second	.8	52.3	24.5	17.6	4.6	.2	100.0	17.4	1493
	Middle	2.2	56.1	20.1	16.8	4.3	.5	100.0	16.5	1341
	Fourth	5.5	54.4	17.5	19.0	3.3	.5	100.0	16.1	1319
	Richest	36.2	34.6	10.8	14.4	3.3	.6	100.0	17.5	1407
Religion of Household Head	Christian	12.6	43.2	21.2	19.4	3.1	.6	100.0	18.0	1601
	Muslim	7.7	49.9	20.9	17.2	3.9	.4	100.0	16.9	5458
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	19
Total		8.8	48.5	21.0	17.6	3.7	.4	100.0	17.2	7078

Table EN.4: Person collecting water

Percent distribution of households according to the person collecting water used in the household, Sierra Leone, 2005

		Person collecting drinking water					Total	Number of households
		Adult woman	Adult man	Female child (under 15)	Male child (under 15)	DK		
Region	East	79.0	7.1	9.0	4.7	.2	100.0	1496
	North	72.4	5.3	14.1	7.9	.3	100.0	2535
	South	71.5	8.6	12.4	7.1	.5	100.0	1739
	West	35.8	25.0	21.1	17.4	.7	100.0	685
Area	Rural	77.4	5.9	10.6	5.8	.3	100.0	4964
	Urban	44.6	18.1	21.7	15.0	.5	100.0	1491
Education of household head	None	73.3	7.1	12.3	6.8	.4	100.0	4726
	Primary	72.6	8.0	11.8	7.4	.2	100.0	582
	Secondary +	53.7	15.5	17.2	13.3	.3	100.0	1105
	Non-standard curriculum	(63.4)	(12.2)	(19.5)	(4.9)	.0	100.0	41
Wealth index quintiles	Poorest	80.9	6.0	8.4	4.5	.3	100.0	1518
	Second	78.7	5.7	9.9	5.5	.3	100.0	1481
	Middle	74.1	6.0	12.5	7.0	.5	100.0	1312
	Fourth	63.4	9.2	16.6	10.4	.4	100.0	1247
	Richest	39.1	21.4	23.1	15.9	.4	100.0	898
Religion of Household Head	Christian	67.2	9.8	13.9	8.8	.3	100.0	1399
	Muslim	70.5	8.4	13.0	7.8	.4	100.0	5037
	Other/Missing	(*)	(*)	(*)	(*)	(*)	100.0	19
Total		**69.8**	**8.7**	**13.2**	**8.0**	**.4**	**100.0**	**6455**

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

Percent distribution of household population according to type of toilet used by the household and the percentage of household members using sanitary means of excreta disposal, Sierra Leone, 2005

		Improved sanitation facility							
		Flush to piped sewer system	Flush to septic tank	Flush to pit (latrine)	Ventilated Improved Pit latrine (VIP)	Pit latrine with slab	Composting toilet	Percentage of population using sanitary means of excreta disposal *	Number of households members
Region	East	0.0	0.9	1.4	0.9	16.4	0.0	19.5	9793
	North	0.1	0.1	0.2	1.0	20.6	0.3	22.4	17282
	South	0.0	0.8	0.3	0.4	30.4	0.0	31.9	9798
	West	3.7	10.7	2.0	0.4	53.8	0.0	70.6	5846
Area	Rural	0.1	0.1	0.2	0.9	15.6	0.2	17.1	306
	Urban	1.7	6.3	2.2	0.3	53.8	0.0	64.3	12092
Education of household head	None	0.1	0.6	0.3	0.6	21.0	0.2	22.7	30563
	Primary	0.0	1.2	0.7	1.5	29.2	0.0	32.6	3669
	Secondary +	2.5	7.1	2.7	0.8	45.1	0.0	58.2	8196
	Non-standard curriculum	2.2	0.0	0.0	0.0	31.5	0.0	33.7	272
	Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	19
Wealth index quintiles	Poorest	0.0	0.0	0.0	0.5	0.5	0.1	1.1	8542
	Second	0.0	0.0	0.0	0.8	5.6	0.2	6.7	8545
	Middle	0.0	0.0	0.0	0.9	20.6	0.1	21.6	8542
	Fourth	0.0	0.1	0.4	1.1	41.9	0.2	43.7	8546
	Richest	2.8	9.3	3.4	0.3	63.6	0.0	79.3	8545
Religion of Household Head	Christian	1.5	3.8	1.1	1.5	26.7	0.0	34.6	9143
	Muslim	0.3	1.4	0.7	0.5	26.3	0.2	29.4	33482
		0.0	0.0	0.0	0.0	27.9	0.0	27.9	93
Total		**0.6**	**1.9**	**0.8**	**0.7**	**26.4**	**0.1**	**30.5**	**42719**

* MICS Indicator 12; MDG Indicator 31

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

Percent distribution of household population according to type of toilet used by the household and the percentage of household members using unsanitary means of excreta disposal, Sierra Leone, 2005

		Unimproved sanitation facility								
		Flush to somewhere else	Pit latrine without slab/open pit	Bucket	Hanging toilet/ hanging latrine	No facilities or bush or field	Other	Missing	Percentage of population using unsanitary means of excreta disposal *	Number of households members
Region	East	0.0	30.0	0.0	9.4	40.5	0.6	0.0	80.5	9793
	North	0.1	45.6	0.0	2.6	25.7	3.6	0.1	77.6	17282
	South	0.1	12.3	0.0	0.9	51.6	3.2	0.0	68.1	9798
	West	1.0	24.2	0.0	0.3	2.9	1.0	0.0	29.4	5846
Area	Rural	0.1	33.7	0.0	3.9	42.2	3.0	0.0	82.9	30626
	Urban	0.4	25.8	0.0	2.4	6.0	1.2	0.0	35.7	12092
Education of household head	None	0.1	34.1	0.0	3.7	36.4	2.9	0.0	77.3	30563
	Primary	0.3	26.7	0.0	3.2	35.3	1.9	0.0	67.4	3669
	Secondary +	0.5	24.0	0.0	2.9	13.6	0.9	0.0	41.8	8196
	Non-standard curriculum	0.0	26.7	0.0	0.0	35.9	3.7	0.0	66.3	272
Wealth index quintiles	Poorest	0.0	29.0	0.0	3.2	64.3	2.4	0.0	98.9	8542
	Second	0.0	34.7	0.0	3.4	51.9	3.3	0.0	93.3	8544
	Middle	0.0	41.6	0.1	6.6	26.0	3.9	0.1	78.4	8542
	Fourth	0.1	33.9	0.0	3.8	16.3	2.1	0.0	56.3	8546
	Richest	0.7	18.0	0.0	0.2	1.1	0.5	0.0	20.7	8545
Religion of Household Head	Christian	0.2	26.3	0.1	2.2	35.0	1.6	0.0	65.4	9143
	Muslim	0.2	32.9	0.0	3.8	31.1	2.7	0.0	70.6	33482
	Missing	0.0	31.3	0.0	0.0	34.4	6.4	0.0	72.1	93
Total		0.2	31.5	0.0	3.5	31.9	2.5	0.0	**69.5**	**42719**

* 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, Sierra Leone, 2005

		What was done to dispose of the stools								Total	Proportion of children whose stools are disposed of safely *	Number of children aged 0-2 years
		Child used toilet/latrine	Put/rinsed into toilet or latrine	Put/rinsed into drain or ditch	Thrown into garbage (solid waste)	Buried	Left in the open	Other	DK			
Region	East	.3	44.3	19.3	16.3	.0	.2	18.5	1.2	100.0	44.6	757
	North	.4	37.8	20.9	21.5	.2	.5	16.9	1.8	100.0	38.2	1238
	South	.5	27.0	21.0	43.6	.3	.3	5.6	1.7	100.0	27.5	859
	West	.0	89.6	4.5	1.0	.7	.0	3.1	1.0	100.0	89.6	259
Area	Rural	.3	29.5	21.9	30.2	.2	.4	15.8	1.6	100.0	29.9	2452
	Urban	.4	82.2	9.1	4.1	.4	.0	2.4	1.3	100.0	82.7	661
Wealth index quintiles	Poorest	.5	18.3	24.6	35.3	.6	.3	18.9	1.5	100.0	18.8	614
	Second	.1	23.9	25.0	34.2	.1	.4	14.5	1.8	100.0	24.0	732
	Middle	.6	36.3	19.2	26.3	.1	.4	15.2	1.9	100.0	36.9	692
	Fourth	.3	52.2	17.7	16.9	.1	.3	11.0	1.4	100.0	52.5	627
	Richest	.2	89.7	4.5	2.6	.2	.0	1.8	1.1	100.0	89.9	449
Religion of Household Head	Christian	.2	46.8	17.7	20.9	.3	.2	11.4	2.6	100.0	47.0	581
	Muslim	.4	39.4	19.5	25.5	.2	.4	13.3	1.3	100.0	39.8	2527
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5
Total		.4	40.7	19.2	24.6	.2	.3	13.0	1.6	100.0	41.1	3113

* MICS indicator 14

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, Sierra Leone, 2005

		Percentage of household population using improved sources of drinking water *	Percentage of household population using sanitary means of excreta disposal **	Percentage of household population using improved sources of drinking water and using sanitary means of excreta disposal	Number of household members
Region	East	51.8	19.5	17.3	9793
	North	30.2	22.4	13.2	17282
	South	46.0	31.9	24.8	9798
	West	86.6	70.6	62.7	5846
Area	Rural	31.8	17.1	10.3	30626
	Urban	83.6	64.3	57.2	12092
Education of household head	None	38.3	22.7	16.0	30563
	Primary	51.9	32.6	23.5	3669
	Secondary +	74.8	58.2	51.6	8196
	Non-standard curriculum	43.6	33.7	22.3	272
	Missing/DK	(*)	(*)	(*)	19
Wealth index quintiles	Poorest	10.8	1.1	.0	8542
	Second	23.3	6.7	1.9	8544
	Middle	43.5	21.6	10.8	8542
	Fourth	63.7	43.7	32.0	8546
	Richest	91.2	79.3	73.2	8545
Religion of Household Head	Christian	47.5	34.6	28.1	9143
	Muslim	46.2	29.4	22.4	33482
	Other/Missing	39.8	27.9	15.0	93
Total		**46.5**	**30.5**	**23.6**	**42719**

* MICS indicator 11; MDG indicator 30
** MICS indicator 12; MDG indicator 31

Table RH.1: Use of contraception

Percentage of women aged 15-49 years married or in union who are using (or whose partner is using) a contraceptive method, Sierra Leone, 2005

Percent of women (currently married or in union) who are using:

		Not using any method	Female steril.	Male steril	Pill	IUD	Inject	Impl	Cond	Diap/ foam/ jelly	LAM	# of women 15-49
Region	East	96.2	0.1	0.0	2.6	0.0	0.7	0.0	0.0	0.1	0.0	1476
	North	95.6	0.0	0.0	1.4	0.0	0.8	0.0	0.0	0.0	1.4	2509
	South	98.0	0.1	0.0	1.2	0.0	0.8	0.0	0.0	0.0	0.0	1483
	West	79.7	0.1	0.0	9.6	0.4	7.5	0.8	1.3	0.0	0.0	609
Area	Rural	97.7	0.0	0.0	0.8	0.0	0.4	0.0	0.0	0.0	0.7	4707
	Urban	84.4	0.1	0.0	8.1	0.3	5.0	0.4	0.6	0.2	0.2	1369
Age	15-19	98.0	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.8	396
	20-24	96.3	0.0	0.0	2.0	0.0	0.5	0.0	0.0	0.0	0.8	871
	25-29	95.8	0.1	0.0	1.8	0.1	1.0	0.1	0.2	0.1	0.4	1587
	30-34	91.1	0.0	0.0	4.2	0.0	3.3	0.2	0.3	0.1	0.7	1053
	35-39	94.1	0.1	0.1	3.5	0.0	1.2	0.1	0.1	0.0	0.5	1145
	40-44	94.1	0.2	0.0	1.8	0.3	1.9	0.1	0.0	0.0	0.8	642
	45-49	96.3	0.2	0.0	1.3	0.0	2.0	0.2	0.0	0.0	0.0	384
Number of living children	0	98.5	0.0	0.0	0.7	0.0	0.3	0.0	0.0	0.0	0.3	586
	1	96.5	0.0	0.0	1.8	0.1	0.5	0.1	0.2	0.0	0.4	931
	2	93.6	0.0	0.0	3.2	0.1	1.8	0.2	0.1	0.0	0.8	1150
	3	93.2	0.1	0.0	3.1	0.0	1.8	0.2	0.4	0.2	0.7	1049
	4+	94.3	0.1	0.0	2.5	0.0	1.8	0.0	0.0	0.0	0.6	2361
Education	None	96.6	0.0	0.0	1.4	0.0	0.8	0.1	0.1	0.0	0.6	4973
	Primary	92.2	0.0	0.0	3.3	0.0	3.0	0.3	0.3	0.0	0.5	557
	Secondary +	79.7	0.4	0.0	11.7	0.7	5.7	0.2	0.6	0.4	0.0	536
Wealth index quintiles	Poorest	98.0	0.1	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.7	1248
	Second	99.0	0.1	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.2	1365
	Middle	97.5	0.0	0.0	1.2	0.0	0.5	0.0	0.1	0.0	0.5	1311
	Fourth	93.1	0.0	0.1	2.9	0.0	1.8	0.1	0.3	0.0	1.3	1176
	Richest	82.9	0.2	0.0	9.3	0.4	5.2	0.5	0.4	0.2	0.2	976
Religion of Household Head	Christian	91.7	0.3	0.0	4.4	0.3	2.2	0.2	0.1	0.0	0.2	1186
	Muslim	95.5	0.0	0.0	2.0	0.0	1.3	0.1	0.2	0.0	0.7	4875
Total		**94.7**	**0.1**	**0.0**	**2.5**	**0.1**	**1.4**	**0.1**	**0.1**	**0.0**	**0.6**	**6077**

* MICS indicator 21; MDG indicator 19C

Table RH.1: Use of contraception

Percentage of women aged 15-49 years married or in union who are using (or whose partner is using)a contraceptive method, Sierra Leone, 2005:

Percent of women (currently married or in union) who are using:

		Period abstain	With-draw	Other	Any modern	Any trad	Any method	Number of women currently married or in union
Region	East	0.1	0.1	0.2	3.5	0.3	3.8	1476
	North	0.0	0.0	0.5	2.4	2.0	4.4	2509
	South	0.0	0.0	0.0	2.0	0.0	2.0	1483
	West	0.1	0.0	0.4	19.8	0.6	20.3	609
Area	Rural	0.0	0.0	0.2	1.3	1.0	2.3	4707
	Urban	0.1	0.0	0.6	14.7	0.9	15.6	1369
Age	15-19	0.0	0.0	0.5	0.7	1.2	2.0	396
	20-24	0.0	0.1	0.2	2.5	1.2	3.7	871
	25-29	0.1	0.0	0.3	3.3	0.9	4.2	1587
	30-34	0.0	0.0	0.2	8.1	0.8	8.9	1053
	35-39	0.1	0.0	0.2	5.1	0.8	5.9	1145
	40-44	0.0	0.0	0.9	4.2	1.7	5.9	642
	45-49	0.0	0.0	0.0	3.7	0.0	3.7	384
Number of living children	0	0.0	0.0	0.2	1.0	0.5	1.5	586
	1	0.1	0.1	0.1	2.7	0.8	3.5	931
	2	0.0	0.0	0.2	5.4	0.9	6.4	1150
	3	0.1	0.0	0.3	5.8	1.0	6.8	1049
	4+	0.0	0.0	0.5	4.6	1.1	5.7	2361
Education	None	0.0	0.0	0.3	2.4	1.0	3.4	4973
	Primary	0.0	0.0	0.3	6.9	0.9	7.8	557
	Secondary +	0.4	0.0	0.4	19.6	0.7	20.3	536
Wealth index quintiles	Poorest	0.1	0.1	0.1	1.0	1.0	2.0	1248
	Second	0.0	0.0	0.2	0.6	0.4	1.0	1365
	Middle	0.0	0.0	0.3	1.7	0.8	2.5	1311
	Fourth	0.0	0.0	0.5	5.2	1.8	6.9	1176
	Richest	0.2	0.0	0.5	16.2	0.9	17.1	976
Religion of Household Head	Christian	0.2	0.1	0.3	7.5	0.8	8.3	1186
	Muslim	0.0	0.0	0.3	3.6	1.0	4.5	4891
Total		**0.0**	**0.0**	**0.3**	**4.3**	**1.0**	**5.3**	**6077**

MICS indicator 21; MDG indicator 19C

Table RH.2: 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, Sierra Leone, 2005

		Person providing antenatal care								Any skilled personnel *	Number of women who gave birth in the preceding two years
		Medical doctor	Nurse/ midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Relative/ Friend	Other /missing	No antenatal care received		
Region	East	3.7	80.9	1.4	6.4	2.6	.2	1.1	3.7	85.9	561
	North	2.5	60.8	10.0	8.1	4.7	3.8	1.2	8.8	73.4	976
	South	4.8	66.6	14.1	4.0	2.1	.3	2.2	6.0	85.5	672
	West	17.6	71.0	4.1	2.1	1.6	.0	.0	3.6	92.8	166
Area	Rural	2.0	68.2	9.0	7.1	3.5	2.1	1.1	6.9	79.3	1894
	Urban	14.1	66.9	7.5	2.3	2.1	.2	2.4	4.5	88.5	480
Age	15-19	6.6	70.0	9.2	4.6	1.8	1.3	1.3	5.2	85.8	228
	20-24	4.8	69.5	6.5	6.3	3.9	1.2	1.0	6.7	80.8	496
	25-29	3.4	66.7	9.9	7.2	2.5	1.9	1.2	7.2	80.0	755
	30-34	6.0	67.6	8.1	6.2	4.4	1.4	2.7	3.5	81.8	362
	35-39	4.1	67.3	9.6	4.8	3.4	2.5	.9	7.5	80.9	360
	40-44	3.6	68.2	6.9	6.8	3.1	2.3	1.6	7.6	78.6	129
	45-49	(2.4)	(67.4)	(13.6)	(2.7)	(4.5)	.0	(2.3)	(7.1)	(83.4)	44
Education of mother/care provider	None	2.8	67.4	8.8	6.8	3.7	1.9	1.4	7.2	79.0	1919
	Primary	7.3	72.1	7.7	5.1	1.3	.9	1.8	3.9	87.1	231
	Secondary +	16.2	68.6	9.2	1.4	1.4	.0	.9	2.2	94.0	218
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6
Wealth index quintiles	Poorest	.9	61.5	9.0	11.4	3.6	2.1	1.2	10.4	71.4	481
	Second	2.2	69.7	8.6	4.9	4.4	1.9	1.2	7.1	80.5	546
	Middle	2.1	69.4	8.4	6.2	3.8	2.1	1.3	6.7	79.9	529
	Fourth	5.0	70.5	10.0	5.7	2.2	1.4	1.6	3.6	85.5	505
	Richest	17.1	68.1	7.0	1.0	1.2	.6	1.7	3.3	92.2	313
Religion of Household Head	Christian	6.5	69.0	7.7	5.3	2.4	1.7	.7	6.6	83.2	432
	Muslim	4.0	67.7	9.0	6.3	3.4	1.7	1.5	6.4	80.7	1943
Total		**4.5**	**67.9**	**8.7**	**6.1**	**3.2**	**1.7**	**1.4**	**6.4**	**81.1**	**2375**

* MICS indicator 20

Table RH.3: Antenatal care content

Percentage of pregnant women receiving antennal 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, Sierra Leone

		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 sample taken	Blood pressure measured	Urine specimen taken	Weight measured	
Region	East	96.3	13.5	76.8	23.3	84.0	561
	North	91.2	27.0	61.7	26.2	63.6	976
	South	94.0	25.2	65.1	23.6	73.9	672
	West	96.4	70.4	84.5	70.9	84.0	166
Area	Rural	93.1	19.5	64.8	20.8	71.0	1894
	Urban	95.5	53.5	79.6	56.2	79.9	480
Age	15-19	94.8	25.6	66.1	30.1	71.5	228
	20-24	93.3	28.1	71.7	30.3	73.6	496
	25-29	92.8	24.4	64.8	25.9	72.9	755
	30-34	96.5	30.9	70.7	30.5	74.1	362
	35-39	92.5	26.1	68.0	25.5	72.1	360
	40-44	92.4	21.8	62.4	26.5	64.9	129
	45-49	(92.9)	(21.6)	(74.4)	(27.4)	(85.7)	44
Education	None	92.8	21.9	64.5	23.9	69.8	1919
	Primary	96.1	33.2	78.0	32.2	82.0	231
	Secondary +	97.8	57.4	86.4	59.0	89.0	218
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	6
Wealth index quintiles	Poorest	89.6	12.7	54.0	15.2	65.5	481
	Second	92.9	18.2	61.3	18.7	67.9	546
	Middle	93.3	22.7	69.9	25.3	74.6	529
	Fourth	96.4	32.7	75.5	32.5	75.1	505
	Richest	96.7	57.3	84.4	60.6	85.8	313
Religion of Household Head	Christian	93.4	32.4	70.7	33.5	76.9	428
	Muslim	93.6	25.0	67.1	26.7	71.9	1947
Total		**93.6**	**26.3**	**67.8**	**27.9**	**72.8**	**2375**

* MICS indicator 44

Table RH.4: 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, Sierra Leone, 2005

		Person assisting at delivery								Any skilled personnel *	Delivered in health facility **	Number of women who gave birth in preceding two years
		Medical doctor	Nurse/ midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Relative/ friend	Other/ missing	No attendant			
Region	East	1.8	61.6	3.2	25.5	1.4	3.7	0.8	1.9	66.6	26.4	561
	North	2.4	20.4	2.2	43.3	1.9	25.1	1.5	3.3	25	13.7	976
	South	1.6	34.4	4.3	45.7	1.7	8.1	2.4	1.9	40.2	15.3	672
	West	6.2	71.5	5.2	9.3	0.5	5.2	0	2.1	82.9	34.2	166
Area	Rural	1.6	30.4	2.8	44.3	1.7	15.2	1.5	2.5	34.8	15.5	1894
	Urban	5	66.4	4.9	9.9	1.5	8.5	1.5	2.2	76.4	30.9	480
Age	15-19	2.8	43.5	2.8	33.7	1.4	10.7	3.1	2.1	49	19.2	228
	20-24	1.7	39.8	3.1	38.1	1.9	12.1	1.2	2.1	44.6	20.4	496
	25-29	2.5	36.1	3.4	38.4	1.5	14.3	1.2	2.6	42	19.3	755
	30-34	2.4	37.3	2.5	35.7	3.1	14	3	1.9	42.2	18.6	362
	35-39	2.2	35	4.5	38.6	0.8	15	0	3.7	41.8	16.3	360
	40-44	3.1	37.7	2.4	37	0	16	0.7	3.1	43.2	14.3	129
	45-49	0	(35.5)	0	(34.7)	(2.3)	(22.6)	(5)	0	(35.5)	(14.2)	44
Education	None	1.4	33.4	3.2	40.7	1.7	15.2	1.6	2.8	38	16.1	1919
	Primary	3.9	49.1	2.6	30.3	0.4	10.3	1.8	1.6	55.5	25.8	231
	Secondary +	8.4	63.2	4.1	16.2	2	4.3	1	0.9	75.7	33.6	218
Wealth index quintiles	Poorest	1.4	24	1.8	46.5	1.7	19.6	2.4	2.7	27.2	10.3	481
	Second	1.3	30.7	2	45	2	15.7	1.4	1.9	34	12.6	546
	Middle	1.5	33.3	2.7	41.8	1.5	14.3	1.3	3.5	37.5	20.3	529
	Fourth	2.1	43.6	4.2	33.4	1.8	11.1	1.4	2.5	49.9	22.6	505
	Richest	7.1	68.8	6.7	8.9	0.7	5.5	1	1.4	82.6	32.4	313
Religion of Household Head	Christian	3.6	43.5	3.5	34.4	2.4	8.7	0.7	3.3	50.5	23.9	432
	Muslim	2	36.5	3.1	37.9	1.5	14.9	1.7	2.3	41.7	17.5	1943
Total		**2.3**	**37.7**	**3.2**	**37.4**	**1.6**	**13.8**	**1.5**	**2.5**	**43.2**	**18.6**	**2375**

* MICS indicator 4; MDG indicator 17

** MICS indicator 5

Table RH.5: Maternal mortality ratio

Lifetime risk of maternal death and proportion of dead sisters dying of maternal causes, Sierra Leone, 2005

		Number of adult household respondents	Sisters who reached age 15	Sisters who reached age 15 (adjusted)	Sisters who reached age 15 and who died	Maternal deaths	Adjustment factor	Sister units of risk exposure	Lifetime risk of maternal death	Percent of dead sisters dying of maternal causes	Total fertility rate 10-14 years ago	Maternal mortality ratio *
Respondent age	15-19	3745	4818	11655	366	54	.107	1247	.043	14.7	.	.
	20-24	2729	4764	11526	359	65	.206	2374	.027	18.1	.	.
	25-29	3265	6883	16652	623	99	.343	5712	.017	15.9	.	.
	30-34	2435	5598	5598	709	116	.503	2816	.041	16.3	.	.
	35-39	2660	6476	6476	915	136	.664	4300	.032	14.8	.	.
	40-44	1744	4424	4424	731	99	.802	3548	.028	13.6	.	.
	45-49	1391	3417	3417	676	94	.900	3075	.031	13.9	.	.
	50-54	1683	4122	4122	899	103	.958	3949	.026	11.5	.	.
	55-59	933	2255	2255	623	75	.986	2224	.034	12.1	.	.
	60+	2953	7092	7092	2743	225	1.000	7092	.032	8.2	.	.
Total		**23539**	**49848**	**73215**	**8644**	**1066**	**.**	**36335**	**.029**	**12.3**	**6.50**	**457**

* MICS Indicator 3; MDG Indicator 16

Table CD.1: Family support for learning

% children aged 0-59 months for whom household members are engaged in activities that promote learning and school readiness, Sierra Leone, 2005

		Percentage of children aged 0-59 months					Number 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	
Sex	Male	63.5	3.8	66.4	1.8	23.6	2605
	Female	65.9	3.9	62.8	1.8	26.2	2639
Region	East	69.9	4.0	75.5	2.4	20.2	1300
	North	63.8	3.8	65.4	1.7	23.9	2040
	South	56.0	3.7	54.6	1.4	26.7	1444
	West	81.5	4.3	61.8	2.0	37.0	460
Area	Rural	62.7	3.8	66.4	1.8	21.3	4144
	Urban	72.4	4.1	57.8	1.7	38.5	1101
Age	0-23 months	50.7	3.4	62.2	1.6	23.0	2090
	24-59 months	73.9	4.1	66.2	2.0	26.2	3154
Mother's education	None	63.6	3.8	65.4	1.8	22.7	4226
	Primary	66.0	3.9	65.1	1.9	27.0	541
	Secondary	72.8	4.2	56.6	1.7	42.3	473
Father's education	None	63.3	3.8	73.1	2.0	.0	2757
	Primary	59.8	3.8	75.0	2.2	.0	455
	Secondary +	74.1	4.1	78.2	2.5	.0	699
	Father not in household	65.1	3.9	35.4	1.0	100.0	1306
Wealth index quintiles	Poorest	64.1	3.8	68.2	1.9	21.7	1109
	Second	64.6	3.8	66.1	1.8	20.8	1231
	Middle	62.4	3.8	65.0	1.8	23.1	1156
	Fourth	62.8	3.8	62.4	1.7	27.6	1020
	Richest	72.2	4.1	59.1	1.8	35.8	729
Religion of Household Head	Christian	72.9	4.1	70.9	2.2	27.9	996
	Muslim	62.8	3.8	63.2	1.7	24.2	4249
Total		**64.7**	**3.8**	**64.6**	**1.8**	**24.9**	**5245**

* MICS indicator 46
** MICS indicator 47

Table CD.2: Learning materials

Percentage of children aged 0-59 months living in households containing learning materials, Sierra Leone, 2005

		3 or more non-children's books *	Median number of non-children's books	3 or more children's books **	Median number of children's books	Child plays with:					3 or more types of playthings ***	Number of children aged 0-59 months
						Household objects	Objects and materials found outside the home	Homemade toys	Toys that came from a store	No playthings mentioned		
Sex	Male	28.3	0.0	10.6	0.0	77.8	72.1	51.5	35.6	12.2	52.9	2605
	Female	29.1	0.0	11.1	0.0	77.4	70.2	48.9	38.8	12.9	50.9	2639
Region	East	16.9	0.0	6.9	0.0	83.2	74.8	59.7	37.2	11.4	63.7	1300
	North	26.9	0.0	12.7	0.0	76.5	67.0	43.1	29.8	14.8	39.9	2040
	South	30.4	0.0	5.4	0.0	79.1	80.2	57.0	37.7	11.4	60.6	1444
	West	64.3	7.0	30.6	0.0	61.6	51.1	33.9	68.4	9.2	44.3	460
Area	Rural	21.6	0.0	6.6	0.0	79.4	73.5	51.6	30.2	13.3	51.4	4144
	Urban	55.3	4.0	26.8	0.0	70.7	62.3	45.1	63.7	9.7	53.6	1101
Age	0-23 months	27.3	0.0	10.1	0.0	61.5	52.1	37.4	30.1	28.4	36.9	2100
	24-59 months	29.6	0.0	11.3	0.0	88.3	83.9	58.8	41.9	2.0	61.9	3144
Mother's education	None	24.0	0.0	8.5	0.0	79.0	72.2	50.6	32.5	12.9	50.8	4226
	Primary	35.9	0.0	14.1	0.0	75.6	71.2	52.6	49.0	12.0	57.3	541
	Secondary	62.2	6.0	27.9	0.0	66.6	61.8	44.4	66.0	10.4	54.8	473
Wealth index quintiles	Poorest	17.1	0.0	3.5	0.0	82.7	78.7	52.9	25.1	12.1	54.1	1109
	Second	18.6	0.0	4.9	0.0	78.7	74.2	51.6	28.2	13.8	51.6	1231
	Middle	23.1	0.0	8.9	0.0	79.3	72.3	51.9	31.9	12.7	52.3	1156
	Fourth	35.2	0.0	13.9	0.0	77.5	66.7	49.7	43.7	12.9	49.1	1020
	Richest	63.0	6.0	30.9	0.0	65.2	58.8	42.1	70.2	10.3	52.1	729
Religion of Household Head	Christian	37.6	0.0	15.8	0.0	77.7	76.6	52.2	43.0	10.7	57.9	995
	Muslim	26.6	0.0	9.7	0.0	77.5	69.9	49.8	35.9	13.0	50.4	4240
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9
Total		**28.7**	**0.0**	**10.8**	**0.0**	**77.6**	**71.2**	**50.2**	**37.2**	**12.5**	**51.9**	**5245**

* MICS indicator 49
** MICS indicator 48
*** MICS indicator 50

Cases of Non-standard curriculum = 2 and missing/DK = 2 for mother's education deleted from the table

Table CD.3: Children left alone or with other children

Percentage of children age 0-59 months left in the care of other children under the age of 10 years or left alone in the past week, Sierra Leone, 2005

		Left in the care children under the age of 10 years in past week	Left alone in the past week	Left with inadequate care in past week *	Number of children aged 0-59 months
Sex	Male	19.3	5.1	20.2	2605
	Female	20.2	5.8	21.3	2639
Region	East	15.8	6.4	17.2	1300
	North	25.0	5.5	25.8	2040
	South	18.2	5.4	19.3	1444
	West	12.1	2.9	12.7	460
Area	Rural	20.8	5.3	21.6	4144
	Urban	15.5	6.1	17.5	1101
Age	0-23	14.0	3.5	15.0	2100
	24-59	23.5	6.8	24.6	3144
Mother's education	None	20.1	5.4	21.0	4226
	Primary	22.1	6.5	23.5	541
	Secondary	14.0	4.5	15.5	473
Wealth index quintiles	Poorest	18.3	4.4	18.6	1109
	Second	22.3	5.6	22.6	1231
	Middle	20.7	6.0	22.2	1156
	Fourth	20.9	6.0	22.0	1020
	Richest	14.3	5.2	16.6	729
Religion of Household Head	Christian	15.5	4.1	16.8	995
	Muslim	20.8	5.8	21.7	4240
	Missing	(*)	(*)	(*)	9
Total		**19.7**	**5.5**	**20.7**	**5245**

* MICS indicator 51

Cases of Non-standard curriculum = 2 and missing/DK = 2 for mother's education deleted from the table

Table ED.1: Early childhood education

Percentage of children aged 36-59 months who are attending some form of organized early childhood education programme and percentage of first graders who attended pre-school, Sierra Leone, 2005

		Percentage of children aged 36-59 months currently attending early childhood education*	Number of children aged 36-59 months	Percentage of children attending first grade who attended preschool program in previous year**	Number of children attending first grade
Sex	Male	12.9	1010	6.8	249
	Female	13.0	1055	6.7	254
Region	East	18.0	522	5.1	97
	North	6.0	779	2.1	191
	South	11.9	565	5.5	126
	West	29.7	199	20.0	90
Area	Rural	9.9	1640	1.7	348
	Urban	24.4	425	18.0	155
Age of child	36-47 months	8.1	1181	.	0
	48-59 months	19.3	884	.	0
	6 years	.	0	6.7	503
Wealth index quintiles	Poorest	7.9	481	2.7	75
	Second	7.7	484	3.2	94
	Middle	10.6	449	1.8	108
	Fourth	15.8	378	7.1	99
	Richest	30.7	274	15.7	127
Religion of Household Head	Christian	20.3	403	16.6	108
	Muslim	11.2	1658	4.1	395
	Other/Missing	(*)	4	(*)	0
Total		**12.9**	**2065**	**6.7**	**503**

* MICS Indicator 52
** MICS Indicator 53

Table ED.2: Primary school entry

Percentage of children of primary school entry age attending grade 1, Sierra Leone, 2005

		Percentage of children of primary school entry age currently attending grade 1 *	Number of children of primary school entry age
Sex	Male	47.0	792
	Female	48.9	774
Region	East	48.2	341
	North	41.3	651
	South	50.0	392
	West	66.7	182
Area	Rural	44.2	1202
	Urban	60.5	364
Age	6	48.0	1566
Mother's education	None	43.3	1276
	Primary	69.4	141
	Secondary +	67.8	149
Wealth index quintiles	Poorest	36.0	333
	Second	44.3	341
	Middle	45.7	346
	Fourth	51.2	280
	Richest	67.2	266
Religion of Household Head	Christian	50.7	321
	Muslim	47.3	1245
Total		**48.0**	**1566**

* MICS Indicator 54

Table ED.3: Primary school net attendance ratio

Percentage of children of primary school age attending primary school or secondary school (NAR), Sierra Leone, 2005

		Male		Female		Total	
		Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio	Number of children
Region	East	71.6	804	72.3	831	72.0	1635
	North	63.0	1837	62.6	1653	62.8	3490
	South	67.1	853	68.3	799	67.7	1652
	West	89.3	510	88.6	508	89.0	1018
Area	Rural	62.7	2948	63.5	2712	63.1	5660
	Urban	86.4	1055	84.3	1080	85.3	2135
Age	6	53.1	792	54.8	774	53.9	1566
	7	62.7	771	69.6	706	66.0	1476
	8	72.0	697	71.6	702	71.8	1399
	9	79.6	522	75.9	541	77.7	1062
	10	74.7	824	73.7	744	74.3	1568
	11	81.1	398	78.8	325	80.1	723
Mother's education	None	65.0	3224	65.6	3061	65.3	6285
	Primary	81.6	352	84.1	321	82.8	673
	Secondary +	89.5	420	87.0	409	88.3	828
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	5
	Missing/DK	(*)	(*)	(*)	(*)	(*)	4
Wealth index quintiles	Poorest	53.8	842	55.0	754	54.4	1596
	Second	62.1	790	62.4	737	62.2	1527
	Middle	65.2	829	67.3	796	66.2	1625
	Fourth	78.3	815	74.8	730	76.7	1545
	Richest	87.5	728	87.3	774	87.4	1502
Religion of Household Head	Christian	70.3	834	74.3	849	72.3	1683
	Muslim	68.5	3162	68.1	2937	68.3	6099
	Other/Missing	(*)	(*)	(*)	(*)	(*)	13
Total		**68.9**	**4003**	**69.4**	**3792**	**69.2**	**7795**

* MICS indicator 55; MDG indicator 6

Table ED.4: Secondary school net attendance ratio

Percentage of children of secondary school age attending secondary or higher school (NAR), Sierra Leone, 2005

		Male		Female		Total	
		Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio	Number of children
Region	East	17.2	613	11.0	532	14.3	1145
	North	12.8	1249	8.2	1144	10.6	2393
	South	14.6	609	9.2	485	12.2	1094
	West	56.9	499	51.2	480	54.1	978
Area	Rural	9.0	1927	5.1	1652	7.2	3578
	Urban	44.4	1044	36.3	988	40.5	2032
Age	12	10.5	628	9.7	585	10.1	1212
	13	14.3	448	14.7	463	14.5	911
	14	27.5	444	21.4	683	23.8	1126
	15	20.1	746	13.0	447	17.5	1193
	16	29.6	359	26.2	252	28.2	611
	17	37.2	346	22.9	210	31.8	556
Mother's education	None	14.9	1844	11.9	1686	13.5	3530
	Primary	19.8	202	17.2	186	18.5	388
	Secondary +	50.4	301	42.4	330	46.2	631
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	3
	Mother not in household	27.5	618	16.0	437	22.8	1055
	Missing/DK	(*)	(*)	(*)	(*)	(*)	3
Wealth index quintiles	Poorest	6.3	523	2.4	461	4.5	985
	Second	7.5	509	3.5	424	5.7	934
	Middle	9.9	517	5.1	451	7.7	968
	Fourth	23.8	673	16.7	583	20.5	1256
	Richest	47.4	748	41.2	720	44.4	1467
Religion of Household Head	Christian	29.0	659	19.2	619	24.2	1278
	Muslim	19.3	2305	16.1	2018	17.8	4323
	Other/Missing	(*)	(*)	(*)	(*)	(*)	9
Total		**21.4**	**2970**	**16.8**	**2640**	**19.3**	**5610**

* MICS indicator 56

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

Percentage of children of secondary school age attending primary school, Sierra Leone, 2005

		Male		Female		Total	
		Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio	Number of children
Region	East	54.1	613	48.9	532	51.7	1145
	North	54.2	1249	43.6	1144	49.1	2393
	South	51.0	609	47.9	485	49.6	1094
	West	30.1	499	31.3	480	30.7	978
Area	Rural	53.9	1927	43.8	1652	49.2	3578
	Urban	41.3	1044	42.3	988	41.8	2032
Age	12	65.6	628	65.3	585	65.4	1212
	13	68.8	448	58.2	463	63.4	911
	14	51.5	444	37.5	683	43.0	1126
	15	44.2	746	34.4	447	40.5	1193
	16	32.1	359	19.4	252	26.9	611
	17	22.0	346	14.8	210	19.3	556
Mother's education	None	55.0	1844	46.4	1686	50.9	3530
	Primary	58.4	202	56.0	186	57.2	388
	Secondary +	42.3	301	44.3	330	43.3	631
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	3
	Mother not in household	33.4	618	24.5	437	29.7	1055
	Missing/DK	(*)	(*)	(*)	(*)	(*)	3
Wealth index quintiles	Poorest	45.3	523	34.9	461	40.4	985
	Second	53.8	509	40.3	424	47.7	934
	Middle	58.1	517	51.5	451	55.1	968
	Fourth	55.6	673	49.9	583	53.0	1256
	Richest	37.9	748	39.6	720	38.7	1467
Religion of Household Head	Christian	45.7	659	43.9	619	44.8	1278
	Muslim	50.6	2305	43.0	2018	47.0	4323
	Other/Missing	(*)	(*)	(*)	(*)	(*)	9
Total		**49.5**	**2970**	**43.2**	**2640**	**46.5**	**5610**

* MICS indicator 56

Table ED.5: Children reaching grade 5

Percentage of children entering first grade of primary school who eventually reach grade 5, Sierra Leone, 2005

		Percent attending 2nd grade who were in 1st grade last year	Percent attending 3rd grade who were in 2nd grade last year	Percent attending 4th grade who were in 3rd grade last year	Percent attending 5th grade who were in 4th grade last year	Percent who reach grade 5 of those who enter 1st grade *
Sex	Male	96.9	98.0	98.1	98.8	92.0
	Female	97.0	97.5	98.6	99.1	92.5
Region	East	95.2	95.2	97.3	98.8	87.1
	North	97.0	98.5	98.6	98.9	93.2
	South	98.4	97.7	98.1	99.1	93.5
	West	97.8	99.5	99.2	99.0	95.6
Area	Rural	96.5	97.9	98.5	99.1	92.3
	Urban	98.3	97.4	98.1	98.6	92.6
Mother's education	None	97.4	98.5	99.0	99.2	94.2
	Primary	98.8	95.6	95.4	98.9	89.1
	Secondary +	99.3	97.6	99.5	100.0	96.5
	Mother not in household	91.7	95.5	98.1	97.4	83.6
Wealth index quintiles	Poorest	95.4	97.8	98.2	99.4	91.1
	Second	97.0	97.9	98.2	98.8	92.1
	Middle	96.9	97.3	98.7	99.1	92.2
	Fourth	97.5	96.9	98.8	98.5	91.9
	Richest	98.2	99.0	97.9	99.0	94.3
Religion of Household Head	Christian	98.2	96.5	98.2	99.6	92.8
	Muslim	96.7	98.1	98.4	98.7	92.2
Total		**97.0**	**97.8**	**98.4**	**98.9**	**92.2**

* MICS Indicator 57; MDG Indicator 7

Table ED.6: Primary school completion and transition to secondary education

Primary school completion rate and transition rate to secondary education, Sierra Leone, 2005

		Net primary school completion rate *	Number of children of primary school completion age	Transition rate to secondary education **	Number of children who were in the last grade of primary school the previous year
Sex	Male	11.6	398	54.1	296
	Female	9.8	325	50.4	212
Region	East	9.0	132	34.1	88
	North	6.5	330	47.8	184
	South	9.3	150	43.0	100
	West	27.9	110	77.5	137
Area	Rural	5.5	474	37.0	238
	Urban	20.8	250	66.2	270
Mother's education	None	6.2	529	51.3	222
	Primary	17.1	82	(45.5)	44
	Secondary +	27.9	111	74.4	94
	Mother not in household	.	0	53.9	67
Wealth index quintiles	Poorest	2.7	110	(31.3)	32
	Second	5.6	126	27.5	51
	Middle	6.0	134	(37.9)	66
	Fourth	10.2	167	49.2	134
	Richest	23.1	186	67.5	225
Religion of Household Head	Christian	13.6	176	50.3	141
	Muslim	9.9	547	53.4	366
	Other/Missing	(*)	(*)	(*)	2
Total		**10.8**	**723**	**52.5**	**509**

* MICS Indicator 59; MDG Indicator 7b

** MICS Indicator 58

Table ED.7: Education gender parity

Ratio of girls to boys attending primary education and ratio of girls to boys attending secondary education, Sierra Leone

		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*
Region	East	72.3	71.6	1.01	11.0	17.2	.64
	North	62.6	63.0	1.00	8.2	12.8	.64
	South	68.3	67.1	1.02	9.2	14.6	.64
	West	88.6	89.3	.99	51.2	56.9	.90
Area	Rural	63.5	62.7	1.01	5.1	9.0	.56
	Urban	84.3	86.4	.98	36.3	44.4	.82
Mother's education	None	65.6	65.0	1.01	11.9	14.9	.80
	Primary	84.1	81.6	1.03	17.2	19.8	.87
	Secondary +	87.0	89.5	.97	42.4	50.4	.84
Wealth index quintiles	Poorest	55.0	53.8	1.02	2.4	6.3	.38
	Second	62.4	62.1	1.01	3.5	7.5	.47
	Middle	67.3	65.2	1.03	5.1	9.9	.52
	Fourth	74.8	78.3	.96	16.7	23.8	.70
	Richest	87.3	87.5	1.00	41.2	47.4	.87
Religion of Household Head	Christian	74.3	70.3	1.06	19.2	29.0	.66
	Muslim	68.1	68.5	.99	16.1	19.3	.83
Total		**69.4**	**68.9**	**1.01**	**16.8**	**21.4**	**.78**

* MICS Indicator 61; MDG Indicator 9

Table ED.8: Adult literacy

Percentage of women aged 15-24 years that are literate, Sierra Leone, 2005

		Percentage literate *	Percentage not known	Number of women aged 15-24 years
Region	East	20.5	.2	545
	North	14.8	.1	856
	South	19.7	.2	547
	West	67.5	.0	322
Area	Rural	9.2	.2	1506
	Urban	55.6	.0	765
Education	None	.5	.1	1357
	Primary	13.7	.2	397
	Secondary +	100.0	.0	503
	Non-standard curriculum	(*)	(*)	13
Age	15-19	31.0	.1	1103
	20-24	19.0	.2	1168
Wealth index quintiles	Poorest	6.3	.6	389
	Second	6.7	.2	405
	Middle	8.3	.0	424
	Fourth	25.0	.0	482
	Richest	62.4	.0	571
Religion of Household Head	Christian	34.3	.0	503
	Muslim	22.2	.2	1764
	Other/Missing	(*)	(*)	4
Total		**24.8**	**.1**	**2271**

* 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, Sierra Leone, 2005

		Birth is registered *	Don't know if birth is registered	Number of children aged 0-59 months	Birth is not registered because:								Number of children aged 0-59 months without birth registration
					Costs too much	Must travel too far	Didn't know child should be registered	Late, didn't want to pay fine	Doesn't know where to register	Other	Don't know	Missing	
Sex	Male	47.6	1.3	2605	21.4	13.5	32.6	3.1	20.1	7.8	1.6	.1	1331
	Female	48.0	1.6	2639	20.0	16.0	32.8	3.3	19.7	6.6	1.5	.0	1329
Region	East	44.6	1.3	1300	28.6	15.2	20.2	4.4	17.7	11.9	1.9	.0	704
	North	28.6	1.6	2040	15.1	14.9	40.7	1.1	23.2	3.3	1.6	.0	1424
	South	71.8	1.4	1444	23.1	16.1	34.9	7.0	13.1	5.3	.3	.3	387
	West	67.3	1.4	460	30.4	6.8	8.7	8.1	16.2	26.7	3.1	.0	144
Area	Rural	44.2	1.4	4144	19.4	15.5	34.2	3.0	20.5	6.0	1.4	.0	2253
	Urban	61.5	1.5	1101	27.7	10.3	24.8	4.3	16.7	13.9	2.3	.0	407
Age	0-11 months	44.4	1.0	1016	19.0	14.4	32.0	3.1	18.6	10.4	2.5	.0	555
	12-23 months	49.8	.5	1074	20.9	13.7	35.6	3.1	19.1	5.8	1.8	.0	534
	24-35 months	49.9	1.7	1069	20.0	14.3	33.7	2.6	21.2	7.1	1.2	.0	518
	36-47 months	48.4	2.2	1181	24.9	13.4	31.3	3.8	19.5	6.2	.7	.2	583
	48-59 months	46.3	1.8	884	18.2	18.8	30.1	3.4	21.6	6.4	1.5	.0	459
Mother's education	None	44.9	1.5	4226	20.0	15.0	33.6	3.1	20.7	6.0	1.5	.0	2266
	Primary	53.0	1.5	541	27.7	12.4	33.0	2.4	15.1	9.0	.4	.0	246
	Secondary	68.4	.6	473	19.6	14.0	17.7	5.8	15.8	22.7	4.4	.0	147
Wealth index quintiles	Poorest	45.6	1.3	1109	18.9	16.0	35.1	3.3	18.4	6.7	1.7	.0	588
	Second	45.3	1.9	1231	23.1	16.8	31.3	2.2	19.3	5.9	1.4	.0	650
	Middle	44.3	1.3	1156	16.5	13.6	38.2	3.1	22.6	5.7	.3	.2	629
	Fourth	46.4	1.5	1020	21.4	15.5	32.3	3.5	20.6	4.8	1.9	.0	531
	Richest	63.1	1.0	729	27.4	8.0	18.5	5.3	17.1	20.0	3.7	.0	262
Religion of Household Head	Christian	59.6	.8	995	30.0	22.8	13.8	5.3	16.2	10.8	1.0	.0	394
	Muslim	45.1	1.6	4240	19.1	13.3	35.9	2.9	20.5	6.6	1.6	.0	2266
Total		**47.8**	**1.4**	**5245**	**20.7**	**14.7**	**32.7**	**3.2**	**19.9**	**7.2**	**1.5**	**.0**	**2660**

* MICS Indicator 62

Table CP.2: Child labour

Percentage of children aged 5-14 years who are involved in child labour activities by type of work, Sierra Leone, 2005

		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				
Sex	Male	2.4	16.1	1.6	41.0	48.8	6407
	Female	2.4	14.9	2.0	40.3	47.7	6369
Region	East	1.6	14.7	.8	36.1	42.3	2644
	North	4.3	9.2	2.5	53.3	56.8	5691
	South	.7	26.7	1.1	39.3	49.6	2646
	West	.3	20.3	1.9	9.1	27.7	1795
Area	Rural	2.8	15.7	2.0	51.4	56.7	9054
	Urban	1.4	15.1	1.2	14.4	27.7	3722
Age	5-11 years	2.7	20.0	1.3	47.6	56.4	9526
	12-14 years	1.5	2.3	3.2	20.2	24.4	3250
School participation	Yes	2.0	16.3	1.4	36.7	45.3	8658
	No	3.2	13.8	2.8	48.9	54.5	4118
Mother's education	None	2.7	14.6	2.0	45.6	51.8	10126
	Primary	2.0	22.2	1.0	35.1	46.3	1147
	Secondary +	.5	16.1	1.3	11.0	25.0	1486
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	9
	Missing/DK	(*)	(*)	(*)	(*)	(*)	8
Wealth index quintiles	Poorest	3.7	12.1	3.0	55.3	58.9	2533
	Second	2.5	15.2	1.4	51.7	56.9	2450
	Middle	2.4	17.9	2.2	50.7	56.9	2555
	Fourth	2.5	15.9	.8	35.1	43.8	2616
	Richest	1.0	16.4	1.6	11.8	25.9	2622
Religion of Household Head	Christian	4.5	13.2	2.3	36.3	43.5	2761
	Muslim	1.8	16.1	1.7	41.8	49.6	9991
	Other/Missing	(*)	(*)	(*)	(*)	(*)	23
Total		**2.4**	**15.5**	**1.8**	**40.6**	**48.3**	**12776**

* MICS Indicator 71

Table CP.3: Labourer students and student labourers

Percentage of children aged 5-14 years who are Labourer students and student labourers, Sierra Leone, 2005

		Percentage of children in child labour *	Percentage of children attending school ***	Number of children aged 5-14	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
Sex	Male	48.8	68.7	6407	63.8	3126	45.3	4400
	Female	47.7	66.9	6369	63.4	3039	45.2	4258
Region	East	42.3	68.6	2644	67.1	1120	41.4	1814
	North	56.8	60.8	5691	58.4	3234	54.5	3462
	South	49.6	66.4	2646	64.4	1314	48.2	1756
	West	27.7	90.6	1795	87.6	498	26.8	1626
Area	Rural	56.7	60.2	9054	59.3	5134	55.8	5451
	Urban	27.7	86.2	3722	84.9	1031	27.3	3207
Age	5-11 years	56.4	65.8	9526	64.2	5372	55.0	6269
	12-14 years	24.4	73.5	3250	59.7	793	19.8	2389
Mother's education	None	51.8	63.4	10126	60.5	5250	49.5	6417
	Primary	46.3	78.3	1147	78.5	531	46.4	898
	Secondary +	25.0	89.9	1486	87.4	372	24.3	1336
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	(*)	3
	Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	4
Wealth index quintiles	Poorest	58.9	50.7	2533	50.0	1492	58.0	1285
	Second	56.9	58.2	2450	57.6	1394	56.3	1426
	Middle	56.9	64.4	2555	63.9	1454	56.5	1644
	Fourth	43.8	75.3	2616	74.1	1145	43.0	1971
	Richest	25.9	88.9	2622	87.5	679	25.5	2331
Religion of Household Head	Christian	43.5	72.5	2761	66.7	1201	40.0	2003
	Muslim	49.6	66.5	9991	62.8	4952	46.8	6643
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	12
Total		**48.3**	**67.8**	**12776**	**63.6**	**6165**	**45.3**	**8658**

** MICS Indicator 72

**** MICS Indicator 73

Table CP.4: Child discipline

Percentage of children aged 2-14 years according to method of disciplining the child, Sierra Leone, 2005

		Percentage of children 2-14 years of age who experience:							
		Only non-violent discipline	Psychological punishment	Minor physical punishment	Severe physical punishment	Any psychological or physical punishment *	No discipline or punishment	Mother/caretaker believes that the child needs to be physically punished	Number of children aged 2-14 years**
Sex	Male	6.3	82.9	75.9	22.5	91.7	2.0	56.5	2967
	Female	5.8	81.8	75.1	22.6	91.7	2.5	55.4	3051
Region	East	6.7	85.9	63.6	12.3	91.1	2.2	61.9	1379
	North	5.0	82.7	80.4	30.2	92.3	2.6	56.4	2342
	South	5.8	82.3	75.5	19.3	92.8	1.5	60.2	1400
	West	8.0	75.9	80.9	23.3	89.2	2.8	38.8	897
Area	Rural	5.7	83.4	74.6	22.5	92.1	2.2	59.0	4343
	Urban	6.9	79.6	77.8	22.7	90.7	2.5	47.9	1676
Age	2-4 years	7.3	77.1	70.0	19.7	87.6	5.1	55.5	1454
	5-9 years	5.5	83.8	76.9	22.8	93.1	1.5	56.6	2566
	10-14 years	5.8	84.3	77.6	24.2	92.9	1.3	55.4	1998
Mother's education	None	5.9	82.9	75.2	22.8	91.8	2.3	57.3	4740
	Primary	5.6	81.7	77.4	23.2	92.4	2.0	57.6	552
	Secondary +	7.3	79.2	75.9	20.4	90.4	2.2	45.7	720
Wealth index quintiles	Poorest	7.1	81.4	71.9	20.6	90.2	2.8	54.2	1270
	Second	5.1	84.5	76.9	24.4	92.7	2.2	60.7	1256
	Middle	5.4	84.2	73.1	21.8	92.4	2.2	60.5	1186
	Fourth	5.6	82.3	78.2	23.5	92.8	1.6	58.7	1164
	Richest	7.0	79.1	77.6	22.4	90.5	2.5	45.0	1143
Religion of Household Head	Christian	6.2	82.6	75.6	20.3	91.9	2.0	52.6	1329
	Muslim	6.0	82.3	75.4	23.1	91.6	2.4	56.9	4674
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	15
Total		**6.0**	**82.3**	**75.5**	**22.5**	**91.7**	**2.3**	**55.9**	**6018**

* MICS Indicator 74

** Table is based on children aged 2-14 years randomly selected during fieldwork (one child selected per household, if any children in the age range) for whom the questions on child discipline were administered

Table CP.5: Early marriage and polygyny

%f women aged 15-49 in marriage or union before their 15th birthday, percentage of women aged 20-49 in marriage or union before their 18th birthday, % women aged 15-19 currently married or in union, and the percentage of married or in union women in a polygynous marriage or union, Sierra Leone, 2005

		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 years 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 currently married/in union
Region	East	27.3	1839	62.5	1581	33.5	258	38.2	1476
	North	34.1	2965	69.4	2543	42.2	422	53.1	2509
	South	22.2	1820	63.3	1545	41.1	275	41.7	1483
	West	15.7	1023	37.4	875	12.2	148	11.9	609
Area	Rural	30.5	5475	67.6	4766	46.7	709	47.1	4707
	Urban	18.6	2171	47.0	1777	16.3	394	26.9	1369
Age	15-19	15.4	1103	na	na	35.9	1103	35.9	396
	20-24	27.7	1168	55.6	1168	na	na	34.6	871
	25-29	32.3	1785	64.2	1785	na	na	42.1	1587
	30-34	31.7	1177	65.2	1177	na	na	43.4	1053
	35-39	27.4	1253	64.4	1253	na	na	43.6	1145
	40-44	26.9	711	62.7	711	na	na	50.5	642
	45-49	22.1	450	53.9	450	na	na	50.8	384
Education	None	31.0	5632	67.0	5077	60.1	554	45.8	4973
	Primary	22.0	841	57.8	596	20.9	244	34.5	557
	Secondary +	12.4	1152	35.6	856	3.4	297	20.8	536
Wealth index quintiles	Poorest	31.0	1482	65.9	1306	44.1	176	42.9	1248
	Second	31.8	1556	70.5	1376	50.7	180	45.9	1365
	Middle	31.6	1517	67.9	1326	45.8	190	47.8	1311
	Fourth	25.6	1510	61.7	1262	39.2	248	45.7	1176
	Richest	16.3	1582	43.1	1273	13.8	309	26.6	976
Religion of Household Head	Christian	27.2	1678	56.3	1440	20.0	238	29.5	1186
	Muslim	27.2	5950	63.7	5087	40.1	863	45.7	4875
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	16
Total		**27.2**	**7647**	**62.0**	**6543**	**35.9**	**1103**	**42.6**	**6077**

* MICS Indicator 67
** MICS Indicator 68, *** MICS Indicator 70
na : not applicable

Table CP.6: Spousal age difference

Percent distribution of currently married/in union women aged 15-19 and 20-24 according to the age difference with their husband or partner, Sierra Leone, 2005

		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 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		Younger	0-4 years older	5-9 years older	10+ years older *	Husband/ partner's age unknown	
Region	East	0	5.4	24.5	56.9	13.2	86	0	8	28	53.8	10.1	229
	North	0	6.1	18.9	59.2	15.7	178	0.3	8.6	23.6	60.8	6.8	359
	South	1	12.4	24.4	60.6	1.6	113	0.9	15.3	28.2	52.4	3.2	211
	West	0	9.5	38.1	42.9	9.5	18	0	21.7	32.5	44.7	1.2	71
Area	Rural	0	7.4	20.7	61.5	10.4	331	0.4	9.6	25.7	57.5	6.9	683
	Urban	1.7	10.3	32.4	42.1	13.5	64	0	16.9	29.9	48.8	4.4	188
Age	15-19	0.3	7.9	22.6	58.4	10.9	396	na	na	na	na	na	na
	20-24	na	na	na	na	na	na	0.3	11.1	26.6	55.6	6.3	871
Education	None	0.3	7.8	20.8	60	11	333	0.3	9.8	25.6	56.9	7.4	690
	Primary	0	8.3	29	50.2	12.4	51	0.9	10.2	33.7	53.2	2	113
	Secondary +	0	9.1	39.6	51.3	0	10	0	24.2	25.1	47.7	3	64
Wealth index quintiles	Poorest	0	5.2	24.6	60	10.1	78	0.6	8.5	20.8	62.1	8	175
	Second	0	6.4	23.5	55	15	91	0.5	13.2	31.3	51.2	3.8	198
	Middle	0	8	16.2	61.2	14.6	87	0	8.9	26.3	55.6	9.3	206
	Fourth	0	10.1	26	58	5.9	97	0.5	10	24.2	59.1	6.1	169
	Richest	2.6	10.8	21.9	57.7	7.1	43	0	16.9	31	48.7	3.4	123
Religion of Household Head	Christian	0	15.5	17.4	56.7	10.5	48	0	11.4	28.5	57.4	2.6	161
	Muslim	0.3	6.9	23.4	58.7	10.7	346	0.4	11.1	26.1	55.2	7.2	707
Total		**0.3**	**7.9**	**22.6**	**58.4**	**10.9**	**396**	**0.3**	**11.1**	**26.6**	**55.6**	**6.3**	**871**

* MICS Indicator 69
na : not applicable

Table CP.7: Membership in secret societies

Percentage of women aged 15-49 who are members of a secret society and the percent distribution of attitudes towards whether the practice of secret societies should be continued, Sierra Leone, 2005

		Are members of secret societies *	Number of women aged 15-49 years	Percent distribution of women who believe the practice of secret societies should:				Total	Number of women aged 15-49 years who have heard of secret societies
				Continue ***	Be discontinued	Depends on situation	Don't know/Missing		
Region	East	96.7	1839	92.9	5.5	1.0	.6	100.0	1808
	North	97.0	2965	88.0	10.6	.5	1.0	100.0	2915
	South	93.6	1820	92.5	4.5	.2	2.8	100.0	1778
	West	80.8	1023	58.1	39.7	.9	1.3	100.0	995
Area	Rural	97.0	5475	92.0	6.1	.6	1.4	100.0	5391
	Urban	86.4	2171	71.6	26.4	.6	1.4	100.0	2106
Age	15-19	81.1	1103	80.1	17.6	.4	1.9	100.0	1035
	20-24	93.6	1168	84.1	14.3	.3	1.3	100.0	1141
	25-29	96.2	1785	86.9	11.3	.6	1.2	100.0	1763
	30-34	96.3	1177	86.6	11.6	.7	1.0	100.0	1169
	35-39	97.5	1253	88.2	9.6	.6	1.5	100.0	1239
	40-44	97.1	711	90.1	8.1	.6	1.2	100.0	707
	45-49	97.1	450	91.3	5.9	1.2	1.6	100.0	444
Education	None	97.3	5632	91.2	6.9	.6	1.4	100.0	5555
	Primary	89.7	841	85.5	12.5	.3	1.7	100.0	808
	Secondary +	80.8	1152	62.1	35.9	.8	1.1	100.0	1112
Membership status	Not member	.0	461	39.0	53.0	2.2	5.8	100.0	311
	Member	100.0	7186	88.3	10.0	.5	1.2	100.0	7186
Wealth index quintiles	Poorest	98.2	1482	94.5	3.0	.8	1.6	100.0	1468
	Second	96.6	1556	93.4	4.5	.6	1.5	100.0	1529
	Middle	97.0	1517	91.2	7.1	.5	1.2	100.0	1492
	Fourth	93.7	1510	83.2	15.1	.2	1.5	100.0	1476
	Richest	84.9	1582	69.3	28.8	.8	1.1	100.0	1533
Religion of Household Head	Christian	89.1	1678	79.1	18.1	1.2	1.6	100.0	1635
	Muslim	95.3	5950	88.2	10.1	.4	1.3	100.0	5844
	Other/Missing	(*)	18	(*)	(*)	(*)	(*)	(*)	18
Total		**94.0**	**7647**	**86.3**	**11.8**	**.6**	**1.4**	**100.0**	**7497**

* MICS Indicator 63, ** MICS Indicator 64, *** MICS Indicator 66

Table CP.8: Membership in secret societies among daughters

Percentage of women with at least one living daughter who is a member of a secret society Sierra Leone, 2005

		Daughter is member of secret society *	Number of women aged 15-49 years
Region	East	35.9	1221
	North	38.6	1975
	South	31.4	1243
	West	23.4	536
Area	Rural	35.4	3774
	Urban	31.5	1201
Age	15-19	6.0	169
	20-24	6.4	553
	25-29	15.1	1216
	30-34	33.4	936
	35-39	45.0	1063
	40-44	65.2	645
	45-49	70.2	392
Education	None	36.4	3999
	Primary	26.9	441
	Secondary +	27.0	525
	Non-standard curriculum	(*)	10
Wealth index quintiles	Poorest	35.4	1020
	Second	33.5	1102
	Middle	36.9	1045
	Fourth	33.2	970
	Richest	33.3	838
Religion of Household Head	Christian	29.0	1057
	Muslim	35.9	3904
	Other/Missing	(*)	15
Total		**34.5**	**4975**

* MICS Indicator 65

Table CP.8A: Membership in secret societies among daughters

Percentage distribution of women with at least one living daughter in a secret society, by the age of daughter at the time of initiation, Sierra Leone, 2005

		Region				Area		Total
		East	North	South	West	Rural	Urban	
Age of daughter	0-4	9.7	12.6	3.9	8.1	8.9	12.0	9.6
	5-7	11.4	26.2	12.3	25.0	18.7	21.0	19.2
	8-9	14.9	16.7	11.7	17.6	14.8	16.4	15.2
	10	17.0	12.1	13.6	12.2	14.7	10.4	13.7
	11-14	17.1	10.7	24.4	18.2	16.2	15.1	16.0
	15+	13.3	5.7	29.8	12.9	13.1	15.2	13.6
	Missing/DK	16.6	16.0	4.3	6.1	13.6	10.0	12.8
Total	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Number of women	441	775	393	127	1351	385	1736

* MICS Indicator 65

Table CP.9: Attitudes toward domestic violence

Percentage of women aged 15-49 years who believe a husband is justified in beating his wife/partner in various circumstances, Sierra Leone, 2005

		Percentage of women aged 15-49 years who believe a husband in beating his wife/partner						
		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*	Number of women aged 15-49 years
Region	East	68.7	69.7	70.2	60.3	45.7	82.5	1839
	North	81.0	82.1	79.4	73.3	63.2	90.1	2965
	South	79.8	80.0	79.1	70.3	66.1	89.8	1820
	West	48.7	45.5	35.6	27.5	24.5	66.1	1023
Area	Rural	78.7	79.0	77.9	71.7	61.6	88.5	5475
	Urban	60.1	60.5	54.6	42.1	36.7	76.2	2171
Age	15-19	66.6	66.4	64.0	53.5	48.3	78.0	1103
	20-24	71.9	71.5	69.6	59.2	52.9	83.5	1168
	25-29	75.1	75.4	72.1	63.8	54.4	86.5	1785
	30-34	73.1	73.3	70.5	64.0	52.5	85.3	1177
	35-39	76.8	78.6	75.1	68.6	58.3	88.2	1253
	40-44	74.3	74.5	72.9	68.4	58.4	86.2	711
	45-49	77.4	76.8	79.0	71.6	62.5	88.4	450
Marital/Union status	Currently married/in union	77.2	77.5	75.8	68.6	58.9	88.0	6077
	Formerly married/in union	69.4	69.4	61.4	52.1	41.3	83.9	446
	Never married/in union	54.7	55.0	50.6	39.1	35.8	68.9	1124
Education	None	78.6	78.3	76.8	70.4	60.1	88.7	5632
	Primary	69.7	70.2	67.5	56.7	48.9	82.8	841
	Secondary +	51.1	53.6	47.1	33.9	31.3	68.4	1152
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	(*)	22
Wealth index quintiles	Poorest	77.1	76.2	75.1	72.8	59.8	88.5	1482
	Second	79.8	80.1	79.3	73.7	62.9	89.7	1556
	Middle	79.9	81.2	79.5	72.9	61.9	89.6	1517
	Fourth	73.6	73.7	70.4	59.3	53.7	84.5	1510
	Richest	57.3	58.0	52.7	38.9	35.0	73.0	1582
Religion of Household Head	Christian	64.1	65.0	60.5	50.5	40.6	78.9	1678
	Muslim	76.0	76.1	74.2	66.9	58.4	86.7	5950
Total		**73.4**	**73.7**	**71.3**	**63.3**	**54.5**	**85.0**	**7647**

* MICS Indicator 100

Table CP.10: Child disability

Percentage of children 2-9 years of age with disability reported by their mother or caretaker according to the type of disability, Sierra Leone, 2005

		Delay in sitting standing or walking	Difficulty seeing, either in the day time or at night	Appears to have difficulty hearing	No understanding of instructions	Difficulty in walking moving, moving arms, weakness or stiffness	Have fits, become rigid, lose consciousness	Not learning to do things like other children his/her age	No speaking cannot be understood in words	Appears mentally backward, dull, or slow	Percentage of children 2-9 years of age with at least one reported disability*	Number of children aged 2-9 years	Speech is not normal	Number of children aged 3-9 years	Cannot name at least one object	Number of children aged 2 years
Region	East	3.7	1.2	1.7	7.1	1.3	2.6	8.4	9.5	4.6	23.8	2580	14.5	2295	41.8	286
	North	3.2	1.0	2.4	4.4	1.7	1.6	3.2	5.4	4.2	18.1	4566	9.1	4094	42.7	472
	South	6.5	2.0	3.7	6.5	2.6	3.3	11.0	17.4	6.5	36.7	2600	35.9	2306	28.4	295
	West	0.5	0.6	0.5	0.7	1.6	0.4	0.8	9.3	1.6	14.1	1147	3.2	1029	34.5	118
Area	Rural	4.5	1.4	2.8	5.4	1.9	2.2	6.5	9.7	4.9	24.5	8339	17.3	7437	39.1	902
	Urban	1.6	0.9	0.9	4.3	1.4	2.0	4.5	9.4	3.4	20.1	2555	12.4	2286	34.7	269
Age of child	2-4	4.0	1.2	1.7	7.6	1.8	2.4	8.9	16.1	5.0	29.7	3659	18.1	2489	38.0	1171
	5-6	3.8	1.2	2.6	4.0	1.8	2.2	5.2	7.6	4.1	21.6	3297	15.7	3297	.	0
	7-9	3.6	1.3	2.7	3.8	1.8	1.8	4.1	5.4	4.5	19.2	3938	15.2	3938	.	0
Mother's education	None	3.9	1.2	2.3	5.2	1.8	2.1	6.4	9.7	4.7	23.7	8835	15.9	7900	39.0	935
	Primary	5.0	2.0	3.5	5.9	2.4	3.0	5.5	9.9	4.2	26.2	1036	19.2	911	31.3	125
	Secondary +	1.9	1.1	2.3	4.0	1.5	1.5	3.8	8.6	3.4	18.8	1013	15.2	904	37.7	109
Wealth index quintiles	Poorest	4.0	1.4	2.8	5.4	1.7	2.5	6.4	11.2	3.9	24.5	2355	14.0	2136	41.6	219
	Second	5.4	1.0	2.9	5.1	2.2	2.3	6.8	11.1	5.3	26.0	2370	17.8	2082	37.5	288
	Middle	4.3	1.8	2.6	6.0	1.7	1.8	5.7	7.9	5.4	23.2	2365	17.0	2111	41.8	254
	Fourth	3.0	1.2	2.2	5.2	2.0	2.6	7.2	10.5	4.6	24.7	2078	19.0	1854	36.8	224
	Richest	1.6	0.7	0.9	3.5	1.2	1.3	3.7	6.9	3.2	17.2	1726	12.3	1540	31.2	186
Religion of Household Head	Christian	3.0	1.3	2.5	4.0	1.7	3.1	7.4	8.7	3.3	21.1	2215	12.3	1997	40.3	218
	Muslim	4.0	1.2	2.3	5.4	1.8	1.9	5.7	9.9	4.9	24.0	8664	17.1	7712	37.5	952
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Total		**3.8**	**1.2**	**2.4**	**5.1**	**1.8**	**2.1**	**6.1**	**9.6**	**4.6**	**23.4**	**10894**	**16.1**	**9723**	**38.0**	**1171**

MICS Indicator 101

Table HA.1: Knowledge of preventing HIV transmission

Percentage of women aged 15-49 years who know the main ways of preventing HIV transmission, Sierra Leone, 2005

			Percentage who know transmission can be prevented by:						
		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	Number of women
Region	East	73.4	48.9	47.2	49.8	37.7	60.3	39.7	1839
	North	59.1	45.9	41.6	41.0	26.0	55.4	44.6	2965
	South	58.4	52.6	45.0	41.5	34.2	57.0	43.0	1820
	West	97.1	89.2	85.0	68.1	60.2	94.1	5.9	1023
Area	Rural	58.5	45.4	41.0	41.1	29.5	53.1	46.9	5475
	Urban	90.0	75.8	71.1	61.3	50.1	84.9	15.1	2171
Age	15-19	70.3	57.2	52.3	47.9	36.0	65.6	34.4	1103
	20-24	71.1	57.7	53.2	49.2	37.6	66.0	34.0	1168
	25-29	67.4	54.7	47.5	46.0	34.1	62.1	37.9	1785
	30-34	70.1	57.7	52.6	49.5	38.5	64.9	35.1	1177
	35-39	65.6	50.5	48.8	47.1	35.1	60.1	39.9	1253
	40-44	60.3	47.7	44.4	42.2	31.5	55.1	44.9	711
	45-49	60.8	44.0	43.2	41.4	31.1	53.1	46.9	450
Education	None	60.5	46.8	42.5	41.7	30.0	54.9	45.1	5632
	Primary	76.1	63.6	57.1	52.3	40.9	71.0	29.0	841
	Secondary +	94.7	82.3	78.4	67.8	57.5	90.4	9.6	1152
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	(*)	(*)	22
Wealth index quintiles	Poorest	46.5	34.5	31.7	32.6	23.6	41.1	58.9	1482
	Second	54.3	41.3	36.2	37.0	26.4	48.2	51.8	1556
	Middle	64.7	50.1	45.1	45.2	31.9	59.1	40.9	1517
	Fourth	77.6	63.9	57.9	52.9	40.3	72.3	27.7	1510
	Richest	92.9	79.1	75.7	65.7	53.7	88.7	11.3	1582
Religion of Household Head	Christian	68.3	56.3	51.4	46.3	38.6	62.3	37.7	1678
	Muslim	67.2	53.4	49.0	47.0	34.5	62.1	37.9	5950
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
Total		**67.4**	**54.0**	**49.5**	**46.9**	**35.3**	**62.1**	**37.9**	**7647**

Table HA.2: Identifying misconceptions about HIV/AIDS

Percentage of women aged 15-49 years who correctly identify misconceptions about HIV/AIDS, Sierra Leone, 2005

		Percent who know that:						
		HIV cannot be transmitted by sharing food	HIV cannot be transmitted by mosquito bites	A healthy looking person can be infected	Reject two most common misconceptions and know a healthy-looking person can be infected	HIV cannot be transmitted by supernatural means	HIV can be transmitted by sharing needles	Number of women
Region	East	48.5	47.2	42.4	19.8	57.7	62.4	1839
	North	27.3	31.5	30.9	10.7	43.4	52.8	2965
	South	34.3	32.2	37.4	17.0	45.0	52.6	1820
	West	76.0	74.9	79.8	58.7	83.1	88.2	1023
Area	Rural	31.2	32.0	31.9	12.1	43.5	51.4	5475
	Urban	64.2	64.5	66.7	42.7	75.3	80.9	2171
Age	15-19	44.8	47.4	43.2	23.0	55.2	62.6	1103
	20-24	45.3	45.1	46.2	24.7	56.7	63.6	1168
	25-29	40.7	40.4	40.1	19.8	52.5	59.1	1785
	30-34	42.7	44.3	45.5	22.7	55.1	63.2	1177
	35-39	37.7	38.9	42.3	20.0	51.5	59.3	1253
	40-44	32.5	31.6	33.6	15.0	44.3	52.1	711
	45-49	32.5	33.5	35.1	15.9	44.6	50.6	450
Education	None	32.9	33.6	33.7	14.0	44.7	52.8	5632
	Primary	45.3	45.1	48.2	21.2	60.5	69.8	841
	Secondary +	73.9	75.2	76.2	53.0	84.7	86.5	1152
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Wealth index quintiles	Poorest	24.9	26.1	26.9	11.5	33.7	41.6	1482
	Second	29.7	30.0	29.5	12.2	40.4	46.0	1556
	Middle	33.7	35.4	35.2	12.4	49.3	57.4	1517
	Fourth	44.2	44.3	46.4	20.6	58.8	68.9	1510
	Richest	69.0	69.3	69.8	46.3	79.3	84.0	1582
Religion of Household Head	Christian	44.4	44.2	49.8	27.9	53.4	62.1	1678
	Muslim	39.5	40.5	39.6	18.9	52.3	59.2	5950
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	18
Total		**40.6**	**41.3**	**41.8**	**20.8**	**52.5**	**59.8**	**7647**

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

Percentage of women aged 15-49 years who have comprehensive knowledge of HIV/AIDS transmission, Sierra Leone, 2005

		Knows 2 ways to prevent HIV transmission	Correctly identify 3 misconceptions about HIV transmission	Have comprehensive knowledge(identify 2 prevention methods and 3 misconceptions) *	Number of women
Region	East	41.4	19.8	15.8	1839
	North	33.8	10.7	4.7	2965
	South	41.6	17.0	11.3	1820
	West	80.8	58.7	52.1	1023
Area	Rural	35.5	12.1	8.0	5475
	Urban	64.6	42.7	33.5	2171
Age	15-19	46.4	23.0	16.4	1103
	20-24	46.5	24.7	17.8	1168
	15-24	46.5	23.9	17.1	2271
	25-29	42.6	19.8	14.5	1785
	30-34	47.2	22.7	17.3	1177
	35-39	42.2	20.0	14.1	1253
	40-44	39.6	15.0	11.5	711
	45-49	36.8	15.9	12.4	450
Education	None	36.7	14.0	9.4	5632
	Primary	51.9	21.2	15.1	841
	Secondary +	72.3	53.0	43.5	1152
	Non-standard curriculum	(*)	(*)	(*)	22
Wealth index quintiles	Poorest	27.0	11.5	8.1	1482
	Second	31.7	12.2	7.4	1556
	Middle	38.9	12.4	8.4	1517
	Fourth	51.8	20.6	14.5	1510
	Richest	68.3	46.3	36.9	1582
Religion of Household Head	Christian	47.0	27.9	22.0	1678
	Muslim	42.9	18.9	13.4	5950
	Other/Missing	(*)	(*)	(*)	18
Total		**43.8**	**20.8**	**15.2**	**7647**

* MICS Indicator 82; MDG Indicator 19b

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

Percentage of women aged 15-49 who correctly identify means of HIV transmission from mother to child, Sierra Leone, 2005

		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 *		
Region	East	69.9	65.4	67.1	65.0	59.7	3.6	1839
	North	56.9	53.9	50.4	54.1	47.4	2.2	2965
	South	52.6	49.9	45.1	51.1	43.7	5.8	1820
	West	89.3	88.6	86.5	82.7	81.3	7.7	1023
Area	Rural	55.4	52.4	49.8	52.7	46.7	3.1	5475
	Urban	83.4	80.5	78.6	77.7	72.5	6.5	2171
Age	15-19	64.3	60.4	57.5	59.1	52.4	6.0	1103
	20-24	66.5	63.8	60.6	63.3	57.0	4.7	1168
	25-29	63.0	59.7	58.1	59.9	53.9	4.3	1785
	30-34	66.7	64.0	61.5	62.6	56.5	3.4	1177
	35-39	62.7	60.2	57.7	59.6	55.0	2.9	1253
	40-44	57.1	54.3	52.6	54.4	49.7	3.2	711
	45-49	57.0	54.5	51.8	54.0	48.8	3.8	450
Education	None	56.7	53.8	51.6	53.8	48.3	3.9	5632
	Primary	69.7	66.1	61.9	67.2	58.5	6.4	841
	Secondary +	91.1	87.9	85.9	83.6	78.4	3.7	1152
	Non-standard curriculum	(*)	(*)	(*)	(*)	(*)	(*)	22
Wealth index quintiles	Poorest	43.0	41.2	39.1	41.5	37.6	3.5	1482
	Second	50.6	48.8	45.5	47.1	42.2	3.6	1556
	Middle	61.3	56.8	54.7	58.7	50.7	3.4	1517
	Fourth	73.5	69.8	67.2	69.1	62.0	4.1	1510
	Richest	87.0	84.1	82.2	81.7	76.6	5.8	1582
Religion of Household Head	Christian	64.0	62.3	59.8	60.2	56.2	4.3	1678
	Muslim	63.1	59.8	57.4	59.7	53.4	4.1	5950
	Other/Missing	(*)	(*)	(*)	(*)	(*)	(*)	18
Total		**63.3**	**60.3**	**58.0**	**59.8**	**54.0**	**4.1**	**7647**

* 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, Sierra Leone, 2005

		Percent of women who:						
		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*	Number of women who have heard of AIDS
Region	East	40.9	30.2	67.5	78.2	95.1	4.9	1350
	North	53.9	40.2	78.8	85.9	98.2	1.8	1751
	South	61.7	25.7	76.7	77.8	95.2	4.8	1063
	West	19.6	47.0	44.2	66.5	87.3	12.7	993
Area	Rural	52.4	30.6	79.5	84.8	96.9	3.1	3203
	Urban	34.1	44.6	51.1	68.1	91.0	9.0	1953
Age	15-19	47.0	40.7	62.5	76.2	94.3	5.7	775
	20-24	43.7	34.7	65.1	77.2	93.9	6.1	831
	25-29	44.8	35.9	72.5	79.6	95.2	4.8	1202
	30-34	44.5	35.7	69.5	80.9	94.8	5.2	825
	35-39	46.5	36.1	70.2	78.3	94.8	5.2	821
	40-44	46.3	31.3	69.2	77.6	93.9	6.1	429
	45-49	48.7	32.6	73.3	78.7	96.0	4.0	273
Education	None	49.7	32.9	76.4	84.1	96.5	3.5	3408
	Primary	46.4	35.4	67.3	76.9	95.9	4.1	639
	Secondary +	31.8	45.4	45.8	61.7	88.1	11.9	1092
Wealth index quintiles	Poorest	40.1	32.2	79.7	83.6	96.5	3.5	690
	Second	50.5	29.0	76.9	83.8	96.1	3.9	844
	Middle	52.3	30.4	79.9	84.4	96.6	3.4	982
	Fourth	53.3	35.0	72.6	79.7	95.3	4.7	1172
	Richest	34.4	46.0	48.4	68.1	91.2	8.8	1469
Religion of Household Head	Christian	31.8	38.4	57.4	70.1	90.9	9.1	1146
	Muslim	49.3	35.2	71.9	80.8	95.7	4.3	3998
Total		**45.5**	**35.9**	**68.7**	**78.5**	**94.7**	**5.3**	**5157**

* 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, Sierra Leone, 2005

		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
Region	East	24.9	2.6	1839	(60.2)	49
	North	8.2	3.9	2965	57.1	115
	South	11.6	5.5	1820	63.9	100
	West	45.0	15.6	1023	83.2	159
Area	Rural	10.1	2.8	5475	52.3	155
	Urban	37.7	12.3	2171	78.5	267
Age	15-19	16.0	3.4	1103	(69.5)	37
	20-24	21.3	8.0	1168	64.5	93
	25-29	17.2	5.5	1785	71.7	98
	30-34	21.4	7.6	1177	72.6	89
	35-39	16.9	4.9	1253	63.9	62
	40-44	14.2	3.3	711	(*)	24
	45-49	16.7	4.5	450	(*)	20
Education	None	11.3	3.0	5632	56.2	171
	Primary	19.6	5.9	841	68.9	50
	Secondary +	49.1	17.4	1152	80.0	201
Wealth index quintiles	Poorest	8.4	1.0	1482	(*)	15
	Second	10.0	2.6	1556	(51.4)	40
	Middle	11.3	3.7	1517	55.0	56
	Fourth	18.5	6.7	1510	69.4	102
	Richest	40.5	13.3	1582	78.2	210
Religion of Household Head	Christian	24.5	9.1	1678	73.1	153
	Muslim	16.1	4.5	5950	66.3	269
	Other/Missing	(*)	(*)	18	(*)	1
Total		17.9	5.5	7647	68.9	423

* MICS Indicator 87
** MICS Indicator 88

Table HA.7: HIV testing and counseling coverage during antenatal care

Percentage of women aged 15-49 years who gave birth in the two years preceding the survey who were offered HIV testing and counseling with their antenatal care, Sierra Leone, 2005

		Percent of women who:				
		Received antenatal care from a health professional for last pregnancy	Were provided information about HIV prevention during ANC visit *	Were tested for HIV at ANC visit	Received results of HIV test at ANC visit **	Number of women who gave birth in two years preceding the survey
Region	East	85.9	53.7	4.0	2.8	561
	North	73.4	37.1	6.4	3.7	976
	South	85.5	32.6	7.5	5.3	672
	West	92.8	53.4	21.8	20.7	166
Area	Rural	79.3	37.2	4.6	2.7	1894
	Urban	88.5	55.6	17.7	14.5	480
Age	15-19	85.8	35.6	6.6	5.4	228
	20-24	80.8	43.3	9.3	6.0	496
	25-29	80.0	42.0	6.9	4.9	755
	30-34	81.8	45.1	8.9	6.9	362
	35-49	80.6	36.5	5.0	3.1	533
Education	None	79.0	36.8	4.9	3.1	1919
	Primary	87.1	47.1	10.5	6.9	231
	Secondary +	94.0	70.3	24.8	21.3	218
	Non-standard curriculum	(*)	(*)	(*)	(*)	6
Wealth index quintiles	Poorest	71.4	28.2	1.4	.8	481
	Second	80.5	33.8	4.2	2.7	546
	Middle	79.9	38.8	5.9	3.6	529
	Fourth	85.5	51.2	9.9	6.4	505
	Richest	92.2	59.6	19.4	16.3	313
Religion of Household Head	Christian	83.2	43.3	12.6	9.5	428
	Muslim	80.7	40.4	6.1	4.2	1943
	Other/Missing	(*)	(*)	(*)	(*)	4
Total		81.1	40.9	7.2	5.1	2375

* MICS Indicator 90
** MICS Indicator 91

Table HA.8: Sexual behaviour that increases risk of HIV infection

**Percentage of young women aged 15-19 years who had sex before age 15,
Percentage of young women aged 20-24 who had sex before age 18, and
Percentage of young women aged 15-24 who had sex with a man 10 or more years old, Sierra Leone, 2005**

		Percentage of women aged 15-19 who had sex before age 15 *	Number of women aged 15-19 years	Percentage of women aged 20-24 who had sex before age 18	Number of women aged 20-24 years	Percentage who had sex in the 12 months preceding the survey with a man 10 or more years older **	Number of women who had sex in the 12 months preceding the survey
Region	East	16.4	258	68.6	287	40.0	395
	North	30.7	422	74.9	434	45.4	572
	South	29.7	275	74.0	272	40.3	390
	West	13.9	148	58.6	174	17.7	234
Area	Rural	29.7	709	75.6	797	46.6	1051
	Urban	16.3	394	60.2	371	23.2	540
Age	15-19	24.9	1103	.	0	33.1	632
	20-24	.	0	70.7	1168	42.4	960
Education	None	32.8	554	74.6	803	47.9	1009
	Primary	21.1	244	80.1	153	35.5	236
	Secondary +	13.9	297	48.3	207	14.3	342
	Non-standard curriculum	(*)	8	(*)	5	(*)	4
Wealth index quintiles	Poorest	29.6	176	77.2	213	48.7	260
	Second	33.6	180	78.2	225	45.1	286
	Middle	33.3	190	73.0	234	43.4	298
	Fourth	21.7	248	72.0	234	40.3	349
	Richest	14.6	309	55.7	262	22.6	397
Religion of Household Head	Christian	23.9	238	69.6	265	33.4	341
	Muslim	25.2	863	70.9	901	40.1	1246
	Other/Missing	(*)	2	(*)	2	(*)	4
Total		24.9	1103	70.7	1168	38.7	1591

* MICS Indicator 84
** MICS Indicator 92

Table HA.9: Condom use at last high-risk sex

Percentage of young women aged 15-24 who had high risk sex in the previous year and who used a condom at last high risk sex, Sierra Leone, 2005

		Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in the last 12 months	Number of women aged 15-24	Percent who had sex with non-marital, non-cohabiting partner *	Number of women aged 15-24 years who had sex in last 12 months	Percent who used a condom at last sex with a non-marital, non-cohabiting partner **	Number of women aged 15-24 years who had sex in last 12 months with a non-marital, non-cohabiting partner
Region	East	76.9	72.5	3.9	545	38.3	395	11.2	151
	North	77.1	66.8	3.0	856	35.5	572	20.8	203
	South	82.5	71.3	3.2	547	41.0	390	18.1	160
	West	78.1	72.5	4.8	322	72.0	234	30.6	168
Area	Rural	79.5	69.8	2.7	1506	31.2	1051	16.4	328
	Urban	76.7	70.6	5.1	765	65.7	540	24.2	355
Age	15-19	63.2	57.2	3.4	1103	55.2	632	20.4	348
	20-24	93.0	82.2	3.6	1168	34.9	960	20.5	335
Education	None	84.4	74.3	3.1	1357	27.2	1009	16.3	275
	Primary	67.4	59.5	3.5	397	49.4	236	13.7	117
	Secondary +	72.1	67.9	4.8	503	84.6	342	27.2	289
Wealth index quintiles	Poorest	77.6	66.8	1.9	389	31.8	260	13.5	83
	Second	81.2	70.8	2.3	405	27.5	286	17.7	79
	Middle	80.3	70.3	3.7	424	33.4	298	16.2	99
	Fourth	80.1	72.4	4.2	482	42.4	349	15.3	148
	Richest	74.6	69.6	4.7	571	69.0	397	27.7	274
Religion of Household Head	Christian	75.0	67.7	4.0	503	55.5	341	27.1	189
	Muslim	79.5	70.7	3.4	1764	39.6	1246	18.0	493
	Other/Missing	(*)	(*)	(*)	4	(*)	4	(*)	1
Total		**78.5**	**70.1**	**3.5**	**2271**	**42.9**	**1591**	**20.4**	**683**

* MICS Indicator 85

** MICS Indicator 83; MDG Indicator 19a

Table HA.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, Sierra Leone, 2005

			Living with neither parent				Living with mother only		Living with father only						
		Living with both parents	Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead	un-determined	Total	Not living with a biological parent *	One or both parents dead **	Number of children
Sex	Male	59.1	1.1	2.5	13.5	1.8	10.0	4.1	5.8	1.6	.5	100.0	19.0	11.2	10794
	Female	56.5	1.3	2.1	16.3	2.0	10.5	4.4	4.9	1.4	.6	100.0	21.7	11.3	10247
Region	East	61.0	1.3	2.5	11.0	2.3	7.5	6.9	4.7	2.1	.6	100.0	17.1	15.3	4688
	North	60.8	1.2	2.4	12.9	1.8	9.5	3.7	5.3	1.9	.5	100.0	18.3	11.0	8935
	South	56.1	1.1	2.5	17.3	2.0	11.9	2.9	4.9	.7	.5	100.0	22.9	9.2	4767
	West	45.0	1.2	1.5	23.9	1.5	14.5	3.7	7.2	.7	1.0	100.0	28.0	8.5	2651
Area	Rural	62.6	1.1	2.1	12.6	1.9	8.6	3.8	5.0	1.7	.4	100.0	17.8	10.8	15280
	Urban	45.1	1.5	2.8	21.0	1.8	14.5	5.2	6.2	1.0	1.1	100.0	27.0	12.3	5761
Age	0-4 years	71.6	.4	.5	7.6	.6	13.4	2.5	2.3	.7	.4	100.0	9.1	4.8	5905
	5-9 years	58.9	1.0	2.1	16.3	1.0	8.9	3.9	6.2	1.4	.3	100.0	20.4	9.5	7234
	10-14 years	49.0	1.6	3.6	19.0	2.1	9.6	5.5	7.0	1.9	.7	100.0	26.3	14.8	5542
	15-17 years	40.7	3.0	4.5	19.0	7.4	8.0	6.4	6.5	2.9	1.6	100.0	33.9	24.7	2360
Wealth index quintiles	Poorest	64.0	1.0	1.6	11.5	1.7	9.4	4.6	3.9	2.0	.4	100.0	15.7	10.9	4237
	Second	64.1	1.2	1.9	11.8	2.2	8.4	3.6	4.6	1.7	.5	100.0	17.2	10.7	4220
	Middle	61.2	1.0	2.2	12.7	1.8	8.6	4.2	6.1	1.9	.5	100.0	17.6	11.0	4282
	Fourth	53.8	1.4	3.3	15.7	1.9	10.9	5.0	6.3	1.1	.5	100.0	22.3	12.9	4286
	Richest	45.4	1.4	2.6	23.2	1.8	14.0	3.6	5.8	1.0	1.0	100.0	29.1	10.6	4017
Religion of Household Head	Christian	12.0	.3	.4	3.1	.5	2.3	1.0	.9	.4	.2	21.1	20.5	12.7	4435
	Muslim	45.8	.9	1.9	11.7	1.4	8.0	3.2	4.4	1.1	.4	78.8	20.2	10.9	16571
	Other/Missing	(.1)	.0	.0	.0	.0	.0	.0	.0	.0	.0	(.2)	(13.9)	(13.9)	36
Total		**57.8**	**1.2**	**2.3**	**14.9**	**1.9**	**10.2**	**4.2**	**5.3**	**1.5**	**.6**	**100.0**	**20.3**	**11.3**	**21041**

* MICS Indicator 78
** MICS Indicator 75

Table HA.11: Prevalence of orphaned and vulnerability among children

Percentage of children aged 0-17 years who are orphaned or vulnerable due to AIDS, Sierra Leone, 2005

		Chronically ill parent	Adult death in household	Chronically ill adult in household	Vulnerable children *	One or both parents dead **	Orphans and vulnerable children	Number of children aged 0-17 years
Sex	Male	2.4	4.7	13.7	18.3	11.2	26.7	10794
	Female	2.6	4.3	13.6	18.1	11.3	26.8	10247
Region	East	2.6	5.5	18.1	23.3	15.3	33.9	4688
	North	2.4	5.8	13.3	18.8	11.0	27.4	8935
	South	3.0	2.9	13.2	16.6	9.2	23.4	4767
	West	1.6	1.4	7.9	10.2	8.5	17.6	2651
Area	Rural	2.3	5.0	14.9	19.7	10.8	27.7	15280
	Urban	2.9	3.3	10.3	14.2	12.3	24.0	5761
Age	0-4 years	1.6	4.4	13.6	17.4	4.8	21.0	5905
	5-9 years	2.5	4.7	13.8	18.4	9.5	25.2	7234
	10-14 years	3.1	4.2	12.8	17.8	14.8	29.5	5542
	15-17 years	3.6	4.9	15.6	20.9	24.7	39.3	2360
Wealth index quintiles	Poorest	1.9	3.2	15.8	19.0	10.9	27.3	4237
	Second	2.2	5.5	13.6	18.7	10.7	27.0	4220
	Middle	3.2	4.8	13.9	19.0	11.0	26.5	4282
	Fourth	2.8	6.5	12.8	18.5	12.9	28.4	4286
	Richest	2.4	2.4	12.1	15.8	10.6	24.3	4017
Religion of Household Head	Christian	2.7	3.3	12.8	16.5	12.7	26.7	4435
	Muslim	2.5	4.8	13.9	18.7	10.9	26.7	16571
	Other/Missing	.0	.0	(8.4)	(8.4)	(13.9)	(22.3)	36
Total		**2.5**	**4.5**	**13.7**	**18.2**	**11.3**	**26.7**	**21041**

* MICS Indicator 76
** MICS Indicator 75

Table HA.12: School attendance of orphaned and vulnerable children

School attendance of children aged 10-14 years by orphanhood and vulnerability due to AIDS, Sierra Leone, 2005

		Percent of children whose mother and father have died	School attendance rate of children whose mother and father have died	% children of 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*	Percent of children who are orphaned or vulnerable due to AIDS	School attendance of children who are orphaned or vulnerable due to AIDS	Percent of children who are not orphans or vulnerable due to AIDS	School attendance of children who are not orphans or vulnerable due to AIDS	OVC vs. non-OVC school attendance ratio	Total number of childre n aged 10-14 years
Sex	Male	1.9	66.1	67.2	80.6	.82	30.5	73.5	69.5	80.7	.91	2742
	Female	2.2	61.3	64.2	72.4	.85	28.5	68.3	71.5	72.5	.94	2800
Region	East	2.4	76.0	66.7	78.8	.96	39.5	71.3	60.5	77.1	.93	1021
	North	2.0	60.1	69.9	70.1	.86	29.1	65.9	70.9	69.7	.95	2512
	South	2.5	53.9	60.5	74.9	.72	29.2	70.8	70.8	75.1	.94	1016
	West	1.4	71.4	59.1	94.9	.75	20.3	89.1	79.7	92.6	.96	992
Area	Rural	2.3	58.3	69.8	69.7	.84	30.9	62.7	69.1	68.6	.91	3601
	Urban	1.6	77.5	57.9	91.9	.84	26.7	88.8	73.3	90.4	.98	1940
Wealth index quintiles	Poorest	1.8	38.9	72.1	58.5	.66	28.5	49.8	71.5	56.8	.88	986
	Second	2.5	56.5	70.8	66.4	.85	31.3	60.0	68.7	65.0	.92	926
	Middle	2.2	68.0	69.3	76.1	.89	28.1	69.3	71.9	75.3	.92	1000
	Fourth	2.5	70.2	63.5	83.2	.84	32.4	78.2	67.6	83.7	.93	1222
	Richest	1.6	77.4	57.0	94.6	.82	27.3	88.6	72.7	92.2	.96	1408
Religion of Household Head	Christian	2.3	62.1	65.1	77.2	.80	28.6	75.5	71.4	78.5	.96	1253
	Muslim	2.0	64.0	65.8	76.3	.84	29.7	69.9	70.3	75.9	.92	4274
	Other/Missing	.0	.	(64.2)	(88.9)	.	(28.6)	(25.1)	(71.4)	(90.1)	(.28)	14
Total		**2.1**	**63.5**	**65.6**	**76.5**	**.83**	**29.5**	**71.0**	**70.5**	**76.5**	**.93**	**5542**

* MICS Indicator 77; MDG Indicator 20

Table HA.13: Support for children orphaned and vulnerable due to AIDS

Percentage of children aged 0-17 years orphaned or made vulnerable due to AIDS whose households receive free basic external support in caring for child, Sierra Leone, 2005

		Percent of orphans and vulnerable children whose households received:							Number of children orphaned or vulnerable aged 0-17 years
		Medical support (in last 12 months)	Emotional and psychosocial support (in last 3 months)	Social/material support (in last 3 months)	Educational support (in last 12 months)	Any support *	All types of support	No support at all	
Sex	Male	1.4	.1	.0	.1	1.4	.0	98.6	2879
	Female	1.1	.2	.2	.3	1.2	.2	98.8	2744
Region	East	2.2	.1	.1	.3	2.3	.1	97.7	1588
	North	.7	.3	.2	.2	.7	.2	99.3	2449
	South	1.6	.0	.0	.2	1.8	.0	98.2	1118
	West	.0	.0	.0	.0	.0	.0	100.0	468
Area	Rural	1.2	.2	.1	.2	1.3	.1	98.7	4239
	Urban	1.2	.0	.0	.1	1.3	.0	98.7	1384
Age	0-4 years	2.0	.1	.0	.0	2.1	.0	97.9	1241
	5-9 years	1.3	.3	.2	.3	1.4	.2	98.6	1822
	10-14 years	1.0	.1	.1	.3	1.1	.1	98.9	1632
	15-17 years	.5	.1	.0	.0	.5	.0	99.5	928
Wealth index quintiles	Poorest	1.8	.2	.1	.3	2.0	.1	98.0	1158
	Second	2.8	.4	.2	.2	2.9	.2	97.1	1140
	Middle	.6	.2	.2	.2	.6	.2	99.4	1133
	Fourth	.5	.1	.1	.1	.5	.1	99.5	1217
	Richest	.4	.0	.0	.2	.5	.0	99.5	974
Total		**1.2**	**.2**	**.1**	**.2**	**1.3**	**.1**	**98.7**	**5622**

* MICS Indicator 81

Table HA.14: Malnutrition among orphans and vulnerable children

Percent of children aged 0-4 years who are moderately or severely underweight, stunted or wasted by orphanhood and vulnerability due to AIDS, Sierra Leone, 2005

	Percentage of children aged 0-4 years who are moderately or severely:			Number of children aged 0-4 years
	Underweight	Stunted	Wasted	
Orphaned	31.2	42.5	10.3	190
Vulnerable	28.9	39.6	9.6	644
Orphaned or vulnerable	29.6	39.9	9.9	793
Not orphaned or vulnerable	30.7	40.1	8.5	3342
Total	30.4	40.1	8.8	4135
Ratio OVC to non-OVC*	**.96**	**.99**	**1.17**	**.**

* MICS Indicator 79

Table HA.15: Sexual Behaviour among young women by orphanhood and vulnerability status due to AIDS

Percentage of young women aged 15-17 years who had sex before age 15 by vulnerability status and survival status of parents, Sierra Leone, 2005

	Percentage of young women aged 15-17 years who had sex before age 15	Number of young women aged 15-17 years
Orphaned	35.9	159
Vulnerable	35.4	118
Orphaned or vulnerable	35.0	241
Not orphaned or vulnerable	23.2	339
Total	27.6	613
Ratio OVC to non-OVC*	**1.51**	**.**

* MICS Indicator 80