Lao PDR

Lao Social Indicator Survey (LSIS)

2011 - 12

(MULTIPLE INDICATOR CLUSTER SURVEY / DEMOGRAPHIC AND HEALTH SURVEY)

December 2012

LAO STATISTICS BUREAU

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The Lao Social Indicator Survey LSIS (MICS/DHS) was carried out in 2011-12 by the Ministry of Health (MoH) and Lao Statistics Bureau (LSB) in collaboration with line ministries. Financial and technical support was provided by the United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), Luxembourg Government (LuxGov), United States Agency for International Development (USAID), The Australian Agency for International Development (AusAID), Swiss Development Cooperation (SDC), United Nations Development Programme (UNDP), World Health Organization (WHO), Japan International Cooperation Agency (JICA), Joint United Nations Programme on HIV/AIDS (UNAIDS), and World Food Programme (WFP).

LSIS is a household-based survey that applied the technical frameworks of the Multiple Indicator Cluster Survey (MICS) and Demographic and Health Survey (DHS). It is the first of its kind in Lao PDR. The LSIS was conducted to collect baseline data for the 7th National Social Economic Development Plan (NSEDP) and continued monitoring of progress towards the MDGs. LSIS provides up-to-date information on the social situation of children, women and men covering health, nutrition, education, water and sanitation, marriage and sexual activity, fertility and mortality, contraception, HIV/AIDS, child protection, and use of mass media and information technology.

Ministry of Health and Lao Statistics Bureau 2012
Lao Social Indicator Survey 2011-12
Vientiane, Lao PDR

Lao PDR
Lao Social Indicator Survey
2011-12

(Multiple Indicator Cluster Survey/Demographic and Health Survey)

Implementing Agencies
MoH, LSB/MPI and MoES

Partner Agencies
UNICEF, UNFPA, LuxGov, USAID, AusAID, SDC, UNDP, WHO, JICA, UNAIDS, WFP

Technical Assistance

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Summary Table of Findings

Lao Social Indicator Survey (LSIS) and Millennium Development Goals (MDG) Indicators, Lao PDR 2011-12

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
CHILD MORTALITY					
Child mortality	1.1	*4.1*	Under-five mortality rate	79	per 1,000
	1.2	*4.2*	Infant mortality rate	68	per 1,000
	1.3		Neonatal mortality rate	32	per 1,000
	1.4		Post-neonatal mortality rate	36	per 1,000
	1.5		Child mortality rate	11	per 1,000
NUTRITION					
Nutritional status			Underweight prevalence		
	2.1a	*1.8*	Moderate and Severe (- 2 SD)	26.6	per cent
	2.1b		Severe (- 3 SD)	7.2	per cent
			Stunting prevalence		
	2.2a		Moderate and Severe (- 2 SD)	44.2	per cent
	2.2b		Severe (- 3 SD)	18.8	per cent
			Wasting prevalence		
	2.3a		Moderate and Severe (- 2 SD)	5.9	per cent
	2.3b		Severe (- 3 SD)	1.4	per cent
Breastfeeding and infant feeding	2.4		Children ever breastfed	95.6	per cent
	2.5		Early initiation of breastfeeding	39.1	per cent
	2.6		Exclusive breastfeeding under 6 months	40.4	per cent
	2.7		Continued breastfeeding at 1 year	73.0	per cent
	2.8		Continued breastfeeding at 2 years	40.0	per cent
	2.9		Predominant breastfeeding under 6 months	68.3	per cent
	2.10		Duration of breastfeeding	19.5	months
	2.11		Bottle feeding	17.5	per cent
	2.12		Introduction of solid, semi-solid or soft foods	52.3	per cent
	2.13		Minimum meal frequency	43.0	per cent
	2.14		Age-appropriate breastfeeding	36.7	per cent
	2.15		Milk feeding frequency for non-breastfed children	51.2	per cent
Vitamin A	2.17		Vitamin A supplementation (children under age 5)	59.1	per cent
Low birth weight	2.18		Low-birth weight infants	14.8	per cent
	2.19		Infants weighed at birth	42.5	per cent
CHILD HEALTH					
Vaccinations	3.1		Tuberculosis immunization coverage	77.1	per cent
	3.2		Polio immunization coverage	49.1	per cent
	3.3		Immunization coverage for diphtheria, pertussis and tetanus (DPT)	51.5	per cent
	3.4	*4.3*	Measles immunization coverage	55.3	per cent
	3.5		Hepatitis B immunization coverage	51.5	per cent
Tetanus toxoid	3.7		Neonatal tetanus protection	65.8	per cent
Care of illness	3.8		Oral rehydration therapy with continued feeding	57.4	per cent
	3.9		Care seeking for suspected pneumonia	54.4	per cent
	3.10		Antibiotic treatment of suspected pneumonia	57.4	per cent
Solid fuel use	3.11		Solid fuels	96.5	per cent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator		Value
Malaria	3.12		Household availability of insecticide-treated nets (ITNs)	50.2	per cent
	3.14		Children under age 5 sleeping under any type of mosquito net	87.4	per cent
	3.15	*6.7*	Children under age 5 sleeping under insecticide-treated nets (ITNs)	43.2	per cent
	3.16		Malaria diagnostics usage	9.1	per cent
	3.17		Anti-malarial treatment of children under age 5 the same or next day	1.2	per cent
	3.18	*6.8*	Anti-malarial treatment of children under age 5	1.9	per cent
	3.19		Pregnant women sleeping under insecticide-treated nets (ITNs)	43.2	per cent
WATER AND SANITATION					
Water and sanitation	4.1	*7.8*	Use of improved drinking water sources	69.9	per cent
	4.2		Water treatment	53.2	per cent
	4.3	*7.9*	Use of improved sanitation	56.9	per cent
	4.4		Safe disposal of child's faeces	18.6	per cent
REPRODUCTIVE HEALTH					
Contraception and unmet need	5.1	*5.4*	Adolescent birth rate	94	per 1,000
	5.2		Early childbearing	18.2	per cent
	5.3	*5.3*	Contraceptive prevalence rate	49.8	per cent
	5.4	*5.6*	Unmet need	19.9	per cent
Maternal and newborn health			Antenatal care coverage		
	5.5a	*5.5*	At least once by skilled personnel	54.2	per cent
	5.5b		At least four times by any provider	36.9	per cent
	5.6		Content of antenatal care	18.3	per cent
	5.7	*5.2*	Skilled attendant at delivery	41.5	per cent
	5.8		Institutional deliveries	37.5	per cent
	5.9		Caesarean section	3.7	per cent
Post-natal health checks	5.10		Post-partum stay in health facility	64.9	per cent
	5.11		Post-natal health check for the newborn	40.6	per cent
	5.12		Post-natal health check for the mother	39.5	per cent
Maternal mortality	5.13	*5.1*	Maternal mortality ratio	**357**	per 100,000
CHILD DEVELOPMENT					
Child development	6.1		Support for learning	57.4	per cent
	6.2		Father's support for learning	51.5	per cent
	6.3		Learning materials: children’s books	5.0	per cent
	6.4		Learning materials: playthings	40.9	per cent
	6.5		Inadequate care	14.0	per cent
	6.6		Early child development index	81.3	per cent
	6.7		Attendance to early childhood education	23.0	per cent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
EDUCATION					
Literacy and education			Literacy rate among young people		
	7.1	*2.3*	women age 15-24 years	68.7	per cent
			men age 15-24 years	77.4	per cent
	7.2		School readiness	23.7	per cent
	7.3		Net intake rate in primary education	63.9	per cent
	7.4	*2.1*	Primary school net attendance ratio (adjusted)	84.9	per cent
	7.5		Secondary school net attendance ratio (adjusted)	44.6	per cent
	7.6	*2.2*	Children reaching last grade of primary	65.3	per cent
	7.7		Primary completion rate	94.2	per cent
	7.8		Transition rate to secondary school	90.9	per cent
	7.9		Gender parity index (primary school)	0.99	ratio
	7.10		Gender parity index (secondary school)	1.00	ratio
CHILD PROTECTION					
Birth registration	8.1		Birth registration	74.8	per cent
Child discipline	8.5		Violent discipline	75.7	per cent
Early marriage			Marriage before age 15		
	8.6		women age 15-49 years	9.3	per cent
			men age 15-49 years	3.0	per cent
			Marriage before age 18		
	8.7		women age 20-49 years	37.0	per cent
			men age 20-49 years	14.6	per cent
	8.8		Young women age 15-19 years currently married or in union	24.7	per cent
			Young men age 15-19 years currently married or in union	9.0	per cent
			Spousal age difference		
	8.10a		women age 15-19 years	11.4	per cent
	8.10b		women age 20-24 years	9.0	per cent
Domestic violence			Attitudes towards domestic violence		
	8.14		women age 15-49 years	58.2	per cent
			men age 15-49 years	49.1	per cent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANED AND VULNERABLE CHILDREN					
HIV/AIDS knowledge and attitudes	9.1		Comprehensive knowledge about HIV prevention		
			women age 15-49 years	22.7	per cent
			men age 15-49 years	29.9	per cent
	9.2	*6.3*	Comprehensive knowledge about HIV prevention among young people		
			women age 15-24 years	24.0	per cent
			men age 15-24 years	27.6	per cent
	9.3		Knowledge of mother-to-child transmission of HIV		
			women age 15-49 years	55.4	per cent
			men age 15-49 years	57.0	per cent
	9.4		Accepting attitudes towards people living with HIV		
			women age 15-49 years	17.0	per cent
			men age 15-49 years	14.2	per cent
	9.5		Women who know where to be tested for HIV	37.3	per cent
			Men who know where to be tested for HIV	46.5	per cent
	9.6		Women who have been tested for HIV and know the results	2.3	per cent
			Men who have been tested for HIV and know the results	2.2	per cent
	9.7		Sexually active young women who have been tested for HIV and know the results	3.8	per cent
			Sexually active young men who have been tested for HIV and know the results	2.6	per cent
	9.8		HIV counselling during antenatal care	12.1	per cent
	9.9		HIV testing during antenatal care	6.2	per cent
Sexual behaviour	9.10		Young women who have never had sex	96.5	per cent
			Young men who have never had sex	74.6	per cent
			Sex before age 15 among young people		
	9.11		women age 15-24 years	6.4	per cent
			men age 15-24 years	2.7	per cent
	9.12		Age –mixing among sexual partner		
			Women age 15-24 years	10.9	per cent
Orphaned children	9.17		Children's living arrangements	6.3	per cent
	9.18		Prevalence of children with one or both parents dead	5.3	per cent
	9.19	*6.4*	School attendance of orphans	66.8	per cent
	9.20	*6.4*	School attendance of non-orphans	83.8	per cent

ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY					
Access to mass media	MT.1		Exposure to mass media		
			women age 15-49 years	6.8	per cent
			men age 15-49 years	9.9	per cent
Use of information/ communication technology	MT.2		Use of computers		
			women age 15-24 years	13.9	per cent
			men age 15-24 years	15.9	per cent
	MT.3		Use of internet		
			women age 15-24 years	7.5	per cent
			men age 15-24 years	9.4	per cent

Table of Contents

List of Tables

List of Figures

List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ASFR	Age-specific Fertility Rate
AusAID	The Australian Agency for International Development
BCG	Bacille-Calmette-Guerin (Tuberculosis)
CBR	Crude Birth Rate
CSPro	Census and Survey Processing System
DHS	Demographic and Health Survey
DPIC	Department of Planning and International Cooperation
DPT	Diphteria Pertussis Tetanus
EPI	Expanded Programme on Immunization
GFR	General Fertility Rate
GPI	Gender Parity Index
HIV	Human Immunodeficiency Virus
HiB	Haemophilus Influenzae Type B
HepB	Hepatitis B
IDD	Iodine Deficiency Disorders
ITN	Insecticide-Treated Net
IUD	Intrauterine Device
IYCF	Infant and Young Child Feeding
JICA	Japan International Cooperation Agency
Lao PDR	Lao People's Democratic Republic
LRHS	Lao Reproductive Health Survey
LSB	Lao Statistics Bureau
LuxGov	Luxembourg Government
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MoH	Ministry of Health
MPI	Ministry of Planning and Investment
MoES	Ministry of Education and Sports
NAR	Net Attendance Rate
NCHS	U.S. National Centers for Health Statistics
NIOPH	National Institute of Public Health
NSEDP	National Socio-Economic Development Plan
ORT	Oral Rehydration Therapy
PASW	Predictive Analytics SoftWare
PNC	Post-natal Care
SDC	Swiss Development Cooperation
SPSS	Statistical Package for Social Sciences
TFR	Total Fertility Rate
UHS	University of Health Science
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
USAID	United States Agency for International Development
WFFC	World Fit For Children
WFP	World Food Programme
WHO	World Health Organization

Acknowledgements

The Lao Social Indicator Survey 2011-12 (LSIS 2011-12) is a nation-wide household-based survey of social development indicators. It combines the Multiple Indicator Cluster Survey (MICS) and Lao Reproductive Health Survey (LRHS) where the LRHS applied technical platform of Demographic and Health Survey (DHS). The LSIS is based on MICS4 platform and add-on DHS modules, for example, live birth history and the maternal mortality module.

The LSIS 2011-12 was undertaken by the Ministry of Health and Ministry of Planning and Investment (Lao Statistics Bureau) in collaboration with other line ministries. UNICEF and UNFPA were the primary agencies giving financial and technical assistance to support the survey. In addition, USAID, AusAID, LuxGov, WHO, UNDP, SDC, JICA and WFP provided financial and technical input to the implementation of the LSIS.

The main purposes of LSIS are to allow continued monitoring of progress towards the Millennium Development Goals (MDGs) and to serve as a baseline for the 7th National Socio-Economic Development Plan (7th NSEDP). The survey results can also be used by the Government and development partners to prepare policies, strategies and planning to improve the social environment of people in Lao PDR, especially women and men of reproductive age (15 to 49 years) and children age under five. In addition, the survey provides key sources and references for researchers and academics to conduct further analysis and research studies in specific areas using LSIS data.

We would like to extend our sincere thanks to all organizations and individuals who have contributed to making this survey a success, especially all concerned departments in the Ministry of Health and the Lao Statistics Bureau, Ministry of Planning and Investment, for leading the entire survey, and the Ministry of Education and Sports for actively participating in the planning and implementing the survey. We would also like to express our special thanks to the LSIS Steering Committee for their leadership and guidance of the survey, the Technical Task Force for advising and supporting the survey, and the Secretariat Group for organizing and dealing with day-to-day work.

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Executive Summary

The Lao Social Indicator Survey (LSIS) is a nationally representative sample survey. Its field data collection was conducted from October 2011 to February 2012. Among the 18,843 successfully interviewed nationally in the survey, 97,421 household members were listed. Of these, 47,820 were male and 49,601 were female. The average household size found in the survey was 5.2.

Water and Sanitation

- 70 per cent of the population is using an improved source of drinking water - 88 per cent in urban areas and 64 per cent in rural areas
- Use of an improved source of drinking water is more common in the Northern region (79 per cent) than in the Central and Southern regions, where only two-thirds of the population get their drinking water from an improved source
- Across the country, the proportion of the population using an improved source for drinking water varies from a low of 48 per cent in Savannakhet to a high of 98 per cent in Luangnamtha
- For 31 per cent of households, it takes less than 30 minutes to collect water and return home, while 6 per cent of households spend 30 minutes or more
- In 71 per cent of households, an adult female is usually the person who collects the drinking water when the source is not on the premises, while children age under 15 are water collectors in 12 per cent of the households without a source on the premises
- 59 per cent of the population is living in households using an improved type of sanitation facility, while 38 per cent of the population has no sanitation facilities at all
- 9 in 10 people in urban areas are using an improved type of sanitation facility, while only 5 in 10 rural people are doing so
- Under 2 year-old children's stools are disposed of safely in only 19 per cent of cases. Overall, the most common way to address stool disposal is to leave them in the open (43 per cent), followed by 19 per cent being buried

Marriage and Sexual Activity

- 22 per cent of women age 15-49 have never married, 71 per cent are currently married, 2 per cent are living together with a man, and 5 per cent are divorced, separated, or widowed
- Among women age 25-49, 37 per cent married by the age of 18, and 58 per cent married by the age of 20
- The median age at first marriage among women age 25-49 is 19.2 years and has been relatively unchanged over the past two decades
- Among men age 25-49, only 15 per cent were married by the age of 18 and 30 per cent by the age of 20. The median age at marriage for men age 25-49 is 22.5 years
- One in four young women and nearly 1 in 10 men age 15-19 years is currently married
- The median age at first sexual intercourse among men age 25-49 is 19.6 years; about a year older than women
- Three in 10 men had sexual intercourse before age 18 compared with 4 in 10 women
- 63 per cent of all women age 15-49 were sexually active in the four weeks before the survey, compared to 64 per cent of men in the same age group

Fertility

- The total fertility rate (TFR) for Lao PDR for the three-year period preceding the survey (2009-2011) is 3.2 children per woman, and 3.6 and 2.2 in rural and urban areas, respectively
- With regard to TFR among women age 15-49, women living in the South have a higher fertility rate (3.9 births) than those living in the Northern and the Central regions (3.2 and 2.9 births, respectively)
- Adolescent fertility for every 1,000 girls age 15-19 is 94; a big difference between rural and urban areas (114 and 44 births per 1,000 adolescents, respectively)
- Based on the trends of the ASFRs and the TFR from 15 years before the survey to the three years prior to the survey (2009-11), there is evidence that the TFR has declined. For example, the TFR has declined from 5.0 births per woman around 1997-99 to 4.7 births in 2000-02, to 4.1 and 3.6 in 2003-05 and 2006-08, and continued to decline to 3.2 in the three-year period prior to the survey
- The median birth interval is 34 months, the median birth interval of urban women is longer than that of rural women (46.3 and 32.2 months, respectively)
- 4 per cent of women age 25-49 have given birth by the age of 15, 19 per cent have given birth by the age of 18, and 39 per cent have become mothers by the age of 20
- The median age at first birth for women age 25-49 is 21.1 years

Reproductive Health

- Over 90 per cent of women and men have heard of a modern contraception method. Both women and men are more familiar with modern methods of contraception (94 per cent and 95 per cent, respectively) than with traditional methods (68 and 69 per cent, respectively)
- 50 per cent of currently married women are using a method of contraception. The most popular method is the pill, used by 2 in 10 married women in Lao PDR. Injectables are the next most popular method, used by 14 per cent of currently married women
- 42 per cent of married women are using a modern method of family planning
- 35 per cent of users obtained their contraceptive method from a government hospital, and 30 per cent from a government health centre
- Overall, 1 in 5 married women have an unmet need for contraception, with 12 per cent of married women having an unmet need for limiting and 8 per cent having an unmet need for birth spacing
- Unmet need is highest in the Southern region (24 per cent) and lower in the Central (21 per cent) and Northern (17 per cent) regions
- 54 per cent of women age 15-49 years who gave birth in the two years preceding the survey received antenatal care from a health professional
- Nearly half of women (48 per cent) did not take any iron pills during their pregnancy
- 42 per cent of women who gave birth in the previous two years were assisted at the time of delivery by a health professional
- Fewer deliveries in the Northern region were assisted by a health professional (31 per cent) than in the Southern (33 per cent) and Central regions (53 per cent)
- 38 per cent of births in Lao PDR are delivered in a health facility, the majority in public sector facilities
- Only 41 per cent of newborns in the last two years received either a health check or post-natal care (PNC) visit within two days of delivery
- Only 40 per cent of mothers received either a health check after delivery or a PNC visit within two days of delivery

Adult and Maternal Mortality

- Age-specific mortality rates for women and men age 15-49 for the seven-year period preceding the survey (2005-2011) indicate that the level of adult mortality was slightly higher among men (3.1 deaths per 1,000 population) than among women (2.3 deaths per 1,000 population)
- The risk of dying between the ages of 15 and 50 for women and men in the seven years preceding the survey (2005-2011) was 8.4 per cent of women and 11.7 per cent of men, respectively. Therefore, more men than women are likely to die between the ages of 15 and age 50
- The Maternal Mortality Ratio (MMR) was 357 deaths per 100,000 live births during the seven-year period preceding the survey. The 95 per cent confidence interval of the MMR is between 269 and 446

Child Health

- By the age of 12 months, the proportions of children age 12-23 months receiving vaccinations were: BCG - 77 per cent; Polio 3 – 49 per cent; DPT-HepB – HiB 3 – 52 per cent; Measles – 55 per cent; all vaccinations (BCG, DPT, HepB, HiB 1 – 3, Polio 1 – 3, and Measles) – 34 per cent.
- 66 per cent of women with a live birth in the previous two years were protected against tetanus
- 74 per cent of women residing in urban areas were protected against tetanus, while only 63 per cent of women residing in rural areas were protected
- Nearly half (48 per cent) of children with diarrhoea received ORS or a recommended home fluid during an episode of diarrhoea
- The vast majority of households (97 per cent) use solid fuels for cooking. Use of solid fuels is 97 per cent or higher in every province of the country, with the exception of Vientiane Capital, where 19 per cent of households use gas or electricity for cooking
- 81 per cent of household members live where cooking is done inside the house
- 50 per cent of households have at least one insecticide treated net (ITN) and 94 per cent of households have at least one mosquito net
- 87 per cent of children under the age of five slept under a mosquito net on the night prior to the survey and 43 per cent slept under an ITN
- 91 per cent of pregnant women slept under a mosquito net and 43 per cent of pregnant women slept under an ITN on the night prior to the survey

Nutrition

- One in four children under the age of five years is moderately underweight (27 per cent) and 7 per cent are severely underweight
- Nearly half of children (44 per cent) are moderately stunted (too short for their age) and 19 per cent are severely stunted
- 6 per cent of children are moderately wasted (too thin for their height), and 1 per cent are severely wasted
- 39 per cent of babies are breastfed for the first time within one hour of birth, while 71 per cent start breastfeeding within one day of birth
- 40 per cent of children age less than six months are exclusively breastfed. While this level is considerably lower than recommended, it indicates a wider practice of exclusive breastfeeding than in the recent past (The percentage of infants being exclusively breastfed is twice as high in the Northern (61 per cent) than in the Central and Southern regions. Prevalence of exclusive breastfeeding does not vary greatly by urban / rural residence or by mother's education or wealth quintile. The median duration of exclusive breastfeeding is only 2.7 months
- Iodized salt was being used in 80 per cent of households
- 59 per cent of children were reported to have received a vitamin A supplement. Vitamin A supplementation coverage is lower in the Central region (51 per cent) than in the Northern and Southern regions (66/67 per cent), while urban and rural respondents reported equal coverage
- Overall, 43 per cent of births were weighed at birth and 15 per cent of infants were estimated to weigh less than 2,500 grams at birth
- 20 per cent of babies in the South were low birth weight, compared with 13 and 14 per cent in the Northern and Central regions

Child Mortality

- For the two-year period preceding the survey (2010-2011), infant mortality was 68 deaths per 1,000 live births, and under-five mortality was 79 deaths per 1,000 live births
- The under 5 mortality rate in the Central region is 73 deaths per 1,000 live births, and over 100 in the Northern and Southern regions
- The under-5 mortality rates in rural areas are those in urban areas. For example, the under-5 mortality rate for the five years preceding the survey was 100 deaths per 1,000 live births in rural areas compared with 45 in urban areas

Child Development

- 23 per cent of children age 36-59 months are attending an organised early childhood education programme
- Only 5 per cent of children under the age of five years live in households where there are at least three children's books
- 41 per cent of children under five years had two or more play things in their homes
- 12 per cent of children under five years of age were left in the care of other children who are under 10 years of age
- 6 per cent of children under five years of age were left completely alone (under the care of no one) during the week preceding the interview

Literacy and Education

- 69 per cent of young women (age 15 – 24) and 77 per cent of young men are literate in Lao PDR
- Among both women and men (age 15 – 24), the literacy is highest in the Central region at 76 per cent among young women and 79 per cent among young men, and lowest in the South at 55 per cent among women and 70 per cent among men
- 24 per cent of children who are currently attending the first grade of primary school attended pre-school the previous year
- Of all children of the primary school entry age of 6 years, 64 per cent are attending the first grade of primary school
- The majority of children of primary school age are attending school (85 per cent)
- Only about half (45 per cent) of children of secondary school age are attending secondary school. Of the remaining half, some are attending primary school, while others are not attending school at all
- 30 per cent of children of secondary school age in the North and South are attending primary school, compared with 20 per cent of children in the Central region
- The survival rate of primary education in Lao PDR is 65 per cent, if it is assumed that repeaters do not progress to the next grade
- The primary school completion rate for all of Lao PDR is 94 per cent. The completion rate among boys (101 per cent) is higher than that of girls (88 per cent)
- The transition rate to secondary school is 91 per cent
- The Gender Parity Index (GPI) for both primary and secondary school is close to 1.00, indicating no difference in the attendance of girls and boys at primary and secondary schools

Child Protection

- The births of 75 per cent of all children under the age of five are registered, and 33 per cent have a birth certificate
- Nearly 9 in 10 children in urban areas (88 per cent) are registered, while only 7 in 10 rural children are officially registered
- 76 per cent of all Lao children age 2-14 are subject to at least one form of psychological aggression or physical punishment from an adult in their household
- Four in ten Lao adults believe physical punishment is necessary to properly raise a child
- 84 per cent of children age 0-17 years live with both their parents; 6 per cent of children live with neither parent

HIV/AIDS and Sexual Behaviour

- In Lao PDR, 84 per cent of women and 92 per cent of men have heard of AIDS
- 44 per cent of women with no education or in the poorest households have never heard of AIDS
- 67 per cent of women and 82 per cent of men know both of the main ways of preventing HIV transmission
- Comprehensive knowledge of AIDS is not common. Only 2 in 10 women and 3 in 10 men have comprehensive knowledge of AIDS
- 8 in 10 adults know that HIV can be transmitted from a mother to her child (77 per cent of women and 82 per cent of men)
- Only 4 in 10 women said they would be willing to care for a family member with AIDS in their household
- 37 per cent of women and 47 per cent of men know where they can go to be tested for HIV
- Nationally, 3 per cent of both women and men were tested for HIV within the 12 months prior to the survey
- Overall, 46 per cent of young women and 42 per cent of young men have had sexual intercourse in the 12 months prior to the survey
- Among the never-married, 3 per cent of young women and 22 per cent of young men report having had intercourse in the previous 12 months
- 54 per cent of women received antenatal care from a health care professional for their last pregnancy. Only 12 per cent received HIV information during antenatal care, and only 6 per cent were offered an HIV test during antenatal care, tested, and told the result
- 6 per cent of women and 3 per cent of men age 15-24 have had sex before the age of 15
- 7 per cent of women who have had sexual intercourse reported having either an STI, bad-smelling or abnormal genital discharge, or a genital sore or ulcer in the last 12 months. 2 per cent of men reported having either an STI, abnormal discharge, genital sore, or genital ulcer in the last 12 months
- 54 per cent of women and 45 per cent of men sought advice or treatment from a clinic, hospital, private doctor or other health professional

Access to Mass Media and Use of ICT

- Only 13 per cent of women age 15-49 read a newspaper at least once a week. One in three women listens to the radio at least once a week, while as many as three in four women watch television at least once a week
- 18 per cent of men age 15-49 read a newspaper or magazine and 42 per cent listen to the radio at least once a week
- 14 per cent of women age 15-24 have used a computer within the last year and 11 per cent have used a computer at least once a week during the last month
- 9 per cent of women age 15-24 have ever used the Internet, while 8 per cent used the Internet within the last year. Only 6 per cent of young women used the Internet once a week or more during the last month
- 16 per cent of 15-24 year old men used a computer and 9 per cent used the internet during the last year

I. Introduction

Background

Prior to the Lao Social Indicator Survey (LSIS), conducted in 2011 and 2012, there were two series of national surveys that collected data surrounding key social development indicators in Lao PDR:

- The Multiple Indicator Cluster Surveys (MICS) (1996, 2000, 2006), focusing on child-related indicators such as education, health, nutrition, water and sanitation, child development, child protection and HIV/AIDS.

- The Lao Reproductive Health Surveys (LRHS) (1995, 2000, 2005) focusing on reproductive health, contraception and sexual behavior.

The MICS and LRHS were conducted at similar times, and produced different national figures for social indicators. In order to maximize government resources and achieve a set of single national figures for social indicators both surveys were combined to create the LSIS. LSIS is a household-based survey that applies the technical frameworks of the MICS and DHS. It aims to produce statistically sound and internationally comparable estimates of a range of indicators. Therefore, LSIS includes water and sanitation, marriage and sexual, fertility, reproductive health, maternal mortality, child health, nutrition, education, child mortality, child development, child protection, HIV/AIDS, and mass media.

According to the Vientiane declaration on Aid effectiveness, UNICEF and UNFPA, who are the main supporters of the surveys mentioned above, agreed to jointly provide the Lao Government with budget and technical support in order to conduct LSIS as a way to maximize resources. At the later stages, as the importance of LSIS in generating social indicators, more donors and development partners also contributed to the survey. At the later stages, support for the LSIS was provided by other development partners and donors.

In April 2010, the Prime Minister Office issued the Letter of Approval to Ministry of Health (MoH) No. 730 to conduct LSIS. The MoH then released Decree No. 720, dated 18 May 2010, to set up a Steering Committee, Technical Task Force and Secretariat Group to ensure smooth planning, coordination and implementation of the Survey. Members of the Committee and Task Force came from various offices of MoH, the Lao Statistics Bureau (LSB) and the Ministry of Education and Sports (MoES). In early 2012, during the data analysis and report writing process, a Review Team was set up that was composed of government officials from line ministries and development partners. A Report Writing Team was also formed to ensure comprehensive data analysis and a final survey report.

This report is based on the LSIS results for Lao PDR, conducted by the MoH and LSB in collaboration with other line ministries. The survey provides valuable information on the situation of children, women and men in Lao PDR, and was based, in large part, on the need to monitor progress towards the goals and targets emanating from recent international agreements, principally the Millennium Declaration, adopted by all 191 United Nations Member States in September 2000. It can also be used as baseline data for the 7th National Socio Economic Development Plan.

Survey Objectives

The LSIS had the following primary objectives:

- To provide a comprehensive selection of data on key social development indicators in order to support the monitoring of Millennium Development Goals (MDGs) and to establish a baseline for the 7th National Socio-Economic Development Plan (NSEDP).

- To measure the achievement of national and provincial targets in different development sectors.

- To produce a range of indicators that are statistically sound and internationally comparable based on methodology that follows the international survey standards of the Multiple Indicator Cluster Survey (MICS) and the Demographic and Health Surveys (DHS).

- To strengthen government capacity to conduct a nationwide survey, and to analyze social data, making use of its findings to formulate and advocate for policy making.

- To reinforce coordination mechanisms on supporting and strengthening social statistics in Lao PDR.

II. Sample and Survey Methodology

Sample Design

The sample for the Lao Social Indicator Survey (LSIS) was designed to provide estimates for a large number of indicators on the situation of children, women and men at the national level, for urban and rural areas, and for 17 provinces including the Vientiane Capital. Urban areas, rural areas with road access and rural areas without road access within each province were identified as the main sampling strata and the sample was selected in two stages. Within each province, a specified number of census enumeration areas were selected systematically using a square root allocation method. However, to be able to adequately represent each province, the allocation was adjusted so that there was a minimum of 50 enumeration areas in each province and up to a maximum of 75 enumeration areas in the largest provinces.

After a household listing was carried out within the selected enumeration areas, a systematic sample of 20 households was drawn in each sample enumeration area. Two of the selected enumeration areas were not visited because they were merged into nearby villages during the period between the household listing operation and the fieldwork. These two selected enumeration areas could not be identified separately in the new villages. The sample was stratified by province, urban areas, rural areas with road access and rural areas without road access within each province, and was not self-weighting. For reporting national level results, sample weights were used. A more detailed description of the sample design can be found in Appendix A.

Questionnaires

Four sets of questionnaires were used in the survey: 1) a household questionnaire which was used to collect information on all *de jure* household members (usual residents), the household, and the dwelling; 2) a women's questionnaire administered in every second household in each cluster visited to all men age 15-49 years; 3) a men's questionnaire administered in each household to all men age 15-49 years; and 4) an under-5 questionnaire, administered to mothers or caretakers for all children under 5 years of age living in the household. The questionnaires included the following modules:

The Household Questionnaire included the following modules:

- Household Listing Form
- Education
- Water and Sanitation
- Household Characteristics
- Insecticide Treated Nets
- Child Discipline
- Salt Iodization

The Questionnaire for Individual Women was administered to all women age 15-49 years living in the households, and included the following modules:

- Women's Background
- Access to Mass Media and Use of Information/Communication Technology
- Child Mortality with Birth History
- Desire for Last Birth
- Maternal and Newborn Health
- Post-natal Health Checks
- Illness Symptoms
- Contraception

- Unmet Need
- Attitudes Towards Domestic Violence
- Marriage/Union
- Sexual Behaviour
- HIV/AIDS
- Maternal Mortality

The Questionnaire for Individual Men was administered to all men age 15-49 years living in the households, and included the following modules:

- Men's Background
- Access to Mass Media and Use of Information/Communication Technology
- Contraception
- Attitudes Towards Domestic Violence
- Marriage and Sexual Activity
- HIV/AIDS

The Questionnaire for Children Under Five was administered to mothers or caretakers of children under 5 years of age[1] living in the 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. The questionnaire included the following modules:

- Age
- Birth Registration
- Early Childhood Development
- Breastfeeding
- Care of Illness
- Malaria
- Immunization
- Anthropometry

The LSIS questionnaires are based on the UNICEF MICS4 model questionnaires with components added from the Demographic and Health Surveys (DHS), for example, the components the full birth history and the maternal mortality module and interviewing a subsample of men. The original questionnaires were designed in English, then translated into the Lao language and were pre-tested in three villages in Luangprabang in January 2011. Based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires. A copy of the LSIS questionnaires is provided in Appendix F.

In addition to the administration of questionnaires, fieldwork teams tested the salt used for cooking in the households for inclusion of iodine, and measured the weight and height of children age under 5 years. The details of these measurements are provided in the respective sections of the report.

Training and Fieldwork

Training for the fieldwork was conducted for 17 working days from 5 to 23 September 2011. Training included lectures on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in asking questions. Towards the end of the training period, trainees spent two days in practice interviewing in 20 villages in Vientiane Province. The training was mainly implemented by seven LSIS trainers from MoH and LSB central offices who had been trained earlier in the LSIS Training of Trainers/Pretest. Furthermore, the training was technically supported by a Regional MICS Coordinator from UNICEF and a survey expert from ICF International on the Demographic and Health Surveys project.

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

The data were collected by 20 teams; each was comprised of four interviewers, one editor, one measurer and a supervisor. All field staff are from central and provincial offices of the MoH and the Ministry of Planning and Investment (MPI). Fieldwork was conducted in two phases. In the first phase, all 20 teams, consisting of 140 enumerators, kicked off the field data collection at 75 selected enumeration areas in Vientiane Capital on 27 September 2011. Field data collection in the capital lasted nine days on average. During the first phase of data collection, all teams were monitored by the seven LSIS trainers as well as the expert from ICF International and LSIS Survey Coordinator. Towards the end of the first phase, the LSIS trainers conducted feedback sessions with all 20 teams individually.

After the first phase of field data collection, the enumerators from provincial offices went back to their provinces and contacted the district level authorities and heads of villages concerned. The enumerators from central offices collected all survey materials, equipment and necessary official documents from MoH and MPI. Each survey team was provided with two vehicles for field data collection in the provinces. The field data collection in the provinces began on 15 October 2011 and concluded at the end of February 2012.

Data Processing

Data processing began simultaneously with data collection in October 2011 and was completed on 15 March 2012. Data were entered using *CSPro* software. The data were entered on 14 microcomputers and carried out by 14 data entry operators temporarily recruited and trained by four data entry supervisors from the Lao Statistics Bureau (LSB). In order to ensure quality control, all questionnaires were double entered and internal consistency checks were performed. Procedures and standard programmes developed under the global MICS4 programme and adapted to the LSIS questionnaire by the LSB in collaboration with a data processing expert from ICF International were used throughout. Data were analysed using the Statistical Package for the Social Sciences (SPSS), Version 19, and the model syntax and tabulation plans developed by UNICEF and ICF International were used for this purpose.

III. Sample Coverage and the Characteristics of Households and Respondents

Sample Coverage

Of the 19,960 households selected for inclusion in the LSIS, 19,018 were found to be occupied. Of these, 18,843 were successfully interviewed, yielding a household response rate of 99 per cent. In the interviewed households, 23,937 women age 15-49 years were identified. Of these, 22,476 were successfully interviewed, yielding a response rate of 94 per cent within interviewed households. In addition, 11,166 men age 15-49 years were listed in the household questionnaire and eligible for individual interview. Questionnaires were completed for 9,951 men, which corresponds to a response rate of 89 per cent within interviewed households. There were 11,258 children age fewer than five listed in the household questionnaire. Questionnaires were completed for 11,067 of these children, which corresponds to a response rate of 98 per cent within interviewed households. Overall response rates of 93, 88, and 97 per cent were calculated for the women, men and under-five interviewed, respectively (Table HH.1).

Table HH.1: Results of household, women's, men's and under-5 interviews

Number of households, women, men, and children under 5 by results of the household, women's, men's and under-5's interviews, and household, women's, men's and under-5's response rates, Lao PDR 2011-12

	Households				Women				Men				Children under 5			
	Sampled	Occupied	Interviewed	Household response rate	Eligible	Interviewed	Women's response rate	Women's overall response rate	Eligible	Interviewed	Men's response rate	Men's overall response rate	Eligible	Mothers/ caretakers interviewed	Under-5's response rate	Under-5's overall response rate
Residence																
Urban	5,080	4,784	4,730	98.9	6,375	5,970	93.6	92.6	2,852	2,517	88.3	87.3	2,125	2,081	97.9	96.8
Rural	14,880	14,234	14,113	99.1	17,562	16,506	94.0	93.2	8,314	7,434	89.4	88.7	9,133	8,986	98.4	97.6
..Rural with road	13,220	12,673	12,566	99.2	15,638	14,723	94.1	93.4	7,436	6,674	89.8	89.0	7,871	7,749	98.5	97.6
..Rural without road	1,660	1,561	1,547	99.1	1,924	1,783	92.7	91.8	878	760	86.6	85.8	1,262	1,237	98.0	97.1
Region																
North	7,780	7,475	7,408	99.1	9,296	8,793	94.6	93.7	4,403	4,055	92.1	91.3	4,292	4,226	98.5	97.6
Central	7,560	7,167	7,082	98.8	9,037	8,393	92.9	91.8	4,244	3,711	87.4	86.4	3,914	3,833	97.9	96.8
South	4,620	4,376	4,353	99.5	5,604	5,290	94.4	93.9	2,519	2,185	86.7	86.3	3,052	3,008	98.6	98.0
Province																
Vientiane Capital	1,500	1,387	1,366	98.5	1,924	1,740	90.4	89.1	859	734	85.4	84.2	574	556	96.9	95.4
Phongsaly	1,000	966	956	99.0	1,164	1,080	92.8	91.8	593	522	88.0	87.1	589	569	96.6	95.6
Luangnamtha	1,000	975	970	99.5	1,210	1,157	95.6	95.1	537	497	92.6	92.1	502	502	100.0	99.5
Oudomxay	1,080	1,058	1,053	99.5	1,457	1,430	98.1	97.7	692	674	97.4	96.9	764	757	99.1	98.6
Bokeo	1,000	968	960	99.2	1,223	1,120	91.6	90.8	558	509	91.2	90.5	604	600	99.3	98.5
Luangprabang	1,340	1,265	1,249	98.7	1,449	1,350	93.2	92.0	670	613	91.5	90.3	680	664	97.6	96.4
Huaphanh	1,080	1,032	1,014	98.3	1,361	1,273	93.5	91.9	676	614	90.8	89.2	699	685	98.0	96.3
Xayabury	1,280	1,211	1,206	99.6	1,432	1,383	96.6	96.2	677	626	92.5	92.1	454	449	98.9	98.5
Xiengkhuang	1,000	950	941	99.1	1,231	1,134	92.1	91.2	613	513	83.7	82.9	651	619	95.1	94.2
Vientiane	1,320	1,249	1,227	98.2	1,518	1,428	94.1	92.4	692	633	91.5	89.9	633	629	99.4	97.6
Borikhamxay	1,020	957	946	98.9	1,144	1,109	96.9	95.8	521	488	93.7	92.6	478	474	99.2	98.0
Khammuane	1,240	1,212	1,199	98.9	1,304	1,279	98.1	97.0	632	589	93.2	92.2	652	650	99.7	98.6
Savannakhet	1,480	1,412	1,403	99.4	1,916	1,703	88.9	88.3	927	754	81.3	80.8	926	905	97.7	97.1
Saravane	1,220	1,175	1,173	99.8	1,566	1,501	95.8	95.7	711	648	91.1	91.0	856	845	98.7	98.5
Sekong	1,000	971	965	99.4	1,427	1,316	92.2	91.7	625	543	86.9	86.3	903	881	97.6	97.0
Champasack	1,400	1,317	1,315	99.8	1,528	1,440	94.2	94.1	704	627	89.1	88.9	725	717	98.9	98.7
Attapeu	1,000	913	900	98.6	1,083	1,033	95.4	94.0	479	367	76.6	75.5	568	565	99.5	98.1
Total	19,960	19,018	18,843	99.1	23,937	22,476	93.9	93.0	11,166	9,951	89.1	88.3	11,258	11,067	98.3	97.4

Household response rates are similar across provinces and areas of residence (urban, rural areas with road access and rural areas without road access). Women's response rates are also similar across areas of residence. However, the women's response rate is lower in Vientiane Capital and Savannakhet than in other provinces. Likewise, it is found out that the response rates of men in Savannakhet and Attapeu are lower than others. The main reason for non-response of these individuals is the failure to find these women and men despite several visits to the households. It is observed that, especially in the case of men, most go to neighbouring countries or other provinces in Lao PDR for work and for further education.

Characteristics of Households

The weighted 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 18,843 households successfully interviewed in the survey, 97,421 household members were listed. Of these, 47,820 were male, and 49,601 were female.

Table HH.2: Household age distribution by sex

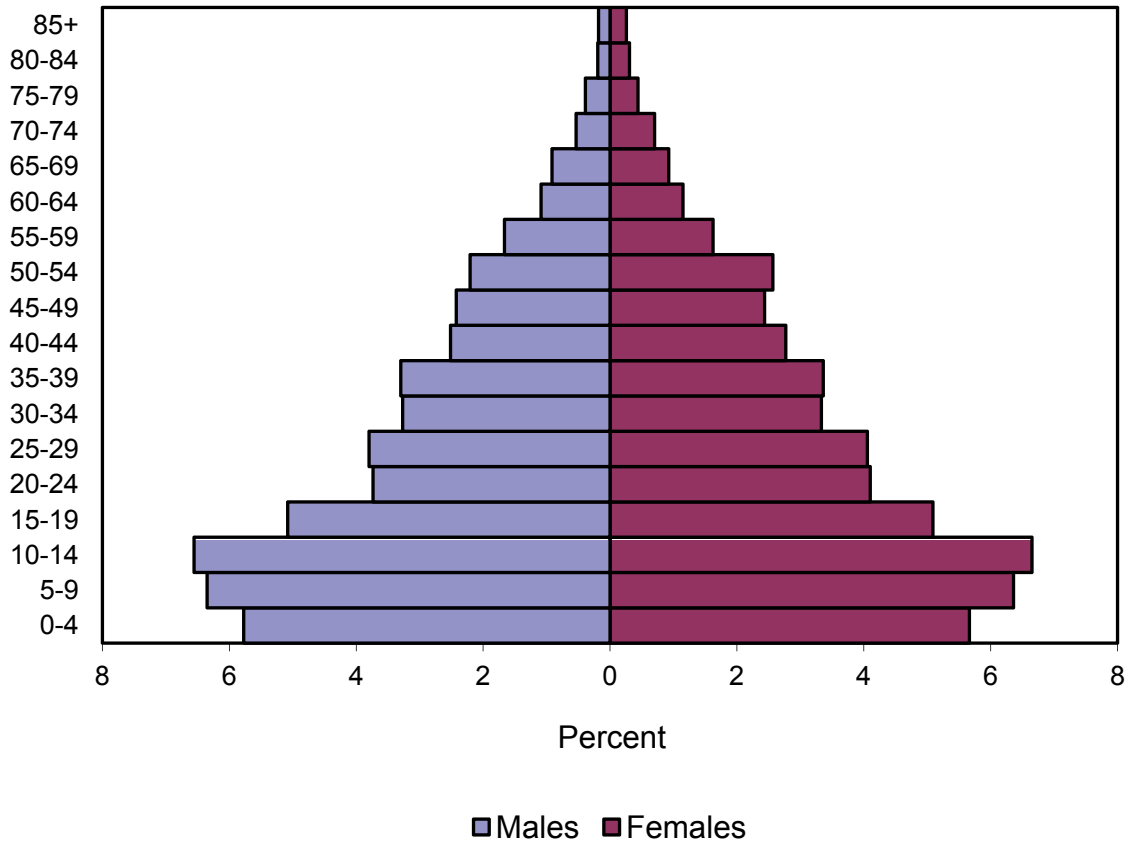
Percent and frequency distribution of the household population by five-year age groups, dependency age groups, and by child (age 0-17 years) and adult populations (age 18 or more), by sex, Lao PDR 2011-12

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Age						
0-4	5,527	11.6	5,423	10.9	10,949	11.2
5-9	6,079	12.7	6,087	12.3	12,166	12.5
10-14	6,275	13.1	6,366	12.8	12,641	13.0
15-19	4,862	10.2	4,872	9.8	9,733	10.0
20-24	3,575	7.5	3,926	7.9	7,501	7.7
25-29	3,635	7.6	3,883	7.8	7,517	7.7
30-34	3,128	6.5	3,188	6.4	6,316	6.5
35-39	3,157	6.6	3,218	6.5	6,374	6.5
40-44	2,406	5.0	2,652	5.3	5,058	5.2
45-49	2,318	4.8	2,332	4.7	4,650	4.8
50-54	2,111	4.4	2,458	5.0	4,569	4.7
55-59	1,592	3.3	1,555	3.1	3,147	3.2
60-64	1,040	2.2	1,102	2.2	2,141	2.2
65-69	876	1.8	886	1.8	1,761	1.8
70-74	511	1.1	672	1.4	1,183	1.2
75-79	372	0.8	423	0.9	795	0.8
80-84	185	0.4	294	0.6	479	0.5
85+	172	0.4	247	0.5	419	0.4
Missing/DK	1	0.0	19	0.0	20	0.0
Dependency age groups						
0-14	17,881	37.4	17,876	36.0	35,757	36.7
15-64	27,823	58.2	29,184	58.8	57,007	58.5
65+	2,115	4.4	2,522	5.1	4,637	4.8
Missing/DK	1	0.0	19	0.0	20	0.0
Child and adult populations						
Children age 0-17 years	20,980	43.9	20,859	42.1	41,840	42.9
Adults age 18+ years	26,838	56.1	28,723	57.9	55,561	57.0
Missing/DK	1	0.0	19	0.0	20	0.0
Total	47,820	100.0	49,601	100.0	97,421	100.0

According to the LSIS, children under 15 years of age make up 37 per cent of the total household population – 37 per cent of the male population, and 36 per cent of the female population. The household population age 15-64 make up 59 per cent of the total household population – 58 per cent of the male population, and 59 per cent of the female population. These figures are very close to and are within the acceptable range of the relevant figures found in the Lao Population and Housing Census of 2005. However, some minor differences are observed. The percentage of 15-19 year-olds is three percentage points lower than the percentage of 10-14 year-olds in the LSIS, while the Census found a 1.8 percentage point difference. This suggests slight possible bias among the interviewers when determining women and men's ages around the cut off point for inclusion for further interviews.

The population pyramid of the LSIS looks slightly different from the pyramid of the Census, primarily for ages 20 and older. In the Census, the proportion of women dropped from 4 per cent in age group 45-49 to 3.2 per cent in age group 50-54. The structure of the population pyramid of the 2006 MICS and the LSIS is similar for all age groups, but in both the 2006 MICS and LSIS, the percentage of women increased from age group 45-49 to 50-54. A possible reason is that females age around 50 did not report their exact completed age, but rather preferred to round their response to 50.

Figure HH.1: Age and sex distribution of household population, Lao PDR 2011-12



Tables HH.3, HH.4.1, HH.4.2 and HH.4.3 provide basic information on the households, female respondents age 15-49, male respondents age 15-49, and children age under 5 by presenting the unweighted, as well as the weighted numbers. Information on the basic characteristics of households, women, men and children age under 5 interviewed in the survey is essential for the interpretation of findings presented later in the report, and also can provide an indication of the representativeness of the survey. The remaining tables in this report are presented only with weighted numbers. See Appendix A for more details about weighting.

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

Table HH.3: Household composition

Percent and frequency distribution of households by selected characteristics, Lao PDR 2011-12

		Number of households	
	Weighted percent	Weighted	Unweighted
Sex of household head			
Male	87.9	16,561	16,812
Female	12.1	2,282	2,031
Region			
North	32.2	6,065	7,408
Central	49.1	9,247	7,082
South	18.7	3,531	4,353
Province			
Vientiane Capital	13.3	2,497	1,366
Phongsaly	3.1	578	956
Luangnamtha	2.9	544	970
Oudomxay	4.8	913	1,053
Bokeo	2.8	520	960
Luangprabang	7.3	1,371	1,249
Huaphanh	4.6	869	1,014
Xayabury	6.7	1,269	1,206
Xiengkhuang	4.0	762	941
Vientiane	7.7	1,447	1,227
Borikhamxay	4.3	804	946
Khammuane	5.7	1,078	1,199
Savannakhet	14.1	2,659	1,403
Saravane	6.0	1,123	1,173
Sekong	1.5	283	965
Champasack	9.5	1,789	1,315
Attapeu	1.8	336	900
Residence			
Urban	27.5	5,177	4,730
Rural	72.5	13,666	14,113
..Rural with road	89.9	12,285	12,566
..Rural without road	10.1	1,380	1,547

Table HH.3: Household composition

Percent and frequency distribution of households by selected characteristics, Lao PDR 2011-12

		Number of households	
	Weighted percent	Weighted	Unweighted
Number of household members			
1	2.1	393	353
2	6.3	1,196	1,168
3	14.0	2,635	2,574
4	21.1	3,976	3,896
5	18.9	3,562	3,564
6	14.5	2,733	2,817
7	9.2	1,739	1,771
8	5.9	1,115	1,155
9	3.4	648	667
10+	4.5	846	878
Education of household head			
None	20.3	3,833	4,049
Primary	45.3	8,542	8,688
Lower secondary	15.5	2,925	2,842
Upper secondary	6.1	1,147	999
Post secondary non tertiary	7.5	1,413	1,376
Higher	5.1	958	872
Missing/DK	0.1	25	17
Wealth index quintile			
Poorest	19.0	3,585	4,165
Second	18.8	3,533	3,832
Middle	19.9	3,743	3,881
Fourth	21.0	3,962	3,686
Richest	21.3	4,019	3,279
Ethno-linguistic group of household head			
Lao-Tai	67.5	12,721	11,337
Mon-Khmer	22.0	4,140	5,014
Hmong-Mien	6.8	1,287	1,419
Chinese-Tibetan	3.1	579	964
Other, Missing, DK	0.6	117	109
Total	100.0	18,843	18,843
Households with at least			
One child age 0-4 years	42.6	-	-
One child age 0-17 years	85.9	-	-
One woman age 15-49 years	89.0	-	-
One man age 15-49 years	84.7	-	-
Mean household size	5.2	-	-

The total weighted and unweighted numbers of households are equal, since sample weights were normalized (See Appendix A). The table also shows the proportions of households with at least one child under 18, at least one child under 5, at least one eligible woman age 15-49 and at least one man age 15-49. Eighty-eight per cent of household heads are male. Twenty-eight per cent of households are urban, 73 per cent are rural. Sixty-eight per cent of households are Lao-Tai-headed, while 22 per cent are Mon-Khmer-headed households. Forty per cent of all households have four to five members, 24 per cent have six to seven members. The average household size is 5.2 people.

Characteristics of Female and Male Respondents Age 15-49 and Children Age Under 5

Tables HH.4.1, HH.4.2 and HH.4.3 provide information on the background characteristics of female respondents, male respondents, and children age under 5 years. In all three tables, the total numbers of weighted and unweighted observations are equal, since sample weights have been normalized. In addition to providing useful information on the background characteristics of women, men and children, the tables are intended to show the number of observations in each background category. These categories are used in the subsequent tabulations of this report.

Table HH.4.1: Women's background characteristics

Percent and frequency distribution of women age 15-49 years by selected background characteristics, Lao PDR 2011-12

	Weighted percent	Number of women	
		Weighted	Unweighted
Region			
North	31.4	7,057	8,793
Central	50.1	11,255	8,393
South	18.5	4,164	5,290
Province			
Vientiane Capital	14.6	3,288	1,740
Phongsaly	3.0	666	1,080
Luangnamtha	2.8	627	1,157
Oudomxay	5.3	1,182	1,430
Bokeo	2.8	620	1,120
Luangprabang	6.6	1,473	1,350
Huaphanh	4.8	1,086	1,273
Xayabury	6.2	1,402	1,383
Xiengkhuang	4.1	930	1,134
Vientiane	7.5	1,677	1,428
Borikhamxay	4.0	901	1,109
Khammuane	4.8	1,082	1,279
Savannakhet	15.0	3,376	1,703
Saravane	6.5	1,456	1,501
Sekong	1.7	388	1,316
Champasack	8.6	1,943	1,440
Attapeu	1.7	376	1,033
Residence			
Urban	29.6	6,649	5,970
Rural	70.4	15,827	16,506
..Rural with road	90.1	14,268	14,723
..Rural without road	9.9	1,559	1,783

Table HH.4.1: Women's background characteristics

Percent and frequency distribution of women age 15-49 years by selected background characteristics, Lao PDR 2011-12

Age			
15-19	19.6	4,415	4,558
20-24	16.1	3,617	3,598
25-29	16.2	3,642	3,668
30-34	13.4	3,015	2,972
35-39	13.6	3,065	3,058
40-44	11.2	2,507	2,463
45-49	9.9	2,215	2,159
Marital/Union status			
Currently married/in union	72.8	16,368	16,550
Widowed	1.8	397	398
Divorced	2.5	562	545
Separated	0.5	119	119
Never married/in union	22.4	5,031	4,864
Motherhood status			
Ever gave birth	70.8	15,916	16,119
Never gave birth	29.2	6,560	6,357
Births in last two years			
Had a birth in last two years	19.2	4,306	4,444
Had no birth in last two years	80.8	18,170	18,032
Education			
None	20.7	4,660	5,275
Primary	39.8	8,955	9,174
Lower secondary	18.3	4,111	3,905
Upper secondary	11.1	2,496	2,191
Post secondary non tertiary	4.6	1,030	961
Higher	5.4	1,224	970
Wealth index quintile			
Poorest	16.9	3,809	4,531
Second	18.2	4,088	4,472
Middle	19.2	4,309	4,566
Fourth	20.9	4,694	4,416
Richest	24.8	5,577	4,491
Ethno-linguistic group of household head			
Lao-Tai	67.4	15,151	13,355
Mon-Khmer	21.9	4,913	6,083
Hmong-Mien	7.1	1,606	1,786
Chinese-Tibetan	3.0	685	1,137
Other, Missing, DK	0.5	121	115
Total	100.0	22,476	22,476

Table HH.4.1 provides the background characteristics of female respondents 15-49 years of age. The table includes information on the distribution of women according to region, province, residence, age, marital status, motherhood status, births in last two years, education,[1] wealth index quintiles,[2] and ethno-linguistic group of the household head.

Seventy-three per cent of women age 15-49 are married or in union with a man, nearly 3 per cent are divorced or separated, and another 2 per cent are widowed. Seventy-one per cent of women age 15-49 have ever given birth. The education variable refers to the highest level of schooling a person has attended (they may or may not have completed the level). Forty per cent of women age 15-49 have attended primary school without advancing beyond the primary school level. Thirty-four per cent of women have attended secondary school. Only about 5 per cent of women age 15-49 have any higher education. Seventy-three per cent of women are currently married or living with a partner, while 71 per cent had ever given birth and 19 per cent had given birth in the previous two years. Twenty-five per cent of women belong to the richest wealth index quintile households, and about 17 per cent are members of households from the poorest.

[1] Unless otherwise stated, "education" refers to educational level attended by the respondent throughout this report when it is used as a background variable.

[2] Principal component analysis was performed by using information on the ownership of consumer goods, dwelling characteristics, water and sanitation, and other characteristics that are related to the household's wealth to assign weights (factor scores) to each of the household assets. Each household was then assigned a wealth score based on these weights and the assets owned by that household. The survey household population was then ranked according to the wealth score of the household they are living in, and was finally divided into five equal parts (quintiles) from lowest (poorest) to highest (richest). The assets used in these calculations were: electricity; radio; television; non-mobile telephone; refrigerator; clock; fan; sofa/wooden settee; water pump; air conditioner; washing machine; CD/DVD player; watch; mobile telephone; bicycle; motor cycle/scooter; animal drawn-cart; car/truck; boat with motor; tuk tuk; tak tak; camera; computer; type of sanitation facility; type of cooking fuel; type of material used for floor, roof and wall; ownership of dwelling; ownership of agricultural land; ownership of livestock; and having a bank account. The wealth index is assumed to capture underlying long-term wealth through information on household assets, and is intended to produce a ranking of households by wealth, from poorest to richest. The wealth index does not provide information on absolute poverty, current income or expenditure levels. The wealth scores calculated are applicable to only the particular data set they are based on. Further information on the construction of the wealth index can be found in Filmer, D. and Pritchett, L., 2001. "Estimating wealth effects without expenditure data – or tears: An application to educational enrolments in states of India". Demography 38(1): 115-132. Gwatkin, D.R., Rutstein, S., Johnson, K. ,Pande, R. and Wagstaff. A., 2000. Socio-Economic Differences in Health, Nutrition, and Population. HNP/Poverty Thematic Group, Washington, DC: World Bank. Rutstein, S.O. and Johnson, K., 2004. The DHS Wealth Index. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro.

Table HH.4.2: Men's background characteristics

Percent and frequency distribution of men age 15-49 years by selected background characteristics, Lao PDR 2011-12

	Weighted percent	Number of men	
		Weighted	Unweighted
Region			
North	31.9	3,172	4,055
Central	50.1	4,990	3,711
South	18.0	1,789	2,185
Province			
Vientiane Capital	13.9	1,379	734
Phongsaly	3.2	318	522
Luangnamtha	2.7	266	497
Oudomxay	5.3	530	674
Bokeo	2.7	267	509
Luangprabang	6.5	644	613
Huaphanh	5.1	511	614
Xayabury	6.4	635	626
Xiengkhuang	4.4	442	513
Vientiane	7.2	721	633
Borikhamxay	3.9	390	488
Khammuane	5.1	503	589
Savannakhet	15.6	1,556	754
Saravane	6.0	597	648
Sekong	1.6	162	543
Champasack	8.8	873	627
Attapeu	1.6	157	367
Residence			
Urban	28.1	2,800	2,517
Rural	71.9	7,151	7,434
..Rural with road	90.3	6,457	6,674
..Rural without road	9.7	694	760
Age			
15-19	21.3	2,119	2,151
20-24	15.7	1,557	1,531
25-29	15.1	1,500	1,513
30-34	12.7	1,264	1,290
35-39	14.5	1,445	1,449
40-44	10.5	1,043	1,021
45-49	10.3	1,023	996
Marital/Union status			
Currently married/in union	66.4	6,611	6,721
Widowed	0.4	41	37
Divorced	0.9	90	84
Separated	0.5	46	36
Never married/in union	31.8	3,163	3,073
Education			
None	9.3	923	1,007
Primary	38.9	3,872	4,031
Lower secondary	23.6	2,351	2,342
Upper secondary	14.6	1,450	1,337
Post secondary non tertiary	6.1	608	597
Higher	7.5	747	637
Wealth index quintile			
Poorest	17.0	1,692	2,005
Second	19.2	1,911	2,054
Middle	20.5	2,039	2,164
Fourth	21.0	2,092	1,939
Richest	22.3	2,217	1,789
Ethno-linguistic group of household head			
Lao-Tai	66.7	6,635	5,845
Mon-Khmer	22.0	2,191	2,665
Hmong-Mien	7.3	728	816
Chinese-Tibetan	3.4	335	568
Other, Missing, DK	0.6	62	57
Total	100.0	9,951	9,951

Similarly, Table HH.4.2 provides background characteristics of male respondents age 15-49. The table shows information about the distribution of men according to region, province, residence, age, marital status, education, wealth index quintile, and ethno-linguistic group of the household head.

Seventy-two per cent of men age 15-49 live in rural areas. Sixty-six per cent of men age 15-49 are married or union with a woman and 32 per cent have never married. Thirty-nine per cent of men age 15-49 have attended primary school without going any further, 44 per cent have attended secondary school, and another 7.5 per cent have pursued higher education. Only 9 per cent have no education, while 8 per cent have higher education. Twenty-two per cent are members of households from the richest wealth index quintile, while about 17 per cent are members of households in the poorest.

Some background characteristics of children age under 5 are presented in Table HH.4.3. These include the distribution of children by several attributes: sex; region; province and residence; age; mother's or caretaker's education; wealth index quintile; and ethno-linguistic group of the household head.

Seventy-nine per cent of children age under 5 live in rural areas. One-third have mothers who have no education, and another 41 per cent have mothers who have attended primary school without going on to secondary school. Twenty-nine per cent of children are members of households in the poorest wealth quintile, while 15 per cent are members of households in the richest quintile. This indicates that the richest households have fewer children than the poorest households.

Table HH.4.3: Under-5's background characteristics

Percent and frequency distribution of children under five years of age by selected characteristics, Lao PDR 2011-12

	Weighted percent	Number of under-5 children	
		Weighted	Unweighted
Sex			
Male	50.5	5,593	5,612
Female	49.5	5,474	5,455
Region			
North	31.6	3,502	4,226
Central	46.6	5,154	3,833
South	21.8	2,411	3,008
Province			
Vientiane Capital	9.6	1,058	556
Phongsaly	3.3	368	569
Luangnamtha	2.5	280	502
Oudomxay	6.1	676	757
Bokeo	3.0	335	600
Luangprabang	6.8	752	664
Huaphanh	5.5	606	685
Xayabury	4.4	486	449
Xiengkhuang	4.9	540	619
Vientiane	6.9	767	629
Borikhamxay	3.6	402	474
Khammuane	5.5	603	650
Savannakhet	16.1	1,784	905
Saravane	8.3	923	845
Sekong	2.4	269	881
Champasack	9.1	1,003	717
Attapeu	1.9	216	565
Residence			
Urban	21.0	2,319	2,081
Rural	79.0	8,748	8,986
..Rural with road	87.6	7,661	7,749
..Rural without road	12.4	1,086	1,237
Age			
0-5 months	10.7	1,182	1,168
6-11 months	10.2	1,125	1,092
12-23 months	19.3	2,141	2,173
24-35 months	19.8	2,193	2,158
36-47 months	20.8	2,302	2,332
48-59 months	19.2	2,124	2,144
Mother's education*			
None	32.3	3,580	3,805
Primary	41.2	4,556	4,610
Lower secondary	14.6	1,613	1,503
Upper secondary	6.3	695	585
Post secondary non tertiary	3.3	368	341
Higher	2.3	255	223
Wealth index quintile			
Poorest	29.2	3,233	3,640
Second	21.2	2,346	2,485
Middle	18.2	2,019	2,011
Fourth	16.3	1,807	1,629
Richest	15.0	1,663	1,302
Ethno-linguistic group of household head			
Lao-Tai	54.5	6,030	5,116
Mon-Khmer	28.8	3,189	3,757
Hmong-Mien	13.0	1,439	1,552
Chinese-Tibetan	3.2	357	589
Other, Missing, DK	0.5	52	53
Total	100.0	11,067	11,067

* Mother's education refers to educational attainment of mothers and caretakers of children under 5.

IV. Water and Sanitation

Safe drinking water is a basic necessity for good health. Unsafe water can be a significant carrier of diseases such as trachoma, cholera, typhoid and schistosomiasis. Drinking water can also be tainted with chemical, physical and radiological contaminants with harmful effects on human health.

MDG Goal 7c is to half the proportion of people without sustainable access to safe drinking water and basic sanitation between 1990 and 2015. The World Fit for Children goal is to reduce by one third the proportion of households without access to affordable and safe drinking water and hygienic sanitation facilities.

The MICS indicators pertaining to water and sanitation include these issues:

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

Use of Improved Water Sources

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

Table WS.1: Use of improved water sources

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Lao PDR 2011-12

	Main source of drinking water																			
	Improved sources									Unimproved sources										
	Piped water																			
	Into dwelling	Into yard/plot	To neigh-bour	Public tap/ standpipe	Tubewell/ borehole	Pro-tected well	Pro-tected spring	Rain-water collection	Bottled water*	Unpro-tected well	Unpro-tected spring	Tanker truck	Cart with tank/ drum	Surface water	Bottled water*	Other	Missing	Total	Percentage using improved sources of drinking water[1]	Number of household members
Region																				
North	5.8	8.4	0.7	34.6	0.7	2.5	15.9	0.5	10.5	4.1	2.0	0.0	0.3	11.1	2.0	1.0	0.0	100.0	79.4	31,310
Central	4.5	1.1	0.3	3.6	6.9	8.0	4.3	2.1	34.0	19.5	2.0	0.1	0.1	4.4	7.5	1.6	0.0	100.0	64.8	46,919
South	4.3	3.5	0.4	2.1	37.0	1.7	5.6	1.3	11.1	9.6	2.1	0.0	0.0	20.4	0.6	0.1	0.0	100.0	67.1	19,192
Province																				
Vientiane Capital	9.5	1.2	0.1	0.1	4.2	2.6	0.0	0.5	70.1	4.3	0.0	0.0	0.1	0.2	6.7	0.4	0.0	100.0	88.3	11,694
Phongsaly	9.9	4.3	1.2	3.4	0.6	0.9	54.2	0.0	0.3	1.0	4.1	0.0	1.3	18.7	0.0	0.0	0.1	100.0	74.7	3,122
Luangnamtha	8.9	10.4	0.7	50.5	0.4	4.9	7.2	0.0	14.6	0.0	0.4	0.0	0.0	1.9	0.1	0.0	0.0	100.0	97.6	2,707
Oudomxay	1.9	11.4	0.6	55.9	0.4	0.1	0.8	0.0	7.2	0.1	0.0	0.0	1.1	13.1	1.5	6.0	0.0	100.0	78.2	5,181
Bokeo	2.3	1.9	0.2	3.1	0.0	3.7	48.5	0.0	16.8	6.1	3.3	0.0	0.0	8.4	5.6	0.0	0.0	100.0	76.6	2,749
Luangprabang	7.6	10.2	1.6	32.0	0.7	0.6	12.2	0.0	16.2	0.5	0.1	0.1	0.0	17.2	0.9	0.0	0.0	100.0	81.1	6,576
Huaphanh	5.7	12.1	0.3	60.6	0.5	0.0	4.7	0.0	3.0	0.3	5.8	0.0	0.0	6.8	0.0	0.3	0.0	100.0	86.9	5,163
Xayabury	5.1	4.5	0.2	19.5	1.7	8.1	11.4	2.6	14.0	17.5	1.7	0.0	0.1	7.7	5.9	0.0	0.0	100.0	67.2	5,813
Xiengkhuang	2.5	3.1	0.1	21.9	0.3	11.6	22.5	0.0	13.8	11.3	3.2	0.0	0.1	7.9	1.7	0.0	0.0	100.0	75.8	4,198
Vientiane	1.1	1.1	0.4	7.6	4.4	7.9	6.1	0.2	32.4	16.4	3.0	0.1	0.1	1.9	17.0	0.3	0.0	100.0	61.3	7,079
Borikhamxay	12.7	0.2	1.6	2.7	6.8	7.8	7.5	0.0	22.6	16.8	2.8	0.0	0.1	3.7	14.6	0.1	0.0	100.0	61.8	3,864
Khammuane	0.4	0.3	0.1	1.4	12.8	19.2	4.1	1.0	17.6	21.1	3.8	0.0	0.0	7.0	7.0	4.2	0.0	100.0	56.9	5,129
Savannakhet	2.0	0.9	0.2	0.3	10.0	7.4	0.9	5.8	20.8	35.3	1.9	0.3	0.2	7.0	3.7	3.2	0.0	100.0	48.4	14,954
Saravane	3.2	3.5	0.3	1.4	37.4	0.8	4.7	2.9	5.0	16.3	3.4	0.0	0.0	20.7	0.4	0.1	0.0	100.0	59.2	6,760
Sekong	11.2	7.6	0.2	1.8	18.5	3.1	27.3	0.0	5.4	4.5	3.2	0.0	0.0	17.0	0.1	0.1	0.0	100.0	75.2	1,806
Champasack	3.8	2.8	0.5	3.1	41.0	1.9	2.1	0.6	16.9	3.7	0.4	0.0	0.0	22.1	1.0	0.1	0.0	100.0	72.8	8,877
Attapeu	4.3	2.8	0.3	0.5	34.1	2.2	4.9	0.3	11.1	19.4	4.5	0.0	0.2	14.8	0.5	0.0	0.0	100.0	60.5	1,749
Residence																				
Urban	11.2	5.2	0.5	2.5	3.8	4.7	1.6	0.2	57.9	5.1	0.6	0.0	0.1	1.2	4.9	0.5	0.0	100.0	87.6	24,845
Rural	2.7	3.5	0.4	16.9	13.2	5.1	10.5	1.9	9.6	15.2	2.5	0.1	0.2	12.6	4.2	1.4	0.0	100.0	63.9	72,576
..Rural with road	2.9	3.6	0.4	17.1	13.7	5.4	10.5	2.0	10.8	15.2	2.4	0.1	0.2	9.6	4.7	1.3	0.0	100.0	66.5	64,866
..Rural without road	0.8	2.1	0.6	15.7	9.3	2.4	10.9	0.2	0.0	14.8	3.6	0.1	0.1	37.5	0.1	1.8	0.1	100.0	42.0	7,710
Education of household head																				
None	2.9	3.4	0.3	16.2	12.2	4.8	11.9	1.1	8.5	17.4	3.5	0.1	0.2	13.6	2.0	2.0	0.0	100.0	61.2	20,763
Primary	3.8	4.2	0.5	15.6	12.7	5.1	9.0	1.7	14.9	13.4	2.1	0.0	0.2	11.8	4.0	1.1	0.0	100.0	67.4	45,854
Lower secondary	6.0	4.0	0.5	11.8	9.4	5.9	7.0	1.4	27.9	11.1	1.4	0.0	0.2	5.1	7.3	0.8	0.0	100.0	74.0	14,280
Upper secondary	6.4	3.3	0.5	4.9	6.5	5.7	3.1	1.9	49.7	7.8	0.6	0.0	0.0	3.2	6.0	0.6	0.0	100.0	81.9	5,241
Post secondary non tertiary	9.6	4.2	0.9	6.3	6.8	3.9	3.2	0.9	45.7	6.7	0.4	0.2	0.0	3.9	7.0	0.3	0.0	100.0	81.5	6,740
Higher	12.4	2.9	0.0	1.5	1.4	2.3	1.5	0.5	68.9	2.0	0.2	0.0	0.0	1.0	4.9	0.4	0.0	100.0	91.4	4,387
DK/Missing	0.0	0.0	0.0	0.0	16.0	0.0	4.3	8.0	65.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	94.1	156

[1] **MICS indicator 4.1; MDG indicator 7.8**

*Households using bottled water as the main source of drinking water are classified into improved or unimproved drinking water users according to the water source used for other purposes such as cooking and handwashing.

Table WS.1: Use of improved water sources

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Lao PDR 2011-12

	Main source of drinking water																			
	Improved sources									Unimproved sources										
	Piped water																			
	Into dwelling	Into yard/plot	To neigh-bour	Public tap/ standpipe	Tubewell/ borehole	Pro-tected well	Pro-tected spring	Rain-water collection	Bottled water*	Unpro-tected well	Unpro-tected spring	Tanker truck	Cart with tank/ drum	Surface water	Bottled water*	Other	Missing	Total	Percentage using improved sources of drinking water[1]	Number of household members
Wealth index quintile																				
Poorest	0.7	2.6	0.6	25.6	9.9	1.5	17.1	0.1	0.1	11.5	3.6	0.0	0.5	24.5	0.0	1.8	0.0	100.0	58.1	19,489
Second	2.9	4.2	0.7	22.1	13.4	4.2	12.3	0.9	1.1	19.7	3.0	0.1	0.1	12.6	0.6	2.0	0.0	100.0	61.9	19,480
Middle	5.8	6.2	0.6	13.8	16.4	6.5	8.0	1.8	7.0	19.0	2.2	0.1	0.2	7.6	3.5	1.3	0.0	100.0	66.2	19,483
Fourth	6.4	5.0	0.3	4.4	11.2	9.7	3.5	3.3	30.0	11.1	1.1	0.1	0.0	3.5	10.1	0.3	0.0	100.0	73.9	19,480
Richest	8.6	1.5	0.1	0.3	3.2	3.0	0.5	1.0	71.4	1.7	0.2	0.0	0.0	0.3	7.8	0.3	0.0	100.0	89.6	19,489
Ethno-linguistic group of household head																				
Lao-Tai	6.0	3.7	0.4	6.2	11.2	6.1	3.8	2.3	32.7	12.8	0.8	0.1	0.1	6.3	6.4	1.0	0.0	100.0	72.4	61,459
Mon-Khmer	2.1	4.0	0.5	23.7	13.5	2.5	12.8	0.0	2.9	14.0	3.6	0.0	0.2	17.7	0.9	1.7	0.0	100.0	62.0	23,629
Hmong-Mien	2.5	4.8	0.4	30.3	4.0	5.2	17.4	0.0	4.0	12.1	5.6	0.0	0.2	11.3	1.2	0.9	0.0	100.0	68.7	8,682
Chinese-Tibetan	9.1	4.2	1.3	27.6	0.0	0.5	37.0	0.0	2.9	0.1	3.5	0.0	0.6	12.7	0.3	0.0	0.1	100.0	82.6	3,111
Other, Missing, DK	10.4	0.0	0.0	0.5	24.7	9.9	6.2	0.0	29.1	10.2	1.6	0.0	1.1	3.1	3.1	0.0	0.0	100.0	80.9	541
Total	4.9	3.9	0.4	13.3	10.8	5.0	8.3	1.4	21.9	12.6	2.0	0.1	0.2	9.7	4.4	1.1	0.0	100.0	69.9	97,421

[1] **MICS indicator 4.1; MDG indicator 7.8**

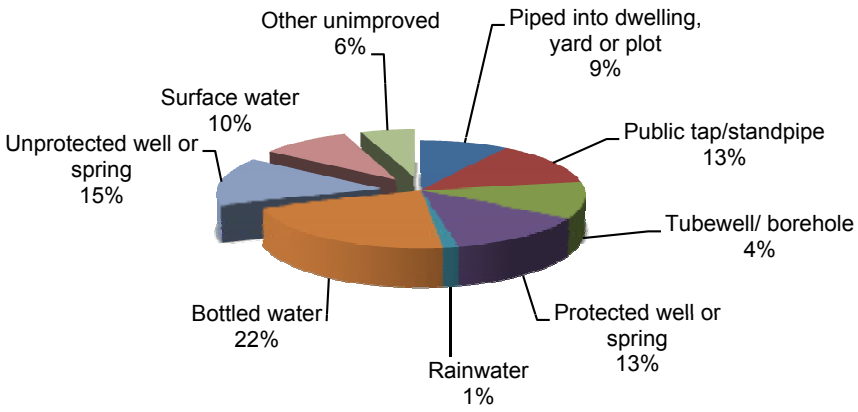
*Households using bottled water as the main source of drinking water are classified into improved or unimproved drinking water users according to the water source used for other purposes such as cooking and handwashing.

Some 70 per cent of the population is using an improved source of drinking water – 88 per cent in urban areas and 64 per cent in rural areas. Use of an improved source of drinking water is more common in the Northern region (79 per cent) than in the Central and Southern regions, where only two thirds of the population get their drinking water from an improved source. Across the country, the proportion of the population using an improved source for drinking water varies from a low of 48 per cent in Savannakhet to a high of 98 per cent in Luangnamtha. The proportion of the population using an improved source of drinking water increases steadily from about 60 per cent to 90 per cent or higher with increasing education and increasing wealth quintile.

The main source of drinking water varies across the country. The most common source of drinking water in the Northern region is a public tap or standpipe, used by 35 per cent of the population, but this kind of water source is used by less than 5 per cent of the population in the Central and Southern regions. In the Central region, the most commonly used source is bottled water (considered an improved source for 34 per cent of the population who also use an improved source of water for hand washing and cooking). Tubewells or boreholes are the most common source for people in the Southern region (used by 37 per cent of the population).

Half the population in the Northern region uses piped drinking water, compared to only 10 per cent in the Central and Southern regions. The second most common sources of drinking water in each region are protected springs in the Northern region (16 per cent), unprotected springs in the Central region (20 per cent) and surface water in the Southern region (20 per cent).

Figure WS.1: Percent distribution of household members by source of drinking water, Lao PDR 2011-12



Treatment of household drinking water is presented in Table WS.2. Respondents to the household questionnaire were asked whether they do anything to treat household drinking water to make it safer to drink, and if so, what method they use. The table presents the distribution of the household population by method of treatment. About 4 in 10 people live in households that don't do anything to drinking water before drinking it. Fifty-five per cent of people live in households that boil their water before drinking it; any other methods of treating drinking water are used by fewer than 5 per cent of the population.

Some households using bottled water from improved water sources do not treat it because they know that it is safe to drink. Table WS.2 also presents the percentage of the population living in households using unimproved sources of drinking water that use an appropriate method to treat it. Boiling water, adding bleach or chlorine, using a water filter, and using solar disinfection are considered appropriate drinking water treatment methods. Only 53 per cent of people living in households that use unimproved sources of drinking water use an appropriate water treatment method prior to drinking water from an unimproved source. Among the population using unimproved sources, the percentage using an appropriate treatment method varies drastically across the country, from a low of 25 per cent in Savannakhet to a high of 94 per cent in Huaphanh.

Among those using an unimproved water source examined by ethno-linguistic group, the Lao-Tai are least likely (47 per cent) to use an appropriate water treatment method, while the Hmong-Mien are the most likely (89 per cent). Only 22 per cent of people in the richest wealth quintile who use unimproved water sources treat their water appropriately; far lower than the percentage in the lower wealth quintiles.

Table WS.2: Household water treatment

Percentage of household population by drinking water treatment method used in the household, and for household members living in households where an unimproved drinking water source is used, the percentage who are using an appropriate treatment method, Lao PDR 2011-12

	Water treatment method used in the household											
	None	Boil	Add bleach/ chlorine	Strain through a cloth	Use water filter	Solar dis-infection	Let it stand and settle	Other	Missing/ DK	Number of household members	Percentage of household members in households using unimproved drinking water sources and using an appropriate water treatment method[1]	Number of household members in households using unimproved drinking water sources
Region												
North	19.3	80.1	0.1	2.2	1.6	0.0	7.1	0.7	0.0	31,310	76.3	6,449
Central	61.2	34.7	0.7	3.4	1.9	0.0	1.1	0.7	0.0	46,919	38.7	16,532
South	35.4	62.4	0.8	4.4	1.8	0.1	2.3	0.2	0.0	19,192	67.6	6,313
Province												
Vientiane Capital	76.7	16.5	1.9	2.6	4.0	0.0	1.3	2.3	0.1	11,694	34.7	1,374
Phongsaly	13.1	86.6	0.0	0.1	0.0	0.0	1.2	0.1	0.0	3,122	78.0	789
Luangnamtha	38.6	61.1	0.0	0.0	0.0	0.0	2.3	0.0	0.0	2,707	39.4	64
Oudomxay	17.4	82.1	0.0	0.5	7.1	0.0	31.6	0.2	0.0	5,181	66.7	1,127
Bokeo	38.1	59.6	0.3	1.8	0.8	0.0	3.5	0.3	0.1	2,749	55.3	643
Luangprabang	15.7	84.0	0.3	7.6	0.2	0.0	3.1	2.5	0.0	6,576	82.4	1,240
Huaphanh	6.0	93.7	0.0	0.0	1.8	0.0	0.4	0.0	0.0	5,163	94.1	677
Xayabury	22.3	76.9	0.0	1.8	0.0	0.0	2.9	0.5	0.0	5,813	79.2	1,909
Xiengkhuang	22.2	77.4	0.1	0.0	0.1	0.1	0.0	0.3	0.0	4,198	79.5	1,015
Vientiane	48.2	51.0	0.2	3.0	1.5	0.0	0.8	0.2	0.0	7,079	55.1	2,738
Borikhamxay	42.6	55.8	0.0	1.6	0.7	0.0	0.5	0.0	0.0	3,864	53.1	1,475
Khammuane	58.0	33.4	1.0	7.6	3.4	0.2	3.6	0.1	0.0	5,129	39.1	2,209
Savannakhet	72.1	24.3	0.1	4.2	0.6	0.0	0.8	0.3	0.0	14,954	25.3	7,721
Saravane	36.3	62.4	1.5	2.6	0.5	0.0	0.9	0.0	0.0	6,760	54.6	2,758
Sekong	21.9	77.2	0.1	0.1	1.0	0.0	5.7	0.0	0.0	1,806	78.9	448
Champasack	38.4	58.1	0.6	7.3	3.0	0.2	0.8	0.5	0.0	8,877	81.0	2,416
Attapeu	30.5	68.5	0.1	1.2	1.0	0.1	12.3	0.2	0.0	1,749	65.1	691
Residence												
Urban	64.0	31.8	1.0	3.1	2.6	0.1	1.9	1.0	0.0	24,845	44.0	3,072
Rural	35.3	62.6	0.3	3.2	1.5	0.0	3.8	0.5	0.0	72,576	54.2	26,223
..Rural with road	35.9	62.0	0.4	3.2	1.4	0.0	3.6	0.5	0.0	64,866	52.9	21,752
..Rural without road	30.7	68.2	0.1	3.4	2.2	0.0	5.3	0.7	0.0	7,710	60.9	4,471
Main source of drinking water												
Improved	41.6	55.9	0.5	3.3	2.0	0.0	3.5	0.6	0.0	68,126	na	na
Unimproved	45.1	52.0	0.4	2.9	1.2	0.0	2.8	0.6	0.0	29,295	53.2	29,295
Education of household head												
None	39.9	57.7	0.1	3.2	1.2	0.0	4.0	0.2	0.1	20,763	49.5	8,057
Primary	36.9	60.9	0.4	3.0	1.5	0.0	3.5	0.6	0.0	45,854	55.6	14,941
Lower secondary	43.7	54.2	0.7	3.4	1.7	0.0	2.7	0.6	0.0	14,280	57.2	3,715
Upper secondary	60.9	33.7	1.2	3.6	2.8	0.1	2.7	0.7	0.0	5,241	51.1	951
Post secondary non tertiary	55.9	40.8	0.7	4.2	3.0	0.0	2.5	0.9	0.0	6,740	41.2	1,246
Higher	68.6	25.6	1.8	2.1	3.7	0.0	1.4	2.1	0.0	4,387	37.2	376
DK/Missing	66.8	30.7	0.0	15.4	0.0	0.0	10.1	0.0	0.0	156	*	9
Wealth index quintile												
Poorest	31.1	67.9	0.0	1.0	1.3	0.0	5.5	0.4	0.0	19,489	57.0	8,164
Second	28.3	70.4	0.2	2.4	1.1	0.0	3.9	0.3	0.0	19,480	55.3	7,424
Middle	30.2	67.7	0.3	4.3	1.1	0.0	3.7	0.3	0.1	19,483	58.9	6,594
Fourth	47.4	49.6	0.7	5.9	1.4	0.0	2.2	0.9	0.0	19,480	48.9	5,093
Richest	76.0	18.2	1.3	2.3	3.9	0.1	1.2	1.2	0.0	19,489	21.7	2,019
Ethno-linguistic group of household head												
Lao-Tai	51.8	44.7	0.8	4.3	2.0	0.0	1.9	0.8	0.0	61,459	47.2	16,938
Mon-Khmer	31.7	67.2	0.1	1.2	1.9	0.0	6.7	0.4	0.0	23,629	52.7	8,991
Hmong-Mien	12.0	87.3	0.1	1.7	0.2	0.0	4.5	0.4	0.0	8,682	88.9	2,721
Chinese-Tibetan	32.2	67.6	0.0	0.1	0.0	0.0	2.9	0.0	0.0	3,111	69.4	543
Other, Missing, DK	36.0	60.7	0.3	1.8	1.0	2.8	0.8	1.0	0.0	541	41.9	103
Total	42.6	54.8	0.5	3.2	1.8	0.0	3.3	0.6	0.0	97,421	53.2	29,295

[1] **MICS indicator 4.2**

na = Not applicable

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

The amount of time it takes to obtain water is presented in Table WS.3 and the person who usually collects the water in Table WS.4. The amount of time reported is the amount of time required to go to the water source, get the water, and return home.

Table WS.3 shows that for 63 per cent of households, the source of drinking water is located on the premises, but this varies broadly across provinces and by urban/rural residence. For 31 per cent of households, it takes less than 30 minutes in total to get to the water source and bring water home, while 6 per cent of households spend 30 minutes or more for this purpose. Rural households spend more time collecting water than urban households, but fewer than 10 per cent of rural households need more than 30 minutes to get their water.

Table WS.3: Time to source of drinking water

Percent distribution of household population according to time to go to source of drinking water, get water and return, for users of improved and unimproved drinking water sources, Lao PDR 2011-12

	Time to source of drinking water									
	Users of improved drinking water sources				Users of unimproved drinking water sources					
	Water on premises	Less than 30 minutes	30 minutes or more	Missing/ DK	Water on premises	Less than 30 minutes	30 minutes or more	Missing/ DK	Total	Number of household members
Region										
North	47.8	30.5	0.3	0.8	6.1	13.4	1.0	0.1	100.0	31,310
Central	56.3	7.5	0.8	0.2	16.7	12.7	5.7	0.1	100.0	46,919
South	45.9	18.7	2.4	0.1	8.2	17.6	7.0	0.1	100.0	19,192
Province										
Vientiane Capital	86.0	1.8	0.2	0.3	9.2	2.0	0.1	0.3	100.0	11,694
Phongsaly	31.0	36.9	0.0	6.8	1.8	23.2	0.0	0.2	100.0	3,122
Luangnamtha	55.8	41.7	0.0	0.1	0.6	1.7	0.0	0.0	100.0	2,707
Oudomxay	74.5	3.7	0.0	0.0	9.0	10.7	2.1	0.0	100.0	5,181
Bokeo	48.1	28.4	0.1	0.0	9.2	12.2	1.8	0.2	100.0	2,749
Luangprabang	47.9	32.7	0.2	0.4	2.2	16.0	0.5	0.1	100.0	6,576
Huaphanh	37.3	48.9	0.6	0.1	2.8	8.7	1.5	0.0	100.0	5,163
Xayabury	38.2	28.2	0.8	0.0	14.3	17.7	0.7	0.1	100.0	5,813
Xiengkhuang	64.4	10.0	1.1	0.3	12.6	10.2	1.3	0.1	100.0	4,198
Vientiane	46.7	13.9	0.5	0.2	29.5	8.3	0.9	0.0	100.0	7,079
Borikhamxay	55.8	6.0	0.0	0.0	31.1	6.2	0.8	0.0	100.0	3,864
Khammuane	37.0	17.0	2.9	0.0	19.7	18.8	4.6	0.1	100.0	5,129
Savannakhet	42.0	5.3	0.9	0.1	12.9	23.4	15.2	0.1	100.0	14,954
Saravane	23.5	31.5	4.0	0.2	2.8	25.6	12.3	0.1	100.0	6,760
Sekong	39.3	29.7	6.0	0.2	4.8	13.8	6.3	0.0	100.0	1,806
Champasack	66.2	5.7	1.0	0.0	11.9	11.1	4.2	0.0	100.0	8,877
Attapeu	36.1	23.9	0.2	0.3	14.2	23.4	1.9	0.0	100.0	1,749
Residence										
Urban	83.4	4.0	0.1	0.2	8.6	2.8	0.9	0.1	100.0	24,845
Rural	40.6	21.6	1.3	0.4	12.7	17.7	5.7	0.1	100.0	72,576
..Rural with road	42.2	22.5	1.3	0.4	12.4	15.8	5.2	0.1	100.0	64,866
..Rural without road	27.1	13.7	0.8	0.5	15.3	33.3	9.3	0.1	100.0	7,710
Education of household head										
None	36.5	22.8	1.3	0.6	11.4	20.2	7.1	0.2	100.0	20,763
Primary	46.4	19.7	1.0	0.4	12.0	15.5	5.0	0.1	100.0	45,854
Lower secondary	59.2	13.4	1.2	0.2	13.2	10.6	2.2	0.1	100.0	14,280
Upper secondary	73.7	7.3	0.6	0.2	11.3	5.3	1.6	0.0	100.0	5,241
Post secondary non tertiary	73.2	7.7	0.5	0.1	10.6	5.5	2.3	0.1	100.0	6,740
Higher	89.8	1.5	0.0	0.1	5.9	1.9	0.3	0.4	100.0	4,387
DK/Missing	91.1	3.1	0.0	0.0	5.9	0.0	0.0	0.0	100.0	156
Wealth index quintile										
Poorest	24.0	32.2	1.5	0.5	7.5	27.6	6.7	0.1	100.0	19,489
Second	31.3	28.3	1.6	0.6	10.8	20.4	6.8	0.1	100.0	19,480
Middle	47.1	17.7	1.1	0.3	14.6	13.6	5.5	0.1	100.0	19,483
Fourth	66.9	6.2	0.5	0.3	17.0	6.0	3.0	0.1	100.0	19,480
Richest	88.2	1.1	0.1	0.2	8.3	1.7	0.2	0.2	100.0	19,489
Ethno-linguistic group of household head										
Lao-Tai	62.1	9.3	0.9	0.2	12.8	10.5	4.1	0.1	100.0	61,459
Mon-Khmer	31.2	28.7	1.5	0.6	8.8	22.4	6.7	0.2	100.0	23,629
Hmong-Mien	36.5	30.7	0.7	0.7	14.7	14.4	2.3	0.0	100.0	8,682
Chinese-Tibetan	37.4	43.7	0.0	1.4	1.8	15.5	0.0	0.1	100.0	3,111
Other, Missing, DK	53.9	26.8	0.0	0.3	8.1	9.2	1.7	0.0	100.0	541
Total	51.5	17.1	1.0	0.4	11.6	13.9	4.5	0.1	100.0	97,421

One third of households do not have a source of drinking water on their premises. Of these, Table WS.4 shows that in most households (71 per cent), an adult female is usually the person who collects the drinking water. Adult men and children under the age of 15 collect water in 17 per cent and 12 per cent, respectively.

Table WS.4: Person collecting water

Percentage of households without drinking water on premises, and percent distribution of households without drinking water on premises according to the person usually collecting drinking water used in the household, Lao PDR 2011-12

	Percentage of households without drinking water on premises	Number of households	Person usually collecting drinking water						Number of households without drinking water on premises
			Adult woman	Adult man	Female child under age 15	Male child under age 15	Missing/DK	Total	
Region									
North	43.6	6,065	74.4	11.3	10.4	3.3	0.6	100.0	2,645
Central	24.9	9,247	65.1	23.0	8.4	2.7	0.8	100.0	2,304
South	42.5	3,531	71.8	19.7	5.6	2.9	0.1	100.0	1,501
Province									
Vientiane Capital	4.9	2,497	41.1	47.3	7.0	1.4	3.2	100.0	122
Phongsaly	64.0	578	88.7	5.8	3.2	1.5	0.8	100.0	370
Luangnamtha	42.9	544	82.1	5.6	9.8	2.5	0.0	100.0	234
Oudomxay	15.2	913	69.9	23.2	5.3	0.9	0.7	100.0	139
Bokeo	37.6	520	66.1	14.3	16.0	3.6	0.0	100.0	195
Luangprabang	47.1	1,371	69.5	7.9	15.3	6.0	1.2	100.0	646
Huaphanh	57.2	869	83.2	4.4	10.8	1.6	0.0	100.0	497
Xayabury	44.4	1,269	63.5	23.4	8.6	3.9	0.6	100.0	563
Xiengkhuang	21.5	762	65.9	11.2	16.8	5.5	0.5	100.0	164
Vientiane	21.5	1,447	52.3	40.5	4.2	2.6	0.4	100.0	311
Borikhamxay	11.9	804	78.9	12.7	2.0	1.7	4.6	100.0	95
Khammuane	41.9	1,078	61.0	26.6	8.4	2.9	1.1	100.0	451
Savannakhet	43.6	2,659	71.5	16.8	8.9	2.5	0.3	100.0	1,160
Saravane	70.5	1,123	81.7	11.7	5.5	1.0	0.1	100.0	792
Sekong	52.4	283	75.2	8.1	12.5	4.2	0.0	100.0	148
Champasack	22.1	1,789	45.0	44.6	3.9	6.5	0.0	100.0	396
Attapeu	49.0	336	85.3	9.1	3.6	2.0	0.0	100.0	165
Residence									
Urban	7.8	5,177	64.4	23.7	5.7	4.8	1.4	100.0	403
Rural	44.2	13,666	70.9	17.0	8.7	2.9	0.5	100.0	6,046
..Rural with road	42.9	12,285	71.0	17.7	8.0	2.7	0.5	100.0	5,274
..Rural without road	56.0	1,380	69.9	12.6	13.3	4.0	0.2	100.0	773
Education of household head									
None	49.7	3,833	71.9	14.6	9.4	3.6	0.4	100.0	1,905
Primary	39.3	8,542	70.8	17.0	9.1	2.7	0.4	100.0	3,353
Lower secondary	26.3	2,925	69.3	22.2	5.3	2.4	0.8	100.0	768
Upper secondary	14.7	1,147	60.0	30.3	3.6	4.5	1.7	100.0	169
Post secondary non tertiary	15.0	1,413	65.1	23.4	7.4	3.6	0.5	100.0	211
Higher	4.3	958	(65.1)	(17.6)	(5.1)	(5.4)	(6.8)	100.0	41
DK/Missing	*	25	*	*	*	*	*	*	1
Wealth index quintile									
Poorest	67.8	3,585	75.0	10.8	10.6	3.4	0.3	100.0	2,430
Second	55.3	3,533	72.8	14.8	9.2	2.8	0.4	100.0	1,955
Middle	35.5	3,743	65.6	24.7	6.3	3.0	0.4	100.0	1,328
Fourth	15.2	3,962	58.8	32.8	4.3	2.4	1.6	100.0	604
Richest	3.3	4,019	54.1	37.1	2.5	1.7	4.7	100.0	132
Ethno-linguistic group of household head									
Lao-Tai	23.5	12,721	65.8	25.0	6.1	2.3	0.8	100.0	2,994
Mon-Khmer	59.4	4,140	74.0	10.8	11.2	3.7	0.4	100.0	2,458
Hmong-Mien	47.8	1,287	69.8	13.5	12.0	4.6	0.1	100.0	615
Chinese-Tibetan	59.3	579	86.5	6.6	5.3	1.6	0.0	100.0	343
Other, Missing, DK	33.2	117	(74.1)	(17.0)	(0.0)	(4.8)	(4.0)	100.0	39
Total	34.2	18,843	70.5	17.4	8.5	3.0	0.5	100.0	6,449

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

Use of Improved Sanitation Facilities

Inadequate disposal of human excreta is associated with a range of diseases including diarrhoeal diseases and polio. Improved sanitation can significantly reduce the prevalence of diarrheal disease, and significantly lessen the adverse health impacts of other disorders responsible for death and disease among millions of children in developing countries. An improved type of sanitation facility is defined as one that hygienically separates human excreta from human contact. Types of improved sanitation facilities include flush or pour-flush toilets (that flush to a piped sewer system, septic tank, or pit latrine), ventilated improved pit latrines, pit latrines with slabs, and composting toilets.

Fifty-nine per cent of the population of Lao PDR is living in households using an improved type of sanitation facility, while 38 per cent of the population has no sanitation facilities at all (Table WS.5). Use of improved types of sanitation facilities is more common in the Northern (61 per cent) and Central (68 per cent) regions than in the Southern region (35 per cent), and varies profoundly by urban/rural residence. Nine in ten people in urban areas are using an improved type of sanitation facility, while only 5 in 10 rural people are doing so. The most common types of facilities in urban areas are toilets that flush to a septic tank or pit latrine. In rural areas, a third of the population uses a toilet that flushes to a pit latrine (33 per cent), or simply have no facilities (48 per cent). The use of an improved type of facility varies broadly all across the country, from a low of 22 per cent in Saravane to a high of 98 per cent in Vientiane Capital. As one would expect, use of improved types of sanitation facilities is strongly correlated with wealth (fewer percentage of poorer people using improved types of facilities) and education (fewer percentage of less educated people using improved types of facilities).

Table WS.5: Types of sanitation facilities

Percent distribution of household population according to type of toilet facility used by the household, Lao PDR 2011-12

	Type of toilet facility used by household														
	Improved sanitation facility							Unimproved sanitation facility							
	Flush/pour flush to:														
	Piped sewer system	Septic tank	Pit latrine	Unknown place/ not sure/ DK where	Ventilated improved pit latrine	Pit latrine with slab	Compos-ting toilet	Flush/ pour flush to some-where else	Pit latrine without slab/ open pit	Bucket	Other	Open defecation (no facility, bush, field)	Total	Percentage using improved type of sanitation facility	Number of household members
Region															
North	0.1	15.6	44.1	0.0	0.1	0.9	0.4	0.0	4.8	0.0	0.2	33.6	100.0	61.3	31,310
Central	0.6	29.0	37.3	0.0	0.1	0.6	0.1	0.0	1.2	0.0	0.6	30.4	100.0	67.8	46,919
South	0.4	18.4	15.7	0.0	0.1	0.1	0.0	0.0	1.0	0.4	0.6	63.2	100.0	34.8	19,192
Province															
Vientiane Capital	2.4	53.8	40.8	0.0	0.2	0.4	0.2	0.1	0.2	0.0	0.4	1.4	100.0	97.9	11,694
Phongsaly	0.0	1.7	31.0	0.0	0.0	1.3	0.1	0.1	3.7	0.0	0.4	61.8	100.0	34.1	3,122
Luangnamtha	0.5	8.6	57.9	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.0	32.6	100.0	67.3	2,707
Oudomxay	0.0	8.5	35.2	0.0	0.1	0.5	0.0	0.0	8.3	0.0	0.5	46.9	100.0	44.2	5,181
Bokeo	0.0	4.7	64.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.2	30.5	100.0	69.3	2,749
Luangprabang	0.4	13.1	44.4	0.0	0.3	0.3	0.1	0.2	1.8	0.0	0.1	39.3	100.0	58.6	6,576
Huaphanh	0.0	28.0	30.1	0.0	0.0	0.7	0.0	0.0	12.2	0.0	0.3	28.7	100.0	58.8	5,163
Xayabury	0.0	29.9	55.3	0.0	0.1	2.6	1.9	0.0	3.4	0.1	0.1	6.8	100.0	89.7	5,813
Xiengkhuang	0.0	20.7	29.5	0.0	0.0	3.9	0.0	0.0	12.3	0.0	0.3	33.3	100.0	54.1	4,198
Vientiane	0.0	22.7	64.1	0.0	0.2	1.1	0.1	0.0	0.4	0.0	1.2	10.1	100.0	88.2	7,079
Borikhamxay	0.0	32.0	51.8	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.2	15.6	100.0	84.0	3,864
Khammuane	0.0	14.8	27.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.9	57.0	100.0	42.1	5,129
Savannakhet	0.1	19.1	23.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	56.5	100.0	43.0	14,954
Saravane	0.0	18.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	77.5	100.0	22.3	6,760
Sekong	3.2	4.2	29.7	0.0	0.0	0.6	0.0	0.0	9.7	0.0	0.5	52.1	100.0	37.7	1,806
Champasack	0.2	21.6	21.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.9	55.8	100.0	43.2	8,877
Attapeu	0.2	18.3	17.7	0.0	1.0	0.1	0.0	0.0	0.7	4.4	0.0	57.6	100.0	37.2	1,749
Residence															
Urban	1.3	47.9	41.4	0.0	0.2	0.4	0.0	0.0	0.5	0.1	0.4	7.7	100.0	91.3	24,845
Rural	0.1	14.0	33.2	0.0	0.1	0.7	0.2	0.0	2.9	0.1	0.5	48.2	100.0	48.2	72,576
..Rural with road	0.1	15.2	34.9	0.0	0.1	0.7	0.2	0.0	3.1	0.1	0.5	45.0	100.0	51.2	64,866
..Rural without road	0.0	3.6	18.1	0.0	0.0	0.6	0.3	0.0	1.7	0.0	0.6	75.2	100.0	22.5	7,710

Table WS.5: Types of sanitation facilities

Percent distribution of household population according to type of toilet facility used by the household, Lao PDR 2011-12

	Type of toilet facility used by household														
	Improved sanitation facility							Unimproved sanitation facility							
	Flush/pour flush to:														
	Piped sewer system	Septic tank	Pit latrine	Unknown place/ not sure/ DK where	Ventilated improved pit latrine	Pit latrine with slab	Compos-ting toilet	Flush/ pour flush to some-where else	Pit latrine without slab/ open pit	Bucket	Other	Open defecation (no facility, bush, field)	Total	Percentage using improved type of sanitation facility	Number of household members
Education of household head															
None	0.1	11.2	27.3	0.0	0.1	0.4	0.3	0.0	1.8	0.1	0.2	58.5	100.0	39.4	20,763
Primary	0.1	17.6	34.7	0.0	0.1	0.6	0.2	0.0	3.1	0.1	0.5	42.9	100.0	53.3	45,854
Lower secondary	0.5	27.2	43.7	0.0	0.1	0.9	0.2	0.0	2.6	0.0	0.7	24.1	100.0	72.5	14,280
Upper secondary	0.8	41.0	42.0	0.0	0.1	0.4	0.1	0.0	0.8	0.1	0.8	14.0	100.0	84.4	5,241
Post secondary non tertiary	1.3	42.4	42.3	0.0	0.1	0.7	0.1	0.1	0.6	0.0	0.4	12.0	100.0	86.9	6,740
Higher	2.8	60.5	33.1	0.0	0.3	0.5	0.0	0.0	0.1	0.0	0.1	2.7	100.0	97.2	4,387
DK/Missing	0.0	56.1	33.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	100.0	89.9	156
Wealth index quintile															
Poorest	0.0	1.0	10.3	0.0	0.0	0.8	0.5	0.0	5.3	0.1	0.3	81.6	100.0	12.7	19,489
Second	0.1	5.3	27.9	0.0	0.1	1.0	0.3	0.1	4.0	0.1	0.6	60.7	100.0	34.5	19,480
Middle	0.0	14.9	43.8	0.0	0.1	1.0	0.1	0.1	2.2	0.2	1.0	36.7	100.0	59.9	19,483
Fourth	0.2	32.4	56.2	0.0	0.1	0.3	0.0	0.0	0.1	0.1	0.3	10.3	100.0	89.3	19,480
Richest	1.8	59.7	38.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.3	100.0	99.6	19,489
Ethno-linguistic group of household head															
Lao-Tai	0.6	32.8	39.4	0.0	0.1	0.5	0.2	0.0	0.9	0.1	0.5	24.8	100.0	73.6	61,459
Mon-Khmer	0.2	3.4	25.2	0.0	0.2	0.7	0.2	0.0	5.7	0.2	0.4	63.8	100.0	29.9	23,629
Hmong-Mien	0.0	8.9	36.8	0.0	0.0	0.4	0.2	0.0	2.4	0.0	0.4	50.8	100.0	46.4	8,682
Chinese-Tibetan	0.0	2.4	26.1	0.0	0.1	1.3	0.1	0.1	4.2	0.0	0.3	65.5	100.0	30.0	3,111
Other, Missing, DK	2.6	38.9	29.5	0.0	0.0	0.6	0.0	0.0	0.7	0.0	0.9	26.8	100.0	71.7	541
Total	0.4	22.6	35.3	0.0	0.1	0.6	0.2	0.0	2.3	0.1	0.5	37.9	100.0	59.2	97,421

Table WS.6 shows the distribution of the household population by whether or not their household facility is improved or unimproved and shared or not shared with other households. Clearly, sharing sanitation facilities is not at all common in Lao PDR. Some 57 per cent of people use an improved sanitation facility that is not shared with other households, while 38 per cent have no facility at all (referred to in the table as 'open defecation'). Thus, findings in this table are similar to the findings discussed in Table WS.5.

Table WS.6: Use and sharing of sanitation facilities

Percent distribution of household population by use of private and public sanitation facilities and use of shared facilities, by users of improved and unimproved sanitation facilities, Lao PDR 2011-12

	Users of improved sanitation facilities					Users of unimproved sanitation facilities							
			Shared by					Shared by					
	Not shared [1]	Public facility	5 households or less	More than 5 households	Missing/DK	Not shared	Public facility	5 households or less	More than 5 households	Missing/DK	Open defecation (no facility, bush, field)	Total	Number of household members
Region													
North	59.7	0.2	1.1	0.2	0.1	4.9	0.1	0.1	0.0	0.0	33.6	100.0	31,310
Central	64.6	0.3	2.1	0.3	0.4	1.7	0.0	0.1	0.0	0.0	30.4	100.0	46,919
South	33.5	0.1	0.8	0.3	0.1	1.4	0.1	0.5	0.0	0.0	63.2	100.0	19,192
Province													
Vientiane Capital	94.1	0.8	1.9	0.7	0.4	0.5	0.0	0.2	0.0	0.0	1.4	100.0	11,694
Phongsaly	32.9	0.3	0.5	0.2	0.1	3.9	0.2	0.0	0.0	0.0	61.8	100.0	3,122
Luangnamtha	66.8	0.1	0.5	0.0	0.0	0.1	0.0	0.0	0.0	0.0	32.6	100.0	2,707
Oudomxay	43.5	0.2	0.4	0.1	0.1	8.2	0.2	0.5	0.0	0.0	46.9	100.0	5,181
Bokeo	65.1	0.0	3.5	0.1	0.6	0.2	0.0	0.0	0.0	0.0	30.5	100.0	2,749
Luangprabang	56.7	0.3	0.9	0.6	0.1	2.0	0.1	0.0	0.1	0.0	39.3	100.0	6,576
Huaphanh	57.8	0.1	0.7	0.1	0.0	12.4	0.1	0.1	0.0	0.0	28.7	100.0	5,163
Xayabury	87.9	0.0	1.7	0.1	0.0	3.4	0.0	0.1	0.0	0.0	6.8	100.0	5,813
Xiengkhuang	53.0	0.1	0.8	0.1	0.2	12.4	0.1	0.2	0.0	0.0	33.3	100.0	4,198
Vientiane	85.0	0.7	2.1	0.1	0.3	1.4	0.1	0.0	0.0	0.2	10.1	100.0	7,079
Borikhamxay	83.1	0.0	0.8	0.1	0.0	0.3	0.0	0.0	0.1	0.0	15.6	100.0	3,864
Khammuane	39.8	0.1	1.4	0.4	0.5	0.8	0.0	0.0	0.0	0.0	57.0	100.0	5,129
Savannakhet	39.0	0.1	3.0	0.2	0.7	0.4	0.0	0.0	0.0	0.0	56.5	100.0	14,954
Saravane	21.2	0.1	0.8	0.1	0.1	0.2	0.0	0.0	0.0	0.0	77.5	100.0	6,760
Sekong	35.2	0.4	1.4	0.6	0.1	8.1	0.0	1.9	0.0	0.1	52.1	100.0	1,806
Champasack	41.9	0.0	0.8	0.3	0.2	0.2	0.1	0.6	0.0	0.1	55.8	100.0	8,877
Attapeu	36.6	0.3	0.3	0.1	0.0	5.1	0.0	0.0	0.0	0.0	57.6	100.0	1,749
Residence													
Urban	88.0	0.3	2.1	0.4	0.5	0.7	0.1	0.1	0.0	0.0	7.7	100.0	24,845
Rural	46.3	0.2	1.3	0.2	0.2	3.3	0.0	0.2	0.0	0.0	48.2	100.0	72,576
..Rural with road	49.2	0.2	1.4	0.2	0.2	3.5	0.0	0.2	0.0	0.0	45.0	100.0	64,866
..Rural without road	22.1	0.1	0.2	0.1	0.1	2.0	0.0	0.2	0.0	0.0	75.2	100.0	7,710

[1] **MICS indicator 4.3; MDG indicator 7.9**

Table WS.6: Use and sharing of sanitation facilities

Percent distribution of household population by use of private and public sanitation facilities and use of shared facilities, by users of improved and unimproved sanitation facilities, Lao PDR 2011-12

	Users of improved sanitation facilities					Users of unimproved sanitation facilities							
			Shared by					Shared by					
	Not shared [1]	Public facility	5 households or less	More than 5 households	Missing/DK	Not shared	Public facility	5 households or less	More than 5 households	Missing/DK	Open defecation (no facility, bush, field)	Total	Number of household members
Education of household head													
None	37.5	0.1	1.4	0.1	0.4	2.0	0.0	0.1	0.0	0.0	58.5	100.0	20,763
Primary	51.4	0.1	1.3	0.3	0.2	3.5	0.0	0.1	0.0	0.0	42.9	100.0	45,854
Lower secondary	69.6	0.4	1.8	0.4	0.3	2.9	0.0	0.3	0.0	0.1	24.1	100.0	14,280
Upper secondary	80.7	0.5	2.3	0.3	0.6	1.2	0.1	0.2	0.0	0.1	14.0	100.0	5,241
Post secondary non tertiary	83.9	0.6	1.7	0.3	0.4	0.9	0.1	0.1	0.0	0.0	12.0	100.0	6,740
Higher	95.1	0.8	1.0	0.3	0.0	0.1	0.0	0.1	0.0	0.0	2.7	100.0	4,387
DK/Missing	84.3	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1	100.0	156
Wealth index quintile													
Poorest	12.1	0.0	0.4	0.1	0.0	5.5	0.0	0.1	0.0	0.0	81.6	100.0	19,489
Second	33.0	0.1	1.3	0.2	0.0	4.4	0.1	0.2	0.0	0.0	60.7	100.0	19,480
Middle	56.8	0.2	2.1	0.5	0.3	2.9	0.1	0.3	0.0	0.1	36.7	100.0	19,483
Fourth	85.7	0.4	2.3	0.3	0.6	0.3	0.0	0.1	0.0	0.0	10.3	100.0	19,480
Richest	97.1	0.5	1.4	0.3	0.4	0.1	0.0	0.0	0.0	0.0	0.3	100.0	19,489
Ethno-linguistic group of household head													
Lao-Tai	70.9	0.3	1.9	0.3	0.4	1.3	0.0	0.2	0.0	0.0	24.8	100.0	61,459
Mon-Khmer	29.0	0.2	0.6	0.1	0.1	6.0	0.1	0.2	0.0	0.0	63.8	100.0	23,629
Hmong-Mien	43.3	0.1	2.0	0.7	0.2	2.7	0.0	0.1	0.0	0.0	50.8	100.0	8,682
Chinese-Tibetan	28.8	0.3	0.5	0.2	0.1	4.3	0.2	0.0	0.0	0.0	65.5	100.0	3,111
Other, Missing, DK	70.4	0.0	0.7	0.6	0.0	1.5	0.0	0.0	0.0	0.0	26.8	100.0	541
Total	56.9	0.2	1.5	0.3	0.3	2.7	0.0	0.2	0.0	0.0	37.9	100.0	97,421

[1] **MICS indicator 4.3; MDG indicator 7.9**

The percentage distribution of children age 0-2 years according to the place of disposal of the child's faeces is shown in Table WS.7. Also shown is the percentage of children age 0-2 years whose stools were disposed of safely the last time the child passed stools. Disposal of a child's faeces is considered safe when it is done either by the child using a toilet or by rinsing the stool into a toilet or latrine.

Nationally, only 19 per cent of children's stools are disposed of safely. The most common way to address stool disposal is to leave them in the open (43 per cent), followed by burial at 19 per cent. Disposal of children's stools varies dramatically by education and wealth quintile, from only 5 per cent of stools safely disposed of among the lowest categories, increasing to about half of stools safely disposed of among the highest educated and wealthiest.

Table WS.7: Disposal of child's faeces

Percent distribution of children age 0-2 years according to place of disposal of child's faeces, and the percentage of children age 0-2 years whose stools were disposed of safely the last time the child passed stools, Lao PDR 2011-12

	Place of disposal of child's faeces									Percentage of children whose last stools were disposed of safely[1]	Number of children age 0-2 years
	Child used toilet /latrine	Put /rinsed into toilet or latrine	Put /rinsed into drain or ditch	Thrown into garbage	Buried	Left in the open	Other	Missing/ DK	Total		
Type of sanitaton facility in dwelling											
Improved	23.0	12.4	2.2	9.2	18.1	21.0	11.9	2.2	100.0	35.5	3,336
Unimproved	5.4	3.0	0.4	0.2	12.4	61.8	15.5	1.3	100.0	8.4	190
Open defacation	0.6	0.4	1.1	1.2	19.4	64.9	11.0	1.3	100.0	1.0	3,095
Region											
North	10.6	6.2	1.4	4.8	11.1	47.6	16.5	1.8	100.0	16.8	2,079
Central	16.4	6.9	2.1	7.6	18.6	36.7	9.6	2.1	100.0	23.3	3,087
South	4.8	6.2	1.1	0.7	29.0	48.5	8.6	1.1	100.0	11.0	1,455
Province											
Vientiane Capital	32.2	18.0	2.8	20.4	9.9	4.2	9.2	3.3	100.0	50.2	634
Phongsaly	3.0	5.5	1.1	5.5	2.6	73.5	1.6	7.3	100.0	8.5	215
Luangnamtha	14.2	5.9	0.0	5.0	14.5	40.8	18.0	1.5	100.0	20.1	165
Oudomxay	7.4	1.6	0.5	0.9	7.8	57.2	23.0	1.5	100.0	9.1	418
Bokeo	11.3	4.3	1.3	3.7	6.2	68.6	4.1	0.5	100.0	15.6	204
Luangprabang	12.6	7.1	2.7	8.6	13.9	23.9	30.2	0.9	100.0	19.7	421
Huaphanh	12.3	1.1	0.3	0.4	3.2	60.8	21.4	0.5	100.0	13.4	352
Xayabury	13.3	19.2	2.9	10.2	28.4	23.0	0.7	2.2	100.0	32.5	303
Xiengkhuang	11.3	0.9	3.4	2.1	1.1	60.2	19.1	1.8	100.0	12.2	314
Vientiane	27.3	7.7	0.8	10.0	12.7	23.0	16.9	1.7	100.0	35.0	455
Borikhamxay	27.5	3.4	5.7	5.9	17.1	35.2	3.7	1.5	100.0	30.9	245
Khammuane	5.4	1.3	1.1	5.5	13.6	56.9	14.8	1.4	100.0	6.7	377
Savannakhet	5.2	4.6	1.3	1.8	33.7	48.1	3.4	1.9	100.0	9.8	1,063
Saravane	3.3	4.1	0.4	0.2	18.1	69.0	2.9	2.0	100.0	7.4	558
Sekong	6.0	6.4	2.0	0.4	6.2	72.7	5.9	0.4	100.0	12.4	150
Champasack	6.2	8.1	1.4	0.7	48.0	20.2	15.0	0.4	100.0	14.4	625
Attapeu	3.3	5.1	0.9	4.0	9.3	70.1	6.1	1.2	100.0	8.4	122
Residence											
Urban	27.1	16.1	2.1	13.1	15.1	14.4	9.9	2.3	100.0	43.2	1,431
Rural	7.9	3.9	1.5	3.1	19.5	50.5	12.0	1.6	100.0	11.8	5,191
..Rural with road	8.6	4.2	1.7	3.3	19.4	49.3	11.7	1.8	100.0	12.8	4,554
..Rural without road	2.5	1.9	0.4	1.2	20.2	59.0	14.3	0.5	100.0	4.3	636
Education of household head											
None	3.1	1.4	0.8	1.0	11.5	70.0	11.1	1.1	100.0	4.5	2,011
Primary	10.2	5.5	1.9	3.5	25.1	41.4	10.7	1.6	100.0	15.7	2,721
Lower secondary	20.1	11.4	2.3	7.7	20.2	22.2	14.3	1.9	100.0	31.4	1,018
Upper secondary	30.3	12.8	1.4	17.9	12.7	8.8	12.6	3.6	100.0	43.1	475
Post secondary non tertiary	26.8	20.6	1.3	12.8	15.5	7.4	11.4	4.1	100.0	47.4	219
Higher	28.6	18.3	4.2	21.3	8.0	5.2	11.4	3.1	100.0	46.9	179
Wealth index quintile											
Poorest	1.7	0.7	0.8	1.3	10.2	72.1	12.1	1.2	100.0	2.3	1,861
Second	4.7	2.1	1.2	1.4	20.7	56.7	11.8	1.5	100.0	6.8	1,391
Middle	11.1	5.7	2.4	2.8	26.4	37.5	12.4	1.7	100.0	16.8	1,231
Fourth	20.3	13.0	2.4	6.5	29.5	15.9	10.6	1.9	100.0	33.2	1,119
Richest	33.1	17.3	2.0	19.2	9.3	5.7	10.3	3.1	100.0	50.4	1,020
Ethno-linguistic group of household head											
Lao-Tai	17.8	9.9	2.0	7.8	26.1	23.9	10.7	1.9	100.0	27.7	3,680
Mon-Khmer	4.0	2.5	1.0	1.8	10.0	68.6	10.8	1.2	100.0	6.6	1,857
Hmong-Mien	6.3	1.5	1.8	2.5	8.2	59.9	17.9	1.9	100.0	7.8	839
Chinese-Tibetan	3.1	1.4	1.0	2.5	5.4	74.9	8.8	2.9	100.0	4.6	216
Other, Missing, DK	(31.2)	(15.4)	(0.0)	(0.8)	(5.5)	(31.1)	(5.5)	(10.5)	100.0	(46.6)	29
Total	12.0	6.5	1.6	5.2	18.5	42.7	11.5	1.8	100.0	18.6	6,622

[1] **MICS indicator 4.4**

Note: Figures in parentheses are based on 25-49 unweighted cases.

A ‘service ladder’ is a concept developed by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation. This allows differences in the quality of drinking water and sanitation to be analysed, and the quality of water to be ranked in a three rung ’ladder’, and sanitation to be ranked in a four rung ladder.[1] For sanitation, this gives an understanding of: the proportion of the population with no sanitation facilities at all; those reliant on technologies defined by JMP as ’unimproved’; those sharing sanitation facilities of otherwise acceptable technology; and those using ‘improved’ sanitation facilities.

Table WS.8 presents the distribution of the household population by drinking water and sanitation ladders. The table also shows the percentage of household members using both improved sources of drinking water and sanitary means of excreta disposal. In Lao PDR, 46 per cent of households are using both improved drinking water sources and improved sanitation facilities.

About 8 in 10 urban households are using both improved drinking water sources and improved sanitation facilities while only about 3 in 10 rural households are doing so. An equally broad spectrum is also seen across provinces. The percentage of households using both improved drinking water sources and improved sanitation facilities varies from a low of 15 to 30 per cent in Saravane, Attapeu, Savannakhet and Khammuane provinces, to a high of 84 per cent in Vientiane Capital, with other provinces ranging from 31 to 66 per cent. Both education level of the household head and household wealth quintile have a strong positive correlation with the percentage of households using both improved drinking water sources and improved sanitation facilities.

[1] WHO and UNICEF JMP, 2008.

Table WS.8: Drinking water and sanitation ladders

Percentage of household population by drinking water and sanitation ladders, Lao PDR 2011-12

	Percentage of household population using:										
	Improved drinking water[1]					Unimproved sanitation					
	Piped into dwelling, plot or yard	Other improved	Unimproved drinking water	Total	Improved sanitation[2]	Shared improved facilities	Unimproved facilities	Open defecation	Total	Improved drinking water sources and improved sanitation	Number of household members
Region											
North	21.6	57.8	20.6	100.0	59.7	1.5	5.1	33.6	100.0	51.1	31,310
Central	23.2	41.6	35.2	100.0	64.6	3.2	1.8	30.4	100.0	50.0	46,919
South	15.6	51.5	32.9	100.0	33.5	1.3	2.0	63.2	100.0	26.2	19,192
Province											
Vientiane Capital	51.5	36.8	11.7	100.0	94.1	3.8	0.7	1.4	100.0	83.5	11,694
Phongsaly	14.5	60.2	25.3	100.0	32.9	1.2	4.1	61.8	100.0	31.4	3,122
Luangnamtha	30.7	66.9	2.4	100.0	66.8	0.6	0.1	32.6	100.0	66.0	2,707
Oudomxay	18.6	59.7	21.8	100.0	43.5	0.8	8.9	46.9	100.0	40.3	5,181
Bokeo	9.6	67.0	23.4	100.0	65.1	4.2	0.2	30.5	100.0	52.3	2,749
Luangprabang	32.9	48.3	18.9	100.0	56.7	1.9	2.1	39.3	100.0	54.3	6,576
Huaphanh	20.8	66.1	13.1	100.0	57.8	0.9	12.5	28.7	100.0	53.3	5,163
Xayabury	17.5	49.7	32.8	100.0	87.9	1.8	3.5	6.8	100.0	57.8	5,813
Xiengkhuang	13.1	62.7	24.2	100.0	53.0	1.1	12.6	33.3	100.0	45.9	4,198
Vientiane	11.8	49.5	38.7	100.0	85.0	3.2	1.7	10.1	100.0	54.0	7,079
Borikhamxay	24.4	37.5	38.2	100.0	83.1	0.9	0.4	15.6	100.0	52.2	3,864
Khammuane	8.4	48.6	43.1	100.0	39.8	2.4	0.9	57.0	100.0	29.9	5,129
Savannakhet	14.0	34.3	51.6	100.0	39.0	4.1	0.4	56.5	100.0	29.4	14,954
Saravane	9.9	49.3	40.8	100.0	21.2	1.1	0.2	77.5	100.0	15.0	6,760
Sekong	23.8	51.3	24.8	100.0	35.2	2.5	10.1	52.1	100.0	31.2	1,806
Champasack	18.3	54.5	27.2	100.0	41.9	1.3	1.0	55.8	100.0	33.8	8,877
Attapeu	14.9	45.6	39.5	100.0	36.6	0.7	5.1	57.6	100.0	25.6	1,749
Residence											
Urban	59.2	28.4	12.4	100.0	88.0	3.4	1.0	7.7	100.0	79.1	24,845
Rural	8.1	55.7	36.1	100.0	46.3	1.9	3.6	48.2	100.0	34.2	72,576
..Rural with road	8.8	57.7	33.5	100.0	49.2	2.1	3.7	45.0	100.0	36.4	64,866
..Rural without road	2.9	39.1	58.0	100.0	22.1	0.5	2.3	75.2	100.0	15.4	7,710

[1] MICS indicator 4.1; MDG indicator 7.8

[2] MICS indicator 4.3; MDG indicator 7.9

Table WS.8: Drinking water and sanitation ladders

Percentage of household population by drinking water and sanitation ladders, Lao PDR 2011-12

	Percentage of household population using:										
	Improved drinking water[1]					Unimproved sanitation					
	Piped into dwelling, plot or yard	Other improved	Unimproved drinking water	Total	Improved sanitation[2]	Shared improved facilities	Unimproved facilities	Open defecation	Total	Improved drinking water sources and improved sanitation	Number of household members
Education of household head											
None	10.7	50.5	38.8	100.0	37.5	1.9	2.1	58.5	100.0	28.1	20,763
Primary	15.0	52.4	32.6	100.0	51.4	2.0	3.8	42.9	100.0	40.0	45,854
Lower secondary	24.1	49.9	26.0	100.0	69.6	2.9	3.4	24.1	100.0	55.2	14,280
Upper secondary	39.2	42.7	18.1	100.0	80.7	3.7	1.6	14.0	100.0	69.0	5,241
Post secondary non tertiary	43.3	38.2	18.5	100.0	83.9	3.0	1.1	12.0	100.0	71.3	6,740
Higher	68.6	22.8	8.6	100.0	95.1	2.1	0.2	2.7	100.0	88.3	4,387
DK/Missing	57.5	36.6	5.9	100.0	84.3	5.6	0.0	10.1	100.0	84.3	156
Wealth index quintile											
Poorest	3.2	54.9	41.9	100.0	12.1	0.5	5.7	81.6	100.0	10.5	19,489
Second	7.3	54.6	38.1	100.0	33.0	1.6	4.8	60.7	100.0	27.1	19,480
Middle	14.0	52.1	33.8	100.0	56.8	3.1	3.4	36.7	100.0	40.0	19,483
Fourth	24.5	49.4	26.1	100.0	85.7	3.6	0.4	10.3	100.0	63.6	19,480
Richest	56.8	32.8	10.4	100.0	97.1	2.5	0.1	0.3	100.0	87.1	19,489
Ethno-linguistic group of household head											
Lao-Tai	28.3	44.1	27.6	100.0	70.9	2.7	1.5	24.8	100.0	56.6	61,459
Mon-Khmer	7.4	54.6	38.0	100.0	29.0	0.9	6.3	63.8	100.0	24.2	23,629
Hmong-Mien	9.3	59.4	31.3	100.0	43.3	3.1	2.8	50.8	100.0	31.9	8,682
Chinese-Tibetan	15.5	67.0	17.4	100.0	28.8	1.2	4.5	65.5	100.0	27.3	3,111
Other, Missing, DK	31.3	49.7	19.1	100.0	70.4	1.3	1.5	26.8	100.0	65.1	541
Total	21.2	48.8	30.1	100.0	56.9	2.3	2.9	37.9	100.0	45.7	97,421

[1] MICS indicator 4.1; MDG indicator 7.8

[2] MICS indicator 4.3; MDG indicator 7.9

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V. Marriage and Sexual Activity

This chapter addresses the principal factors, other than contraception, that affect a woman's risk of becoming pregnant – marriage and sexual activity. For most women marriage marks the onset of regular exposure to the risk of pregnancy. Therefore, information on age at marriage is central to an understanding of fertility. Populations in which age at first marriage is low tend to have early childbearing and high fertility.

Current Marital Status

The percentage distribution of women and men age 15-49 by marital status is shown in Tables MS.1.1 and MS.1.2, according to age group. The term 'married' refers to legal or formal marriage, while the term 'living together' designates an informal union in which a man and a woman live together but a formal civil or religious ceremony has not taken place. In later tables that do not list 'living together' as a separate category, these women are included in the 'currently married / in a union' group. Respondents who are currently married, widowed, divorced or separated are referred to as 'ever married'.

Twenty-two per cent of women age 15-49 have never married, 71 per cent are currently married, 2 per cent are living together with a man, and 5 per cent are divorced, separated or widowed. The low proportion of women age 45-49 that have never been married indicates that marriage is nearly universal in Lao PDR.

The proportion age 15-49 that have never been married is notably higher among men than among women (32 per cent and 22 per cent, respectively). About two thirds of men (64 per cent) are currently married, 2 per cent are living together with a woman, and 2 per cent are divorced, separated or widowed. A significant proportion of men marry after reaching the age of 25, in contrast to women, who tend to marry before the age of 25. For example, 68 per cent of women age 20-24 are in a union, compared with only 47 per cent of men in the same age group. As with women, however, virtually all men have married by the time they reach 50.

Table MS.1.1: Current marital status

Percent distribution of women age 15-49 by current marital status, according to age, Lao PDR 2011-12

	Marital status								
	Never married	Married	Living together	Divorced	Separated	Widowed	Total	Percentage of women currently in union	Number of women
Age									
15-19	73.9	22.2	2.6	0.7	0.5	0.1	100.0	24.7	4,415
20-24	27.9	64.2	4.0	2.7	0.9	0.2	100.0	68.2	3,617
25-29	9.7	83.6	2.7	2.9	0.6	0.5	100.0	86.3	3,642
30-34	5.1	88.8	1.7	2.6	0.4	1.3	100.0	90.5	3,015
35-39	3.6	89.8	1.0	3.4	0.4	1.7	100.0	90.8	3,065
40-44	3.1	88.1	1.1	2.8	0.3	4.5	100.0	89.2	2,507
45-49	2.6	85.3	1.2	3.2	0.4	7.3	100.0	86.6	2,215
Total	22.4	70.6	2.2	2.5	0.5	1.8	100.0	72.8	22,476

Table MS.1.2: Current marital status

Percent distribution of men age 15-49 by current marital status, according to age, Lao PDR 2011-12

	Marital status								
	Never married	Married	Living together	Divorced	Separated	Widowed	Total	Percentage of men currently in union	Number of men
Age									
15-19	90.6	7.1	1.8	0.1	0.3	0.0	100.0	9.0	2,119
20-24	51.4	41.4	5.3	0.5	1.2	0.2	100.0	46.7	1,557
25-29	18.1	76.0	3.5	1.7	0.5	0.2	100.0	79.5	1,500
30-34	6.7	89.7	1.3	1.4	0.5	0.5	100.0	91.0	1,264
35-39	3.6	93.1	1.2	1.0	0.5	0.7	100.0	94.3	1,445
40-44	1.8	95.7	0.2	1.0	0.1	1.1	100.0	95.9	1,043
45-49	1.5	96.5	0.2	1.2	0.0	0.7	100.0	96.6	1,023
Total	31.8	64.3	2.1	0.9	0.5	0.4	100.0	66.4	9,951

Age at First Marriage

Age at first marriage has a major effect on childbearing because women who marry early have, on average, a longer period of exposure to the risk of pregnancy and give birth to a greater number of children over their lifetimes. LSIS interviewers obtained information on age at first marriage by asking respondents the month and year, or their age, at which they started living with their first partner.

The percentage of women and men who were first married by specific ages is shown in Tables MS.2.1 and MS. 2.2 according to age group and residence. The minimum legal age of marriage in Lao PDR is 18 for both women and men (Family Law of Lao PDR No. 05/NA dated 26 July 2008, Chapter 2, Article 9). Among women age 25-49, 37 per cent were married by the age of 18, and 58 per cent were married by the age of 20. The median age at first marriage among women age 25-49 is 19.2 years and has been relatively unchanged over the past two decades. Examining the percentages married before the age of 15 and 18 by different age groups allows us to see the trends in age at marriage over time. The percentage of women who married before the age of 18 slowly increased over time, from 32 per cent among the 45-49 age group to 41 per cent among the 25-29 age group, followed by a slight decrease in the 20-24 age group. However, fewer women in urban areas are getting married before the age of 18 than in rural areas.

Men tend to be older than women when they get married. Among men age 25-49, only 15 per cent were married by the age of 18 and 30 per cent by the age of 20. The median age at marriage for men age 25-49 is 22.5 years; three years older than women in the same age range (19.2 years). The median age at marriage among urban men is about three years older than among rural men. More women marry before the age of 18 than men (37 per cent and 15 per cent, respectively).

Table MS.2.1: Age at first marriage

Percentage of women age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Lao PDR 2011-12

Age	Percentage first married by exact age: 15	18	20	22	25	Percentage never married	Number of women	Median age at first marriage
TOTAL								
15-19	5.4	na	na	na	na	73.9	4,415	a
20-24	8.9	35.4	56.0	na	na	27.9	3,617	19.4
25-29	11.7	40.7	58.8	71.6	86.0	9.7	3,642	19.0
30-34	11.5	37.8	58.4	73.9	86.0	5.1	3,015	19.2
35-39	10.8	37.8	58.9	74.8	86.7	3.6	3,065	19.1
40-44	9.9	35.9	56.4	73.6	86.5	3.1	2,507	19.3
45-49	8.6	32.1	53.6	70.0	84.5	2.6	2,215	19.7
25-49	10.6	37.3	57.5	72.9	86.0	5.2	14,444	19.2
URBAN								
15-19	1.6	na	na	na	na	86.8	1,229	a
20-24	3.3	16.3	33.8	na	na	46.9	1,127	a
25-29	5.7	24.3	39.0	53.7	74.7	18.5	1,115	21.5
30-34	5.2	21.6	38.2	55.4	73.3	10.7	899	21.3
35-39	6.4	26.8	46.8	65.0	79.7	5.9	881	20.3
40-44	5.8	26.2	45.7	66.1	82.5	5.0	734	20.4
45-49	5.6	27.2	49.4	66.7	83.5	4.5	664	20.1
25-49	5.7	25.0	43.2	60.5	78.1	9.8	4,293	20.7
RURAL								
15-19	6.9	na	na	na	na	69.0	3,186	a
20-24	11.4	44.1	66.0	na	na	19.4	2,490	18.5
25-29	14.3	48.0	67.5	79.6	90.9	5.8	2,527	18.2
30-34	14.1	44.7	67.0	81.7	91.4	2.8	2,116	18.5
35-39	12.5	42.3	63.7	78.8	89.6	2.7	2,184	18.7
40-44	11.5	39.9	60.9	76.8	88.2	2.4	1,773	18.9
45-49	9.8	34.2	55.4	71.4	84.9	1.8	1,551	19.5
25-49	12.7	42.6	63.6	78.1	89.3	3.3	10,151	18.7

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

Table MS.2.2: Age at first marriage

Percentage of men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Lao PDR 2011-12

Age	Percentage first married by exact age: 15	18	20	22	25	Percentage never married	Number of men	Median age at first marriage
TOTAL								
15-19	1.8	na	na	na	na	90.6	2,119	a
20-24	2.6	12.7	27.1	na	na	51.4	1,557	a
25-29	3.0	16.7	31.3	46.2	68.4	18.1	1,500	22.5
30-34	4.3	16.0	33.1	48.8	69.6	6.7	1,264	22.2
35-39	3.2	14.3	28.1	45.7	69.5	3.6	1,445	22.4
40-44	3.8	15.6	30.2	47.1	71.2	1.8	1,043	22.3
45-49	3.0	11.8	24.0	37.4	61.7	1.5	1,023	23.5
25-49	3.4	15.0	29.6	45.4	68.3	7.0	6,275	22.5
URBAN								
15-19	1.6	na	na	na	na	94.2	576	a
20-24	1.5	5.3	12.0	na	na	70.1	463	a
25-29	1.4	9.2	15.7	28.3	50.8	31.3	426	24.9
30-34	3.0	6.3	17.6	31.4	50.9	13.3	382	24.8
35-39	1.3	5.0	15.7	32.0	55.3	7.1	373	24.5
40-44	1.5	10.3	20.1	32.9	60.8	2.6	263	23.9
45-49	2.4	8.8	17.7	25.6	50.6	3.4	317	24.9
25-49	1.9	7.8	17.1	30.0	53.2	13.0	1,761	24.6
RURAL								
15-19	1.9	na	na	na	na	89.3	1,543	a
20-24	3.1	15.9	33.4	na	na	43.5	1,094	a
25-29	3.6	19.7	37.5	53.4	75.4	12.8	1,074	21.5
30-34	4.8	20.2	39.8	56.4	77.7	3.8	882	21.2
35-39	3.9	17.5	32.4	50.5	74.4	2.4	1,072	21.9
40-44	4.6	17.4	33.6	51.9	74.7	1.6	780	21.8
45-49	3.3	13.2	26.8	42.7	66.6	0.7	706	22.9
25-49	4.0	17.9	34.4	51.4	74.1	4.7	4,514	21.8

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

Table MS.3 shows the median age at first marriage among women and men age 25-49, by background characteristics. Women and men age 15-24 are not included in this table because too few are married. Both women and men living in urban areas marry about two years later (20.7 and 22.6 years, respectively) than rural women and men (18.7 and 20.5 years, respectively). The median age at first marriage is a year younger in the North among both women and men compared with other regions, and ranges from a low of 18.2 years among women and 19.8 years among men in Huaphanh to a high of 21.2 years among women and 23.2 years among men in Vientiane Capital.

Among both women and men, there is a difference of more than four years in the median age at marriage between those with no education (18.2 and 20.1 years, respectively) and those with post-secondary education (22.7 and 24.5 years, respectively). The median age at marriage is at roughly the same level in the poorest three wealth quintiles, but is about two-and-a-half years later among women and men in the richest quintile. Women and men in Lao-Tai headed households have the highest median age at marriage (19.7 and 21.5 years, respectively) while marriage among women and men in Hmong-Mien headed households occurs, on average, two years earlier (17.5 and 19.4 years, respectively).

Table MS.3: Median age at first marriage

Median age at first marriage among women and men age 25-49 years, Lao PDR 2011-12

	Women age 25-49	Men age 25-49
Region		
North	18.5	20.4
Central	19.6	21.5
South	19.6	21.3
Province		
Vientiane Capital	21.2	23.2
Phongsaly	19.0	20.7
Luangnamtha	19.2	21.1
Oudomxay	18.5	20.4
Bokeo	18.4	20.4
Luangprabang	18.6	20.5
Huaphanh	18.2	19.8
Xayabury	18.3	20.2
Xiengkhuang	18.8	20.5
Vientiane	19.0	21.0
Borikhamxay	18.7	20.7
Khammuane	19.1	21.1
Savannakhet	18.9	20.9
Saravane	18.9	20.5
Sekong	18.8	20.9
Champasack	20.3	21.9
Attapeu	19.3	21.0
Residence		
Urban	20.7	22.6
Rural	18.7	20.5
..Rural with road	18.7	20.5
..Rural without road	18.6	20.5

	Women age 25-49	Men age 25-49
Women's education		
None	18.2	20.1
Primary	18.5	20.3
Lower secondary	19.6	21.3
Upper secondary	21.6	23.5
Post secondary non tertiary	22.7	24.5
Higher	a	a
Wealth index quintile		
Poorest	18.4	20.4
Second	18.3	20.2
Middle	18.6	20.5
Fourth	19.2	21.0
Richest	21.2	23.0
Ethno-linguistic group of household head		
Lao-Tai	19.7	21.5
Mon-Khmer	18.2	20.1
Hmong-Mien	17.5	19.4
Chinese-Tibetan	19.1	21.1
Other, Missing, DK	20.1	21.8
Total	19.2	21.1

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

Early Marriage

Table MS.4.1 presents the percentage of women age 15-49 years who first married or entered a marital union before their fifteenth birthday, the percentages of women age 20-49 years who first married or entered a marital union before their fifteenth and eighteenth birthdays, and the percentage of women age 15-19 years currently married or in a union. Almost half (45 per cent) of women age 20-49 in the Northern region were married before the age of 18 compared with one third of women in the Central and South regions. The lowest proportions are found in Vientiane Capital (20 per cent) and the highest in Huaphanh (48 per cent). Almost twice as many women are married before 18 in rural areas (43 per cent) than urban areas (23 per cent). The strongest relationship to marriage before 18 is with education, where half of women age 20-49 with no education were married before 18 compared with only 2 per cent of women with some education. A similar inverse relationship is seen by wealth index quintiles. Nearly 6 in 10 women in Hmong-Mien headed households marry before the age of 18; the highest among all ethno-linguistic groups.

One in four young women age 15-19 is currently married, with wide variation across provinces – varying from a low of 16 per cent in Vientiane Capital and 20 per cent in Champasack, to a high of 35 per cent in Phongsaly. The proportion currently married is quite different between urban (12 per cent) and rural (30 per cent) areas, and is strongly related to the level of education; 45 per cent of women age 15-19 years with no education are currently married compared with less than 1 per cent among women with some education. Similarly, the proportion of women age 15-19 currently married is high among the lowest wealth quintile (37 per cent) and low among the highest wealth quintiles (11 per cent). The highest percentage of women age 15-19 years currently married is among women in Hmong-Mien headed households (35 per cent).

Table MS.4.1: Early marriage

Percentage of women age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, and the percentage of women age 15-19 years currently married or in union, Lao PDR 2011-12

	Women age 15-49		Women age 20-49			Women age 15-19	
	Percentage married before age 15[1]	Number of women age 15-49 years	Percentage married before age 15	Percentage married before age 18[2]	Number of women age 20-49 years	Percentage of women 15-19 years currently married/in union[3]	Number of women age 15-19 years
Region							
North	11.8	7,057	12.9	44.5	5,654	28.3	1,403
Central	8.2	11,255	9.2	33.4	9,130	22.4	2,125
South	8.1	4,164	8.9	33.8	3,277	24.5	887
Province							
Vientiane Capital	4.1	3,288	4.4	19.9	2,760	15.5	527
Phongsaly	9.9	666	10.0	40.3	542	35.4	124
Luangnamtha	11.1	627	11.7	39.3	505	27.4	123
Oudomxay	13.9	1,182	15.6	45.6	911	28.6	271
Bokeo	10.9	620	11.7	46.3	496	33.7	124
Luangprabang	11.4	1,473	12.4	42.2	1,226	26.8	248
Huaphanh	12.4	1,086	14.1	48.3	840	23.1	246
Xayabury	11.6	1,402	12.7	46.6	1,136	28.8	267
Xiengkhuang	9.0	930	9.9	41.3	679	23.6	252
Vientiane	8.3	1,677	9.3	38.9	1,393	25.2	284
Borikhamxay	9.8	901	10.8	43.1	717	23.6	184
Khammuane	9.8	1,082	10.8	37.3	876	25.0	206
Savannakhet	11.1	3,376	12.9	38.6	2,705	25.2	672
Saravane	12.9	1,456	13.7	40.5	1,148	30.0	308
Sekong	11.1	388	12.5	41.0	295	25.1	94
Champasack	3.8	1,943	4.5	26.6	1,541	19.9	402
Attapeu	9.0	376	9.3	37.8	294	26.1	83
Residence							
Urban	4.6	6,649	5.2	23.2	5,420	12.1	1,229
Rural	11.3	15,827	12.4	42.9	12,641	29.6	3,186
..Rural with road	11.2	14,268	12.3	42.8	11,412	29.4	2,856
..Rural without road	12.4	1,559	13.8	43.6	1,229	31.2	330
Education							
None	17.5	4,660	18.0	49.6	4,212	45.0	448
Primary	11.9	8,955	12.1	44.9	7,575	39.2	1,380
Lower secondary	4.0	4,111	4.7	32.3	2,861	22.2	1,250
Upper secondary	0.9	2,496	1.6	13.2	1,347	6.0	1,149
Post secondary non tertiary	1.6	1,030	1.6	6.4	980	(3.0)	51
Higher	0.7	1,224	0.8	1.8	1,087	0.8	137
Wealth index quintile							
Poorest	16.3	3,809	17.4	48.0	3,124	36.6	685
Second	13.5	4,088	14.6	46.5	3,227	33.1	860
Middle	9.6	4,309	11.3	42.3	3,390	25.6	919
Fourth	6.8	4,694	7.5	34.7	3,741	22.3	952
Richest	3.4	5,577	4.0	20.6	4,578	11.0	999
Ethno-linguistic group of household head							
Lao-Tai	6.5	15,151	7.2	31.8	12,323	20.3	2,827
Mon-Khmer	15.1	4,913	17.1	46.7	3,910	31.4	1,003
Hmong-Mien	17.2	1,606	19.1	57.0	1,193	35.1	413
Chinese-Tibetan	11.1	685	11.4	40.5	536	30.1	148
Other, Missing, DK	9.5	121	11.8	32.4	98	(52.3)	24
Total	9.3	22,476	10.3	37.0	18,061	24.7	4,415

[1] **MICS indicator 8.6**

[2] **MICS indicator 8.7**

[3] **MICS indicator 8.8**

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table MS.4.2 presents the same information for men, and shows that the patterns of marriage before 18 are largely the same as among women. Early marriage is more prevalent in the Northern region, and in the more remote rural areas. The strong relationships with education and with wealth quintiles seen among women are also seen among men. For example, 24 per cent of men with no education were married before 18 compared with only 3 per cent of men with some education.

Nine per cent of young men age 15-19 are currently married, compared to 25 per cent of women of the same age. The provinces with the highest percentages are Phongsaly and Saravane (17 per cent). Differences are evident in relation to education, wealth quintile and ethno-linguistic group. The percentage of men age 15-19 who are currently married steadily decreases as their education increases (17 per cent among men with no education compared with only 3 per cent among men with higher education), and as wealth increases (17 per cent in the poorest quintile and 6 per cent in the richest).

Table MS.4.2: Early marriage

Percentage of men age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of men age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, and the percentage of men age 15-19 years currently married or in union, Lao PDR 2011-12

	Men age 15-49		Men age 20-49			Men age 15-19	
	Percentage married before age 15[1]	Number of men age 15-49 years	Percentage married before age 15	Percentage married before age 18[2]	Number of men age 20-49 years	Percentage of men 15-19 years currently married/in union[3]	Number of men age 15-19 years
Region							
North	3.1	3,172	3.5	18.0	2,554	10.6	617
Central	3.1	4,990	3.3	13.3	3,888	7.9	1,103
South	2.3	1,789	2.8	12.0	1,390	9.4	399
Province							
Vientiane Capital	2.5	1,379	2.7	7.6	1,130	6.4	249
Phongsaly	4.2	318	4.6	27.7	245	17.1	72
Luangnamtha	4.4	266	4.4	18.3	216	13.8	51
Oudomxay	3.4	530	4.0	21.1	414	13.6	116
Bokeo	4.8	267	5.1	16.0	220	11.5	48
Luangprabang	1.9	644	2.3	12.5	540	8.9	104
Huaphanh	2.5	511	3.2	21.8	380	8.9	131
Xayabury	2.5	635	3.0	14.6	539	4.2	96
Xiengkhuang	3.2	442	3.6	15.9	311	12.9	131
Vientiane	1.7	721	2.0	10.8	566	4.1	155
Borikhamxay	1.9	390	2.3	13.2	311	6.3	79
Khammuane	2.3	503	2.7	14.6	388	6.8	115
Savannakhet	4.9	1,556	5.0	18.8	1,182	9.4	374
Saravane	2.9	597	3.0	15.4	467	17.1	129
Sekong	2.7	162	3.3	11.8	121	7.8	41
Champasack	2.2	873	2.8	9.8	676	5.4	196
Attapeu	0.8	157	0.9	11.4	125	4.9	33
Residence							
Urban	1.8	2,800	1.8	7.3	2,224	5.6	576
Rural	3.4	7,151	3.8	17.5	5,608	10.2	1,543
..Rural with road	3.3	6,457	3.7	16.7	5,066	9.6	1,390
..Rural without road	4.9	694	4.8	24.3	542	16.3	152
Education							
None	6.2	923	6.1	24.0	822	17.2	101
Primary	4.4	3,872	4.7	20.1	3,260	16.4	613
Lower secondary	2.0	2,351	2.3	13.1	1,634	7.3	718
Upper secondary	1.1	1,450	1.5	4.8	836	3.0	614
Post secondary non tertiary	0.4	608	0.4	2.7	590	*	18
Higher	0.5	747	0.3	2.7	690	(3.0)	57
Wealth index quintile							
Poorest	4.5	1,692	4.7	22.8	1,379	16.6	313
Second	4.6	1,911	5.1	20.8	1,483	11.0	429
Middle	3.1	2,039	3.7	15.9	1,564	9.4	475
Fourth	1.9	2,092	2.2	9.5	1,608	4.5	484
Richest	1.3	2,217	1.2	6.5	1,799	5.9	418
Ethno-linguistic group of household head							
Lao-Tai	2.0	6,635	2.2	10.9	5,250	5.4	1,385
Mon-Khmer	4.8	2,191	5.2	20.4	1,722	13.3	470
Hmong-Mien	5.6	728	6.1	26.2	556	21.6	172
Chinese-Tibetan	5.6	335	6.1	25.6	259	16.4	76
Other, Missing, DK	3.1	62	4.2	(16.6)	45	*	17
Total	3.0	9,951	3.3	14.6	7,832	9.0	2,119

[1] **MICS indicator 8.6**

[2] **MICS indicator 8.7**

[3] **MICS indicator 8.8**

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

Spousal Age Difference

Table MS.5 shows that about one in four women age 15-19 and age 20-24 is currently married to a man who is older by five to nine years (26 and 25 per cent, respectively), while 1 in 10 women of each age group is married to a man 10 or more years older (11 and 9 per cent, respectively). The highest proportions of women age 20-24 who married a man 10 or more years older are found in Vientiane Capital and Sekong (both 14 per cent) and in Vientiane province (12 per cent). A large age difference of 10 or more years between spouses is more prevalent in urban areas than rural areas, particularly for women age 20-24 (15 and 7 per cent, respectively). The prevalence of an age difference of 10 or more years is twice as high in the richest quintile than the poorest quintile among women age 15-19 and 20-24.

Table MS.5: Spousal age difference

Percent distribution of women currently married/in union age 15-19 and 20-24 years according to the age difference with their husband or partner, Lao PDR 2011-12

	Percentage of currently married/in union women age 15-19 years whose husband or partner is:							Percentage of currently married/in union women age 20-24 years whose husband or partner is:						
	Younger	0-4 years older	5-9 years older	10+ years older[1]	Husband /partner's age unknown	Total	Number of women age 15-19 years currently married/ in union	Younger	0-4 years older	5-9 years older	10+ years older[2]	Husband /partner's age unknown	Total	Number of women age 20-24 years currently married/ in union
Region														
North	7.3	58.6	22.4	10.0	1.7	100.0	397	13.6	54.5	22.6	7.4	1.9	100.0	923
Central	9.9	48.6	28.4	12.4	0.7	100.0	477	10.4	52.7	26.0	10.5	0.5	100.0	1,111
South	4.9	53.9	29.0	11.6	0.5	100.0	218	14.8	48.9	25.4	8.3	2.6	100.0	433
Province														
Vientiane Capital	(17.7)	(26.4)	(36.6)	(19.2)	(0.0)	100.0	82	12.0	48.2	25.1	13.9	0.7	100.0	240
Phongsaly	17.8	70.3	7.6	4.3	0.0	100.0	44	25.4	51.6	16.0	6.4	0.6	100.0	98
Luangnamtha	12.0	58.3	17.9	10.4	1.5	100.0	34	16.6	56.0	18.0	8.8	0.7	100.0	91
Oudomxay	8.6	51.4	26.4	12.3	1.2	100.0	78	13.2	50.2	28.4	6.9	1.3	100.0	163
Bokeo	3.0	52.1	25.8	10.7	8.3	100.0	42	14.4	46.5	23.5	9.0	6.6	100.0	87
Luangprabang	1.3	55.9	22.2	20.6	0.0	100.0	66	12.2	53.4	25.9	7.4	1.1	100.0	164
Huaphanh	10.5	70.6	16.2	1.1	1.6	100.0	57	10.1	60.0	19.9	6.7	3.3	100.0	130
Xayabury	2.8	56.3	31.5	8.0	1.4	100.0	77	9.8	59.8	21.5	7.5	1.3	100.0	190
Xiengkhuang	8.8	55.1	24.5	11.6	0.0	100.0	60	8.7	61.4	25.1	4.9	0.0	100.0	106
Vientiane	5.1	46.5	38.6	8.0	1.7	100.0	71	6.9	50.7	30.2	12.2	0.0	100.0	187
Borikhamxay	5.6	51.2	29.8	13.4	0.0	100.0	43	12.8	45.1	31.1	9.3	1.6	100.0	97
Khammuane	10.9	55.4	28.2	5.5	0.0	100.0	52	10.5	61.5	22.8	5.2	0.0	100.0	121
Savannakhet	9.4	55.0	21.1	13.1	1.3	100.0	169	10.9	53.1	24.3	11.1	0.6	100.0	360
Saravane	6.5	48.0	32.2	12.6	0.7	100.0	92	19.2	48.8	20.8	6.4	4.8	100.0	183
Sekong	14.1	40.6	28.8	14.1	2.4	100.0	24	12.4	42.5	27.3	14.1	3.8	100.0	40
Champasack	0.8	64.5	24.4	10.2	0.0	100.0	80	11.5	51.1	28.2	8.6	0.6	100.0	166
Attapeu	3.5	54.8	32.5	9.2	0.0	100.0	21	11.7	47.1	32.0	9.2	0.0	100.0	44
Residence														
Urban	7.0	42.6	31.4	17.5	1.5	100.0	148	7.8	49.2	27.6	14.7	0.7	100.0	567
Rural	8.1	55.0	25.5	10.4	1.0	100.0	943	13.7	53.7	23.7	7.2	1.6	100.0	1,901
..Rural with road	7.7	53.5	27.0	10.7	1.0	100.0	840	12.9	53.8	24.3	7.4	1.5	100.0	1,745
..Rural without road	11.3	67.2	13.0	7.9	0.6	100.0	103	22.7	53.0	17.1	5.1	2.1	100.0	156

[1] **MICS indicator 8.10a**

[2] **MICS indicator 8.10b**

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

Table MS.5: Spousal age difference

Percent distribution of women currently married/in union age 15-19 and 20-24 years according to the age difference with their husband or partner, Lao PDR 2011-12

	Percentage of currently married/in union women age 15-19 years whose husband or partner is:							Percentage of currently married/in union women age 20-24 years whose husband or partner is:						
	Younger	0-4 years older	5-9 years older	10+ years older[1]	Husband /partner's age unknown	Total	Number of women age 15-19 years currently married/ in union	Younger	0-4 years older	5-9 years older	10+ years older[2]	Husband /partner's age unknown	Total	Number of women age 20-24 years currently married/ in union
Education														
None	11.0	58.5	16.2	11.2	3.1	100.0	202	16.3	54.3	19.3	7.5	2.6	100.0	504
Primary	7.2	51.4	29.8	11.2	0.4	100.0	541	12.3	51.7	26.4	8.2	1.4	100.0	1,047
Lower secondary	7.1	53.2	27.9	11.2	0.6	100.0	277	9.8	49.5	28.8	11.2	0.7	100.0	483
Upper secondary	9.3	52.6	23.1	13.2	1.8	100.0	69	10.6	54.6	23.4	11.0	0.4	100.0	258
Post secondary non tertiary	*	*	*	*	*	*	2	10.6	56.6	26.2	6.6	0.0	100.0	79
Higher	*	*	*	*	*	*	1	12.1	62.0	13.9	10.0	2.0	100.0	97
Wealth index quintile														
Poorest	11.3	55.1	21.4	10.1	2.1	100.0	251	18.0	52.0	20.9	6.5	2.6	100.0	536
Second	8.3	58.4	21.8	10.7	0.7	100.0	285	12.7	54.3	23.2	8.2	1.5	100.0	534
Middle	3.6	56.5	30.5	9.3	0.1	100.0	235	12.7	53.8	25.8	6.9	0.8	100.0	464
Fourth	6.7	46.3	33.0	12.1	1.9	100.0	212	8.3	51.8	27.8	10.8	1.3	100.0	472
Richest	11.1	42.6	27.2	19.0	0.0	100.0	109	9.3	51.5	26.0	12.8	0.5	100.0	461
Ethno-linguistic group of household head														
Lao-Tai	6.4	48.9	31.7	12.5	0.6	100.0	575	9.7	53.2	26.2	9.9	1.0	100.0	1,508
Mon-Khmer	9.0	57.2	20.5	12.5	0.8	100.0	315	16.2	47.7	25.8	8.5	1.8	100.0	611
Hmong-Mien	9.0	61.1	20.7	7.0	2.2	100.0	145	12.5	60.6	17.9	6.8	2.2	100.0	231
Chinese-Tibetan	20.0	54.5	16.9	3.7	4.8	100.0	45	24.8	56.4	12.0	3.3	3.5	100.0	100
Other, Missing, DK	*	*	*	*	*	*	12	*	*	*	*	*	*	19
Total	8.0	53.3	26.3	11.4	1.1	100.0	1,092	12.4	52.7	24.6	9.0	1.4	100.0	2,468

[1] **MICS indicator 8.10a**

[2] **MICS indicator 8.10b**

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

Attitudes toward Domestic Violence

Women and men age 15-49 were asked a number of questions to assess their attitudes towards whether husbands are justified in hitting or beating their wives or partners in a variety of scenarios. These questions were asked to provide an indication of cultural beliefs that tend to be associated with the prevalence of violence against women by their husbands or partners. The main assumption is that respondents that agree with the statements indicating that husbands or partners are justified in beating their wives or partners tend in reality to experience violence in their own marital relationships. The responses to these questions can be found in Tables MS.6.1 and MS.6.2. A higher proportion of women (58 per cent) than men (49 per cent) feel that a husband or partner has a right to hit or beat his wife or partner for at least one of the reasons presented.

Women and men most commonly agree and justify violence in instances when the woman neglects the children (46 per cent of women and 35 per cent of men). Some women and men also agree a husband is justified in beating his wife if she demonstrates her autonomy, for example, by going out without telling her husband (32 per cent of women and 25 per cent of men) or arguing with him (27 per cent of women and 25 per cent of men). Around a quarter of women and a fifth of men believe that a husband has a right to hit or beat his wife or partner if she refuses to have sex with him. The least common response justifying beating relates to when the wife burns the food (19 per cent of women and 14 per cent of men).

Disaggregation of the results by region shows that the percentage of respondents who believe that beating of the spouse or partner is justified is highest in the South (64 per cent of women and 56 per cent of men) and lowest in the North (52 per cent of women and 43 per cent of men). For women, the acceptance of domestic violence is highest in Sekong (91 per cent) and Xiengkhuang (80 per cent). For men, reported acceptance is not as high as it is among women, but still reaches 79 per cent in Sekong and 77 per cent in Huaphanh.

It is interesting to note that the proportion of women expressing accepting attitudes towards wife beating is higher than the proportion of men, at all ages. However, between women and men, no differences are seen by age group in attitudes towards domestic violence. The acceptance of both women and men to wife beating varies little with respect to education and household wealth. By ethno-linguistic group, accepting attitudes toward wife beating are most common among women in Hmong-Mien headed households (69 per cent) and men in Mon-Khmer headed households (53 per cent).

Table MS.6.1: Attitudes toward domestic violence

Percentage of women age 15-49 years who believe a husband is justified in beating his wife/partner in various circumstances, Lao PDR 2011-12

	Percentage of women age 15-49 years who believe a husband is justified in beating his wife/partner:						
	If she goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these reasons[1]	Number of women age 15-49 years
Region							
North	22.0	37.7	21.4	24.9	16.0	51.7	7,057
Central	33.7	48.9	32.1	26.3	21.6	60.1	11,255
South	44.9	53.2	22.0	21.1	19.0	64.1	4,164
Province							
Vientiane Capital	21.1	40.2	18.6	16.2	12.1	54.4	3,288
Phongsaly	19.8	21.7	19.0	20.5	14.9	39.0	666
Luangnamtha	11.9	33.4	13.9	5.9	9.8	42.0	627
Oudomxay	15.9	27.5	15.4	13.5	7.2	38.3	1,182
Bokeo	32.2	54.0	35.6	39.5	23.8	69.1	620
Luangprabang	17.4	39.7	27.1	22.0	25.7	57.1	1,473
Huaphanh	36.0	61.3	23.8	53.2	17.7	76.8	1,086
Xayabury	22.3	28.3	16.6	19.9	11.7	40.5	1,402
Xiengkhuang	47.0	70.8	53.7	51.9	35.7	80.1	930
Vientiane	34.6	52.7	28.2	25.8	18.4	59.6	1,677
Borikhamxay	13.1	25.5	9.0	11.9	18.1	34.6	901
Khammuane	47.5	60.4	45.1	37.4	29.3	74.3	1,082
Savannakhet	42.9	52.0	43.2	29.7	27.0	62.6	3,376
Saravane	14.4	24.4	14.3	15.0	6.4	33.4	1,456
Sekong	86.2	78.5	47.4	28.2	65.1	91.4	388
Champasack	56.8	66.3	23.5	21.9	19.6	79.7	1,943
Attapeu	58.4	71.0	17.2	33.5	16.9	74.9	376
Residence							
Urban	29.6	46.0	25.1	19.7	17.4	57.1	6,649
Rural	33.2	46.3	27.5	27.1	20.2	58.7	15,827
..Rural with road	32.7	46.3	27.5	27.0	20.0	58.4	14,268
..Rural without road	37.0	46.6	27.7	27.8	21.6	61.4	1,559
Age							
15-19	28.9	44.2	25.5	21.5	17.4	56.4	4,415
20-24	31.3	44.9	26.8	23.8	17.6	57.2	3,617
25-29	32.0	47.9	26.1	25.4	19.6	58.6	3,642
30-34	31.5	46.0	27.0	26.2	18.5	58.4	3,015
35-39	34.9	49.0	28.3	28.4	22.7	61.1	3,065
40-44	34.8	45.9	27.3	25.3	20.2	58.1	2,507
45-49	33.7	46.5	28.0	25.7	21.2	58.5	2,215
Marital/Union status							
Currently married/in union	33.5	47.4	27.6	27.2	20.5	59.4	16,368
Formerly married/in union	32.8	46.4	28.3	22.4	19.0	57.6	1,077
Never married/in union	27.5	42.2	23.9	18.1	15.8	54.5	5,031
Education							
None	33.8	44.9	29.6	28.6	23.5	57.0	4,660
Primary	34.2	46.5	27.5	27.7	21.3	59.2	8,955
Lower secondary	32.5	49.4	26.7	24.9	17.4	61.0	4,111
Upper secondary	28.7	47.6	25.2	18.2	14.4	58.4	2,496
Post secondary non tertiary	27.0	42.2	22.5	18.4	16.2	54.0	1,030
Higher	20.6	38.5	18.7	10.2	8.7	49.1	1,224
Wealth index quintile							
Poorest	32.4	43.7	27.5	28.4	23.1	56.2	3,809
Second	34.1	45.3	29.2	28.5	21.4	57.7	4,088
Middle	32.8	47.2	26.7	26.5	19.9	58.5	4,309
Fourth	33.5	48.0	27.5	25.8	19.1	60.4	4,694
Richest	28.7	46.3	24.2	18.0	15.1	57.9	5,577
Ethno-linguistic group of household head							
Lao-Tai	32.2	47.2	26.1	23.8	17.5	59.2	15,151
Mon-Khmer	30.6	41.4	25.9	23.8	20.8	53.1	4,913
Hmong-Mien	42.7	58.9	40.6	42.9	33.3	69.4	1,606
Chinese-Tibetan	19.0	31.9	16.8	16.2	16.7	47.7	685
Other, Missing, DK	14.8	34.1	26.3	24.5	17.0	50.5	121
Total	32.1	46.2	26.8	24.9	19.4	58.2	22,476

[1] MICS indicator 8.14

Table MS.6.2: Attitudes toward domestic violence

Percentage of men age 15-49 years who believe a husband is justified in beating his wife/partner in various circumstances, Lao PDR 2011-12

	Percentage of men age 15-49 years who believe a husband is justified in beating his wife/partner:						
	If she goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these reasons[1]	Number of men age 15-49 years
Region							
North	18.8	28.3	22.0	16.2	8.0	42.9	3,172
Central	27.5	38.6	28.1	22.0	16.4	50.7	4,990
South	30.6	39.3	20.6	24.7	15.5	55.8	1,789
Province							
Vientiane Capital	18.2	30.0	20.8	15.4	13.6	44.6	1,379
Phongsaly	10.5	6.3	10.8	7.3	7.9	24.1	318
Luangnamtha	26.1	20.9	23.8	15.6	15.4	37.6	266
Oudomxay	7.4	8.4	17.8	8.9	1.5	26.8	530
Bokeo	18.0	38.1	27.9	26.2	8.0	55.2	267
Luangprabang	24.3	45.2	41.6	11.5	11.1	60.0	644
Huaphanh	35.7	63.7	17.9	46.9	12.8	76.8	511
Xayabury	10.4	9.3	11.4	2.6	3.5	18.2	635
Xiengkhuang	8.4	22.3	9.7	11.7	4.7	32.1	442
Vientiane	11.2	30.1	20.8	14.2	6.8	39.6	721
Borikhamxay	18.0	19.6	18.5	14.8	4.3	23.5	390
Khammuane	44.5	57.6	42.2	35.2	25.5	70.3	503
Savannakhet	45.6	53.4	41.0	31.9	26.6	67.0	1,556
Saravane	33.9	43.4	22.9	44.4	19.2	72.8	597
Sekong	62.6	54.7	30.1	29.7	16.8	78.7	162
Champasack	26.5	35.0	20.6	13.3	15.1	43.4	873
Attapeu	7.8	31.5	1.9	8.4	1.7	36.8	157
Residence							
Urban	28.2	38.0	27.6	19.0	16.9	49.5	2,800
Rural	24.1	34.4	23.7	21.2	12.3	49.0	7,151
..Rural with road	24.1	34.5	23.7	21.4	12.4	49.2	6,457
..Rural without road	24.4	33.9	23.9	19.3	10.7	46.8	694
Age							
15-19	25.7	36.2	25.9	20.3	13.3	50.3	2,119
20-24	24.4	35.2	24.4	19.9	12.3	47.6	1,557
25-29	26.6	37.0	24.8	22.2	14.9	51.3	1,500
30-34	25.6	34.5	25.0	20.4	12.8	48.7	1,264
35-39	24.7	35.7	24.7	20.6	14.6	49.5	1,445
40-44	25.3	35.6	23.5	19.7	13.1	47.9	1,043
45-49	24.1	32.5	24.2	21.4	13.9	47.0	1,023
Marital/Union status							
Currently married/in union	24.9	34.9	24.0	21.0	13.4	49.0	6,611
Formerly married/in union	29.7	47.0	35.7	27.7	17.5	59.7	177
Never married/in union	25.8	35.8	25.8	19.4	13.7	48.8	3,163
Education							
None	31.8	38.2	27.7	27.7	17.1	57.3	923
Primary	26.8	36.2	25.7	23.2	14.0	50.6	3,872
Lower secondary	23.4	34.7	24.0	18.6	12.0	47.7	2,351
Upper secondary	23.3	33.7	23.6	17.4	13.1	46.0	1,450
Post secondary non tertiary	22.0	33.7	21.7	17.8	14.4	43.0	608
Higher	21.6	34.9	24.2	13.7	12.0	47.1	747
Wealth index quintile							
Poorest	25.7	34.0	25.3	23.3	12.0	50.7	1,692
Second	26.7	36.7	24.6	24.4	13.2	52.3	1,911
Middle	24.4	34.1	24.7	20.9	11.7	48.7	2,039
Fourth	24.7	34.9	23.7	19.3	14.1	46.0	2,092
Richest	25.1	37.2	25.7	16.3	16.2	48.5	2,217
Ethno-linguistic group of household head							
Lao-Tai	25.9	36.3	24.3	19.7	14.6	48.6	6,635
Mon-Khmer	25.6	35.1	27.4	23.6	12.3	52.7	2,191
Hmong-Mien	21.3	36.0	23.9	21.6	10.1	49.2	728
Chinese-Tibetan	18.7	17.4	18.5	15.0	9.7	34.6	335
Other, Missing, DK	24.5	46.7	28.0	29.0	11.9	62.5	62
Total	25.3	35.4	24.8	20.6	13.5	49.1	9,951

[1] **MICS indicator 8.14**

Age at First Sexual Intercourse

Although age at first marriage is often used as a proxy for first exposure to sexual intercourse, the two events do not necessarily coincide. In the 2011-12 LSIS, interviewers asked women and men how old they were when they first had sexual intercourse.

The percentage of women and men who first had sexual intercourse by specific ages is shown in Tables MS.7.1 and MS.7.2. Among women age 25-49, 9 per cent first had sexual intercourse before the age of 15, 40 per cent before 18, and by age 25 the majority of women (87 per cent) have had sexual intercourse. The median age at first sexual intercourse among women age 25-49 years is 18.8 years, which is slightly lower than the median age at first marriage of 19.2 years seen in Table MS.3. Similar to median age at first marriage, the median age at first sexual intercourse has been relatively unchanged over the past two decades.

Table MS.7.1: Age at first sexual intercourse

Percentage of women age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Lao PDR 2011-12

	Percentage who had first sexual intercourse by exact age:					Percentage who never had sexual intercourse	Number of women	Median age at first sexual intercourse
	15	18	20	22	25			
Age								
15-19	5.2	na	na	na	na	72.4	4,415	a
20-24	7.9	35.8	58.7	na	na	25.9	3,617	19.2
25-29	9.2	40.0	60.5	73.3	86.1	8.9	3,642	18.9
30-34	10.1	40.9	63.5	76.9	86.7	4.8	3,015	18.7
35-39	8.5	40.4	62.8	76.5	87.9	3.7	3,065	18.8
40-44	9.1	39.6	61.8	75.4	87.8	3.0	2,507	18.8
45-49	7.1	36.3	59.9	74.9	87.0	2.7	2,215	19.1
25-49	8.9	39.6	61.7	75.3	87.0	5.0	14,444	18.8

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

As is the case with age at first marriage, men tend to initiate sexual activity at slightly older ages than women. The median age at first sex among men age 25-49 is 19.6 years; about a year older than women. The median ages at first intercourse among the different age cohorts suggest no significant change in age at first sexual intercourse among men over the past 20 years. The median age at first sexual intercourse among men age 25-49 years is 19.6 years – almost three years earlier than the median age at first marriage (22.5 years), as seen in Table MS.3. Three in ten men had sexual intercourse before age 18 compared with 4 in 10 women.

Table MS.7.2: Age at first sexual intercourse

Percentage of men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Lao PDR 2011-12

	Percentage who had first sexual intercourse by exact age:					Percentage who never had sexual intercourse	Number of men	Median age at first sexual intercourse
	15	18	20	22	25			
Age								
15-19	2.9	na	na	na	na	77.1	2,119	a
20-24	2.4	27.9	54.5	na	na	26.4	1,557	19.6
25-29	3.4	33.0	56.2	74.3	88.7	5.0	1,500	19.3
30-34	3.2	31.1	56.3	73.2	86.2	2.5	1,264	19.4
35-39	3.6	29.6	53.3	71.4	84.5	1.6	1,445	19.6
40-44	3.0	26.2	51.5	71.4	85.7	0.9	1,043	19.7
45-49	3.1	26.2	46.9	64.3	79.8	0.8	1,023	20.2
25-49	3.3	29.6	53.3	71.3	85.3	2.3	6,275	19.6

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

Median age at first sex is shown in Table MS.8 in relation to respondent background characteristics. The median age at first sex is the same among women and men in urban areas at 20.6 years, but differs by a year in rural areas (18.2 years among women and 19.2 years among men). The median age at first sexual intercourse is lowest in the Northern region (17.9 years among women and 18.5 years among men) and highest in the Southern region (19.7 years among women and 21.1 years among men).

The median age at first sexual intercourse rises with levels of education and wealth. Women with post-secondary education first had sex, on average, five years later than women with no education (22.8 years and 17.4 years, respectively). A similar pattern is seen among men, although the difference is only about two years. Similarly, the median age at first sex is almost four years later among women in the richest wealth quintile than among women in the poorest, and the same pattern of later sexual initiation with increasing wealth is seen among men.

Table MS.8: Median age at first sexual intercourse

Median age at first sexual intercourse among women and men age 25-49 years, Lao PDR 2011-12

	Women age 25-49	Men age 25-49
Region		
North	17.9	18.5
Central	19.2	19.9
South	19.7	21.1
Province		
Vientiane Capital	21.2	20.8
Phongsaly	18.3	16.7
Luangnamtha	17.3	18.3
Oudomxay	17.9	19.7
Bokeo	17.9	18.3
Luangprabang	18.4	18.8
Huaphanh	16.8	17.0
Xayabury	18.2	19.7
Xiengkhuang	18.2	19.2
Vientiane	18.8	19.7
Borikhamxay	18.8	19.1
Khammuane	18.8	19.9
Savannakhet	18.2	19.7
Saravane	18.9	20.4
Sekong	18.8	21.7
Champasack	20.7	22.1
Attapeu	18.8	19.0
Residence		
Urban	20.6	20.6
Rural	18.2	19.2
..Rural with road	18.3	19.2
..Rural without road	18.0	18.8

	Women age 25-49	Men age 25-49
Women's education		
None	17.4	18.4
Primary	18.3	19.1
Lower secondary	19.4	19.7
Upper secondary	21.8	20.6
Post secondary non tertiary	22.8	20.8
Higher	a	21.1
Wealth index quintile		
Poorest	17.5	18.5
Second	17.8	18.7
Middle	18.4	19.4
Fourth	19.0	20.1
Richest	21.2	20.8
Ethno-linguistic group of household head		
Lao-Tai	19.4	20.2
Mon-Khmer	17.6	18.9
Hmong-Mien	16.9	17.7
Chinese-Tibetan	17.4	16.9
Other, Missing, DK	19.8	22.3
Total	18.8	19.6

a = Omitted because less than 50 percent of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Recent Sexual Activity

In the absence of contraception, the probability of pregnancy is related to coital frequency. Therefore, information on sexual activity can be used to refine measures of exposure to the risk of pregnancy. Interviewers asked women and men how long ago their last sexual activity occurred.

Tables MS.9.1 and MS.9.2 show the per cent distributions of women and men age 15-49 by recent sexual activity. Sixty-three per cent of all women age 15-49 were sexually active in the four weeks before the survey, 10 per cent had been sexually active in the year before the survey but not in the four weeks prior to the interview, and 5 per cent had been sexually active at some time in their lives but not within the previous year. One in every five women (22 per cent) had never had sexual intercourse. The proportion of women who were sexually active during the four weeks before the survey at first increases with age, from 22 per cent among those age 15-19 to 82 per cent among those age 35-39, and then decreases to 69 per cent among those age 45-49. For currently married women, 87 per cent have been sexually active in the four weeks preceding the survey, compared with 3 per cent of formerly married women and 1 per cent of women who have never been married.

More rural women are recently sexually active (67 per cent) than urban women (55 per cent). Seven in ten women residing in the Northern region were recently sexually active, compared to 6 in 10 in the other two regions. Substantially more women with no education (76 per cent) were sexually active in the recent past than women with some education (33 per cent). Among wealth quintiles the richest women reported being sexually active in the past four weeks the least (53 per cent). The patterns seen are partially a reflection of the percentages of women who are currently married in each group, but this does not fully explain the differences.

Table MS.9.1: Recent sexual activity

Percent distribution of women age 15-49 by timing of last sexual intercourse, Lao PDR 2011-12

	Timing of last sexual intercourse						
	Within the past 4 weeks	Within 1 year*	One or more years**	Missing	Never had sexual intercourse	Total	Number of women
Region							
North	70.2	7.6	4.2	0.2	17.8	100.0	7,057
Central	60.1	11.3	5.1	0.2	23.4	100.0	11,255
South	60.9	9.3	6.6	0.4	22.8	100.0	4,164
Province							
Vientiane Capital	51.4	13.5	5.7	0.3	29.2	100.0	3,288
Phongsaly	71.8	9.7	3.6	0.3	14.6	100.0	666
Luangnamtha	73.9	4.7	5.6	0.2	15.6	100.0	627
Oudomxay	64.9	9.8	4.2	0.1	21.1	100.0	1,182
Bokeo	73.0	5.4	4.4	0.3	17.0	100.0	620
Luangprabang	67.1	9.9	4.4	0.4	18.1	100.0	1,473
Huaphanh	73.2	5.7	2.9	0.1	18.1	100.0	1,086
Xayabury	72.1	6.2	4.4	0.0	17.3	100.0	1,402
Xiengkhuang	64.3	7.7	2.3	0.0	25.8	100.0	930
Vientiane	67.0	10.1	4.4	0.0	18.6	100.0	1,677
Borikhamxay	67.5	7.2	3.8	0.2	21.3	100.0	901
Khammuane	62.5	11.5	5.8	0.2	20.1	100.0	1,082
Savannakhet	61.2	11.9	5.7	0.2	21.1	100.0	3,376
Saravane	61.1	9.7	7.4	0.6	21.2	100.0	1,456
Sekong	56.8	11.8	6.9	0.1	24.4	100.0	388
Champasack	60.2	8.9	6.2	0.4	24.2	100.0	1,943
Attapeu	67.6	7.5	4.7	0.0	20.2	100.0	376
Residence							
Urban	55.0	10.4	5.4	0.3	28.8	100.0	6,649
Rural	66.9	9.5	4.9	0.2	18.5	100.0	15,827
..Rural with road	66.6	9.6	5.0	0.2	18.6	100.0	14,268
..Rural without road	69.9	8.9	4.2	0.2	16.8	100.0	1,559
Age							
15-19	21.6	5.3	0.8	0.1	72.3	100.0	4,415
20-24	58.3	12.1	3.6	0.2	25.8	100.0	3,617
25-29	76.1	11.1	3.9	0.0	8.9	100.0	3,642
30-34	80.1	10.2	4.7	0.2	4.8	100.0	3,015
35-39	82.0	8.2	5.9	0.3	3.6	100.0	3,065
40-44	78.3	9.4	8.9	0.4	2.9	100.0	2,507
45-49	68.9	15.1	12.9	0.5	2.6	100.0	2,215
Marital/Union status							
Currently married/in union	86.5	11.8	1.5	0.2	0.1	100.0	16,368
Formerly married/in union	2.9	17.1	78.2	1.7	0.0	100.0	1,077
Never married/in union	1.3	1.8	0.9	0.1	96.0	100.0	5,031
Marital duration* **							
0-4 years	82.0	17.4	0.5	0.0	0.1	100.0	3,151
5-9 years	88.0	10.7	1.1	0.1	0.0	100.0	2,679
10-14 years	89.6	8.6	1.6	0.2	0.1	100.0	2,891
15-19 years	91.3	6.9	1.6	0.2	0.0	100.0	2,327
20-24 years	88.4	9.6	1.8	0.2	0.0	100.0	2,071
25+ years	82.1	14.6	2.9	0.3	0.1	100.0	1,834
Married more than once	82.4	15.1	2.2	0.2	0.1	100.0	1,416
Education							
None	75.5	9.1	6.9	0.3	8.2	100.0	4,660
Primary	71.5	10.1	5.1	0.2	13.1	100.0	8,955
Lower secondary	58.1	9.3	4.8	0.3	27.5	100.0	4,111
Upper secondary	37.0	8.5	2.6	0.0	51.9	100.0	2,496
Post secondary non tertiary	60.3	14.8	5.5	0.1	19.3	100.0	1,030
Higher	32.8	10.1	3.4	0.1	53.6	100.0	1,224
Wealth index quintile							
Poorest	70.7	8.8	6.2	0.1	14.1	100.0	3,809
Second	68.9	8.3	5.1	0.2	17.4	100.0	4,088
Middle	65.6	9.2	4.4	0.5	20.3	100.0	4,309
Fourth	62.6	10.1	5.1	0.1	22.1	100.0	4,694
Richest	53.4	11.7	4.7	0.1	30.1	100.0	5,577
Ethno-linguistic group of household head							
Lao-Tai	61.2	10.5	5.1	0.2	22.9	100.0	15,151
Mon-Khmer	67.0	8.7	5.5	0.3	18.6	100.0	4,913
Hmong-Mien	69.6	7.2	3.6	0.1	19.6	100.0	1,606
Chinese-Tibetan	70.8	7.7	4.7	0.3	16.5	100.0	685
Other, Missing, DK	68.2	10.3	5.6	0.0	15.8	100.0	121
Total	63.4	9.8	5.1	0.2	21.5	100.0	22,476

* Excludes women who had sexual intercourse within the past 4 weeks

** Excludes women who had sexual intercourse within the past 4 weeks or within 1 year

*** Excludes women who are not currently married

Among men age 15-49, 64 per cent were sexually active in the four weeks preceding the survey, 12 per cent had had sexual intercourse in the year before the survey but not in the four weeks prior to the survey, and 2 per cent had been sexually active at some time in their lives, but not within the previous year. Twenty-two per cent of men reported they had never had sex – the same proportion as among women. As with women, men's recent sexual activity at first increases with age, peaks in the late thirties and the early forties (88 per cent), and then declines. Ninety per cent of men currently married/in a union reported recent sexual activity. The proportions of formerly married men who had had recent sexual activity (30 per cent) and of men who have never been married (12 per cent) is higher than those of women with the same marital status. The patterns seen by residence, education, wealth, and ethno-linguistic group are similar to those seen among women.

Table MS.9.2: Recent sexual activity

Percent distribution of men age 15-49 by timing of last sexual intercourse, Lao PDR 2011-12

	Timing of last sexual intercourse						
	Within the past 4 weeks	Within 1 year*	One or more years**	Missing	Never had sexual intercourse	Total	Number of men
Region							
North	72.3	9.9	1.5	0.2	16.0	100.0	3,172
Central	59.8	12.7	2.6	0.5	24.4	100.0	4,990
South	59.6	11.1	3.5	0.5	25.3	100.0	1,789
Province							
Vientiane Capital	57.8	18.3	2.5	0.8	20.6	100.0	1,379
Phongsaly	75.4	11.6	1.1	0.1	11.8	100.0	318
Luangnamtha	77.1	7.2	1.3	0.9	13.6	100.0	266
Oudomxay	65.9	13.1	1.0	0.0	20.1	100.0	530
Bokeo	77.5	8.2	4.6	0.0	9.8	100.0	267
Luangprabang	70.9	9.9	1.2	0.3	17.7	100.0	644
Huaphanh	74.0	9.4	1.5	0.0	15.1	100.0	511
Xayabury	72.0	8.9	1.5	0.3	17.3	100.0	635
Xiengkhuang	61.3	13.2	1.1	0.2	24.1	100.0	442
Vientiane	65.6	11.1	1.6	0.5	21.2	100.0	721
Borikhamxay	65.9	9.8	0.8	0.4	23.1	100.0	390
Khammuane	58.2	9.3	3.5	0.2	28.8	100.0	503
Savannakhet	57.5	10.2	3.7	0.5	28.1	100.0	1,556
Saravane	64.6	7.6	3.7	1.1	22.9	100.0	597
Sekong	56.7	13.5	2.5	0.0	27.2	100.0	162
Champasack	54.8	13.6	3.9	0.3	27.4	100.0	873
Attapeu	70.2	7.7	1.7	0.0	20.4	100.0	157
Residence							
Urban	58.3	14.8	2.7	0.5	23.6	100.0	2,800
Rural	65.9	10.2	2.3	0.4	21.2	100.0	7,151
..Rural with road	65.4	10.4	2.4	0.4	21.5	100.0	6,457
..Rural without road	71.0	9.1	1.5	0.2	18.2	100.0	694
Age							
15-19	12.9	7.9	2.3	0.1	76.8	100.0	2,119
20-24	49.3	21.0	3.3	0.4	26.1	100.0	1,557
25-29	77.8	13.3	3.3	0.6	4.9	100.0	1,500
30-34	85.8	9.9	1.5	0.6	2.3	100.0	1,264
35-39	88.3	8.4	1.6	0.3	1.4	100.0	1,445
40-44	88.4	7.8	2.4	0.5	0.9	100.0	1,043
45-49	83.7	12.2	2.5	0.8	0.8	100.0	1,023
Marital/Union status							
Currently married/in union	89.6	9.2	0.6	0.4	0.2	100.0	6,611
Formerly married/in union	30.3	33.1	32.4	4.2	0.0	100.0	177
Never married/in union	11.6	15.1	4.6	0.2	68.5	100.0	3,163
Marital duration* **							
0-4 years	86.9	11.8	0.5	0.5	0.2	100.0	1,361
5-9 years	91.9	7.4	0.4	0.1	0.1	100.0	1,132
10-14 years	91.4	7.5	0.1	0.7	0.2	100.0	1,233
15-19 years	92.3	7.0	0.6	0.1	0.0	100.0	1,009
20-24 years	89.4	9.5	0.6	0.2	0.3	100.0	796
25+ years	85.6	12.3	1.4	0.7	0.0	100.0	451
Married more than once	86.4	11.2	1.5	0.8	0.0	100.0	627
Education							
None	75.1	10.4	2.2	0.4	11.9	100.0	923
Primary	71.5	9.7	2.7	0.4	15.7	100.0	3,872
Lower secondary	57.2	10.8	2.0	0.4	29.6	100.0	2,351
Upper secondary	45.1	10.8	2.2	0.1	41.7	100.0	1,450
Post secondary non tertiary	74.7	14.3	2.6	1.4	7.0	100.0	608
Higher	57.7	23.7	3.1	0.3	15.2	100.0	747
Wealth index quintile							
Poorest	72.6	8.9	2.2	0.4	16.0	100.0	1,692
Second	66.6	8.5	1.9	0.3	22.6	100.0	1,911
Middle	63.5	10.6	2.4	0.2	23.3	100.0	2,039
Fourth	59.7	12.1	2.7	0.7	24.8	100.0	2,092
Richest	58.7	16.5	2.8	0.5	21.6	100.0	2,217
Ethno-linguistic group of household head							
Lao-Tai	61.4	12.6	2.6	0.5	22.8	100.0	6,635
Mon-Khmer	66.7	9.2	2.3	0.3	21.5	100.0	2,191
Hmong-Mien	71.6	9.0	1.3	0.0	18.1	100.0	728
Chinese-Tibetan	75.7	10.8	1.1	0.6	11.7	100.0	335
Other, Missing, DK	51.6	6.3	7.1	0.0	35.0	100.0	62
Total	63.8	11.5	2.4	0.4	21.9	100.0	9,951

* Excludes men who had sexual intercourse within the past 4 weeks

** Excludes men who had sexual intercourse within the past 4 weeks or within 1 year

*** Excludes men who are not currently married

VI. Fertility Levels, Trends, Differentials and Preferences

Fertility is one of the three principal components of population dynamics that determine the size and structure of the population of a country. This chapter looks at a number of fertility indicators, including: levels, patterns and trends in both current and cumulative fertility; the length of birth intervals; the age at which women initiate childbearing; and fertility preferences. Information on current and cumulative fertility is essential for monitoring population growth. Birth intervals are important because short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the mother and the child. Data on fertility preferences may be a useful indicator of the direction future fertility patterns may take.

Data on fertility were collected in several ways. First, each woman was asked the number of sons and daughters who live with her, the number who live elsewhere, and the number born alive and who later died. Next, a complete history of all the woman's births was obtained, including information on sex, date of birth, and survival status of each child. For living children, a question was asked about whether the child was living in the household or away. For dead children, the age at death was recorded. Finally, information was collected on whether a woman was pregnant at the time of the survey.

Current Fertility

The level of current fertility is one of the most important topics in this report because of its direct relevance to population policies and programmes. Current fertility can be measured using the age-specific fertility rate (ASFR), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). The ASFR provides the age pattern of fertility, while the TFR refers to the number of live births that a woman would have had if she were subject to the current ASFRs throughout her reproductive years (15-49 years). The GFR is expressed as the number of live births per 1,000 women age 15-44, and the CBR is expressed as the number of live births per 1,000 people in the population. The measures of fertility presented in this chapter refer to the three-year period preceding the survey (1-36 months). This time period generates a sufficient number of births to provide reliable, current estimates.

Table FE.1: Current fertility

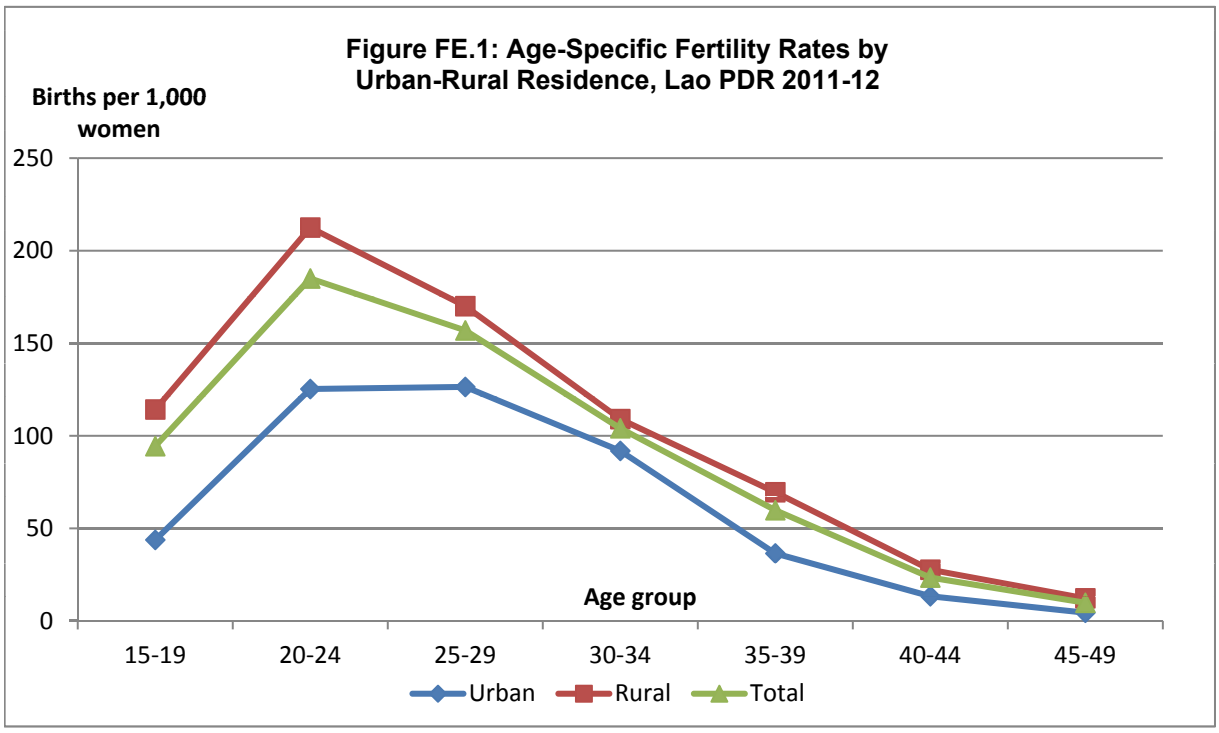
Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Lao PDR 2011-12

	Residence		
	Urban	Rural	Total
Age			
15-19	44	114	94
20-24	125	213	185
25-29	126	170	157
30-34	92	109	104
35-39	36	70	60
40-44	13	28	23
45-49	4	12	10
TFR (15-49)	2.2	3.6	3.2
GFR	78	125	111
CBR	20	26	25

Notes: Age-specific fertility rates are per 1,000 women.
Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate, expressed per 1,000 women age 15-44
CBR: Crude birth rate, expressed per 1,000 population

ASFRs are presented in Table FE.1 and Figure FE.1. Numerators of ASFRs are calculated by identifying live births that occurred in the period 1 to 36 months preceding the survey (determined from the date of interview and date of birth of the child); they are then classified by the age of the mother (in five-year groups) at the time of the child's birth. The denominators of these rates are the number of woman-years lived by the survey respondents in each of the five-year age groups during the specified period.

For the country as a whole, the ASFR rises from 94 births per 1,000 women age 15-19 to a peak of 185 births among women age 20-24, and then falls steadily, reaching a low of 10 births per 1,000 women age 45-49. Fertility is higher among rural women than it is among urban women, at all ages. The rural-urban differential in fertility is greatest during the peak childbearing ages of 20-24.



As Table FE.1 shows, the TFR for Lao PDR for the three-year period preceding the survey is 3.2 children per woman. This means that a Lao woman who is at the beginning of her childbearing years would give birth to just over three children by the end of her reproductive period if she were to go through her childbearing years bearing children at currently observed rates. The TFR in rural areas exceeds the TFR in urban areas by almost one-and-a-half children per woman (3.6 and 2.2 children per woman, respectively).

The CBR in Lao PDR is 25 births per 1,000 population. As is the case with other fertility measures, there is a substantial differential in the CBR by urban-rural residence. The CBR is 30 per cent higher in rural areas (26 per 1,000 population) than in urban areas (20 per 1,000 population). The GFR in Lao PDR is 111 live births per 1,000 women of reproductive age. The rate is considerably higher in rural areas (125) than in urban areas (78).

Fertility Differentials

Table FE.2 presents adolescent birth rates and TFRs for the three years preceding the survey, the percentage of women who are currently pregnant, and the mean number of children ever born (CEB) to women age 40-49, by background characteristics.

Table FE.2: Fertility by background characteristics

Adolescent birth rate and total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, Lao PDR 2011-12

	Adolescent birth rate[1] (Age-specific fertility rate for women age 15-19)	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Region				
North	120	3.2	4.8	5.0
Central	79	2.9	4.9	4.5
South	90	3.9	6.6	5.3
Province				
Vientiane Capital	37	2.0	3.8	3.1
Phongsaly	145	3.7	5.2	5.0
Luangnamtha	124	2.6	4.7	4.0
Oudomxay	138	3.6	3.9	5.7
Bokeo	149	3.6	4.9	5.0
Luangprabang	95	3.1	5.4	5.3
Huaphanh	137	3.8	5.9	5.9
Xayabury	83	2.2	3.8	3.8
Xiengkhuang	101	3.6	4.5	6.1
Vientiane	86	2.7	5.0	4.1
Borikhamxay	79	2.8	3.9	4.4
Khammuane	108	3.7	4.5	4.9
Savannakhet	99	3.5	6.3	5.4
Saravane	106	4.3	7.5	6.0
Sekong	107	4.5	6.9	5.9
Champasack	70	3.6	5.7	4.7
Attapeu	107	3.6	6.8	5.7
Residence				
Urban	44	2.2	3.6	3.6
Rural	114	3.6	5.8	5.3
..Rural with road	112	3.4	5.7	5.2
..Rural without road	137	4.8	6.7	6.1
Education				
None	190	4.8	6.5	5.9
Primary	136	3.3	5.4	5.1
Lower secondary	85	2.7	4.4	3.8
Upper secondary	23	2.6	3.6	2.7
Post secondary non tertiary	2	2.0	5.7	3.2
Higher	0	(1.7)	3.7	2.4
Wealth index quintile				
Poorest	183	5.3	7.3	6.1
Second	120	3.8	5.9	6.0
Middle	96	3.1	4.8	5.4
Fourth	72	2.4	5.2	4.4
Richest	31	1.9	3.4	3.2
Ethno-linguistic group of household head				
Lao-Tai	69	2.6	4.5	4.3
Mon-Khmer	132	4.2	6.2	6.1
Hmong-Mien	161	5.5	7.6	7.0
Chinese-Tibetan	141	3.6	4.9	5.0
Total	94	3.2	5.2	4.8

[1] **MICS indicator 5.1; MDG indicator 5.4**

Note: Figures in parentheses are based on 125-249 unweighted woman-years of exposure.

For every 1,000 girls age 15–19 there are 94 births. Girls living in the Northern region have a higher fertility rate (120 per 1,000 girls) compared with girls who live in the Central and Southern regions. A big difference in birth rates is found between urban and rural adolescents. The fertility rate among girls living in rural areas is nearly three times higher than among girls living in urban areas (114 and 44 births per 1,000 adolescents, respectively).

Bokeo province has the highest adolescent fertility rate of all the provinces (149 births per 1,000 girls), followed by Phongsaly, Oudomxay and Huaphanh provinces (145, 138 and 137 births, respectively). Further analysis shows that girls with lower education levels have a much higher fertility rate. Similarly, girls from the poorest wealth quintile have a much higher fertility rate compared with girls from the richest wealth quintile. The fertility rate among adolescent girls of Lao-Tai headed households is about half the level observed among girls of other ethno-linguistic groups.

With regard to TFR among women age 15-49, those living in the South have a higher fertility rate (3.9 births) than those in the Northern and Central regions (3.2 and 2.9 births, respectively). There are substantial differentials in the TFR across provinces, with a low of 2.0 children per woman in Vientiane Capital. Sekong and Saravane provinces have the highest TFR (4.5 and 4.3 children, respectively).

The TFR is inversely related to mothers' education. The TFR of women with no education is nearly three times higher than of women with higher education. Similarly, the TFR is also inversely related to wealth quintile; the TFR of women in the poorest quintile is about three times higher than the TFR of women in the richest quintile. Fertility also varies by ethno-linguistic group; women of Hmong-Mien headed households have a TFR of 5.5, higher than other ethno-linguistic groups, and double that of women in Lao-Tai headed households.

Table FE.2 also presents a crude assessment of trends in the various subgroups by comparing current fertility with a measure of completed fertility – the mean number of children ever born to women age 40-49. The mean number of children ever born to older women, who are nearing the end of their reproductive period, is an indicator of the average completed fertility of women who began childbearing over the three decades preceding the survey. If fertility remained constant over time and the reported data on both children ever born and births during the three years preceding the survey are reasonably accurate, the TFR and the mean number of children ever born for women age 40-49 would be expected to be similar. When fertility levels have been falling, the TFR will be substantially lower than the mean number of children ever born to women age 40-49. The comparison of current fertility at the country level with completed fertility suggests that fertility has fallen by one-and-a-half children per woman during the past few decades, from 4.8 to 3.2 children. The table also reveals that substantial declines in fertility have taken place in both rural areas (from 5.3 to 3.6) and urban areas (from 3.6 to 2.2). The differences between the levels of current and completed fertility are highest in the Northern region (1.9 children), particularly Luangprabang and Huaphanh (both 2.2 children), and in Xiengkhuang (2.5 children), in rural areas with roads (1.8 children), among primary school educated women (1.8 children) and among women in the second and middle wealth quintile (2.2 children each).

The percentage of women currently pregnant is a useful measure of current fertility, although not all women who are pregnant are likely to be included because they may not be aware that they are pregnant or may be reluctant to disclose a pregnancy in its early stages. Five per cent of women reported that they were pregnant at the time of the survey. The highest percentages of women currently pregnant are found in the Southern region (7 per cent), in the more remote rural areas (7 per cent), and among women with no education and the poorest women (7 per cent each).

Fertility Trends

Table FE.3 uses information from the retrospective birth histories obtained from the 2011-12 LSIS respondents to examine the trends in ASFR, and TFRs for successive three-year periods preceding the survey. To calculate these rates, births were classified according to the period of time in which the birth occurred and the mother's age at the time of birth. Because birth histories have not been collected for women age 50 and over, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 45-49 for periods 6-8 years or more prior to the survey because women in those age groups would have been 50 years or older at the time of the survey.

Based on the trend in ASFRs and the TFR from 15 years before the survey to the most recent three-years prior to the survey, there is evidence that the TFR has declined over the period. For example, the TFR has declined from 5.0 births per woman around 1997-99 to 4.7 births in 2000-02, to 4.1 and 3.6 in 2003-05 and 2006-08, and continued to decline to 3.2 in the recent three-year period prior to the survey (2009-11).

Table FE.3: Trends in age-specific fertility rates and total fertility rate

Age-specific fertility rates and total fertility rate for three-year periods preceding the survey, by mother's age at the time of the birth, Lao PDR 2011-12

	Number of years preceding the survey				
	0-2	3-5	6-8	9-11	12-14
Mother's age at birth					
15-19	94	102	111	127	116
20-24	185	204	219	245	264
25-29	157	174	196	212	246
30-34	104	121	142	166	197
35-39	60	71	91	108	169
40-44	23	33	64	(77)	na
45-49	10	9	na	na	na
Total Fertility Rate	3.2	3.6	4.1	4.7	5.0

na = Not applicable due to censoring

Note: Figures in parentheses are based on 125-249 unweighted woman-years of exposure.

Children Ever Born and Living

Table FE.4 presents the distribution of all women and currently married women by the number of children ever born, according to five-year age groups. The table also shows the mean number of children ever born and the mean number of living children. Data on the number of children ever born reflect the accumulation of births to women over their entire reproductive lifespan and therefore have limited reference to current fertility levels, particularly when a country has experienced a decline in fertility. However, the information on children ever born is useful for observing how average family size varies across age groups and also for observing the level of primary infertility.

The results show that 86 per cent of women age 15-19 have never given birth. This proportion declines rapidly to 17 per cent for women age 25-29 and to 6 per cent or lower for women age 35 and older. On average, Lao women attain a parity of 5.1 children per woman by the end of their childbearing years. This number is higher than the TFR of 3.2 per woman; a difference that is attributable to the decrease in fertility.

Table FE.4: Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born and mean number of living children, according to age group, Lao PDR 2011-12

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	86.0	10.6	2.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	4,415	0.180	0.161
20-24	40.5	31.4	18.6	6.5	2.2	0.6	0.1	0.0	0.0	0.0	0.0	100.0	3,617	1.010	0.920
25-29	16.8	21.6	29.0	15.7	9.3	4.7	1.7	0.6	0.4	0.1	0.0	100.0	3,642	2.064	1.850
30-34	8.4	11.0	26.1	21.6	13.3	8.5	5.9	2.7	1.4	0.8	0.4	100.0	3,015	2.998	2.609
35-39	5.8	5.6	20.9	20.2	14.9	10.9	8.2	5.3	3.9	2.5	1.9	100.0	3,065	3.821	3.238
40-44	5.4	5.1	13.4	16.0	15.1	12.5	10.2	8.0	6.1	4.2	4.0	100.0	2,507	4.501	3.703
45-49	5.4	4.4	8.2	13.5	13.4	13.3	12.5	9.1	7.4	4.3	8.4	100.0	2,215	5.100	4.110
Total	29.2	13.9	16.9	12.5	8.7	6.2	4.6	3.0	2.2	1.3	1.6	100.0	22,476	2.460	2.089
CURRENTLY MARRIED WOMEN															
15-19	46.2	40.4	10.9	2.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	1,092	0.698	0.627
20-24	17.1	42.8	26.3	9.5	3.3	0.9	0.2	0.1	0.0	0.0	0.0	100.0	2,468	1.427	1.299
25-29	7.5	22.7	32.7	17.9	10.5	5.3	2.0	0.8	0.4	0.1	0.0	100.0	3,142	2.322	2.080
30-34	3.4	10.5	27.8	23.3	13.9	9.1	6.3	2.9	1.6	0.9	0.4	100.0	2,728	3.198	2.782
35-39	2.1	4.8	21.7	21.1	15.7	11.6	8.5	5.6	4.2	2.7	2.1	100.0	2,782	4.024	3.415
40-44	2.2	4.8	13.3	16.4	15.6	12.8	10.5	8.7	6.6	4.6	4.4	100.0	2,238	4.732	3.897
45-49	2.5	3.8	7.9	14.5	14.1	13.2	13.4	9.5	7.5	4.5	9.0	100.0	1,917	5.310	4.289
Total	8.6	17.2	22.0	16.4	11.3	8.0	5.9	3.9	2.8	1.8	2.1	100.0	16,368	3.193	2.716

Some women achieve much higher parity by the time they reach 40; a small proportion of women have 10 or more births by the end of their childbearing years. One in five women age 45-49 has given birth to eight or more children. Results for younger, currently married women differ from those for all women because the majority of younger women were likely to be unmarried with no children. Differences at older ages generally reflect the impact of marital dissolution. Only 3 per cent of currently married women age 45-49 have never had a child. If the desire for children is universal in Lao PDR; this percentage represents a rough measure of primary infertility or the inability to bear children.

As expected, the mean number of children ever born and the mean number of children surviving rise monotonically with increasing age. A comparison of the mean number of living children with the mean number of children ever born shows that currently, by the end of their child bearing years, married women have lost an average of one child each.

Birth Intervals

A birth interval is defined as the length of time between two successive live births. The study of birth intervals is important in understanding the health status of young children. Research has shown that short birth intervals are closely associated with the poor health of children, especially during infancy. Children born too soon after a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and death at a young age. Longer birth intervals improve the health status of both mother and child.

Table FE.5 presents the distribution of second and higher-order births in the five years preceding the survey by the number of months since the previous birth, according to background characteristics. The table also presents the median number of months since the preceding birth.

The median birth interval is 34 months, indicating that half of non-first births to women in Lao PDR occur less than three years after a previous birth. Twenty-eight per cent have an interval of less than two years, and 14 per cent of births are less than 18 months apart. Twenty-five per cent of births occur 24-35 months after the previous birth and 47 per cent are at least three years apart.

Table FE.5: Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Lao PDR 2011-12

	Months preceding birth							Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+	Total		
Region									
North	15.1	15.0	27.9	14.8	8.6	18.6	100.0	2,543	31.8
Central	13.5	12.8	22.7	15.4	11.2	24.4	100.0	3,421	36.5
South	14.6	13.6	26.4	17.1	10.0	18.3	100.0	1,737	33.3
Province									
Vientiane Capital	6.2	7.4	15.8	13.7	14.1	42.7	100.0	583	52.5
Phongsaly	18.7	14.8	33.0	13.5	8.6	11.5	100.0	280	28.3
Luangnamtha	12.8	15.9	25.8	18.4	8.9	18.3	100.0	169	34.2
Oudomxay	13.1	14.6	34.5	14.7	8.0	15.1	100.0	492	31.1
Bokeo	13.1	14.9	30.5	16.6	8.6	16.1	100.0	244	31.3
Luangprabang	14.5	12.0	25.6	16.8	10.7	20.5	100.0	567	35.1
Huaphanh	19.6	22.1	29.0	11.5	6.1	11.7	100.0	498	26.6
Xayabury	11.9	9.3	13.4	14.3	9.5	41.5	100.0	294	48.5
Xiengkhuang	14.3	17.6	29.4	16.2	9.8	12.6	100.0	375	30.6
Vientiane	7.5	13.1	21.7	15.8	11.7	30.2	100.0	476	40.9
Borikhamxay	10.4	10.0	21.0	18.6	15.1	24.8	100.0	254	41.5
Khammuane	16.6	16.7	22.4	13.8	11.6	18.9	100.0	433	31.3
Savannakhet	18.4	13.1	24.6	15.7	9.2	19.1	100.0	1,301	32.6
Saravane	16.3	15.7	27.1	17.0	9.8	14.1	100.0	721	30.6
Sekong	12.9	17.9	34.7	16.3	8.2	9.9	100.0	211	29.1
Champasack	13.9	9.7	22.3	18.0	10.6	25.4	100.0	651	39.4
Attapeu	11.5	13.8	29.0	15.2	10.6	19.9	100.0	154	34.2
Residence									
Urban	8.0	8.5	19.2	17.1	12.7	34.6	100.0	1,326	46.3
Rural	15.6	14.8	26.5	15.3	9.5	18.3	100.0	6,374	32.2
..Rural with road	15.1	14.7	26.0	15.5	9.7	19.1	100.0	5,461	32.8
..Rural without road	18.6	15.6	29.5	14.3	8.4	13.6	100.0	914	29.3
Age									
15-19	31.1	31.7	28.8	7.7	0.2	0.5	100.0	171	21.8
20-29	17.0	16.2	28.4	16.6	9.6	12.1	100.0	3,751	30.0
30-39	11.1	10.5	22.3	15.1	11.0	30.0	100.0	3,084	39.9
40-49	9.5	9.8	20.2	14.3	10.6	35.5	100.0	694	44.8
Sex of preceding birth									
Male	13.4	14.2	24.9	15.6	10.3	21.5	100.0	3,934	34.6
Female	15.2	13.2	25.6	15.6	9.8	20.6	100.0	3,767	33.7
Survival of preceding birth									
Living	11.9	13.3	25.7	16.3	10.5	22.3	100.0	6,809	35.5
Dead	32.3	16.8	22.1	10.4	6.5	11.9	100.0	891	24.2
Birth order									
2-3	13.7	13.3	23.3	15.3	10.8	23.7	100.0	4,255	35.9
4-6	14.5	14.0	26.3	16.7	9.1	19.4	100.0	2,348	33.3
7+	16.2	14.9	30.5	14.6	9.4	14.5	100.0	1,097	29.8
Education									
None	17.5	16.5	29.9	15.9	8.3	11.8	100.0	3,013	29.1
Primary	13.8	12.9	24.2	14.6	10.3	24.1	100.0	3,139	35.5
Lower secondary	8.7	11.6	17.3	16.5	12.0	33.9	100.0	944	45.3
Upper secondary	9.4	7.9	18.4	16.1	15.6	32.6	100.0	331	46.6
Post secondary non tertiary	9.2	5.2	23.3	18.0	14.2	30.2	100.0	168	45.0
Higher	8.7	9.0	18.2	22.3	11.0	30.9	100.0	106	41.8
Wealth index quintile									
Poorest	18.5	18.1	30.7	15.9	7.5	9.3	100.0	2,740	27.9
Second	15.9	14.3	28.5	15.0	9.7	16.6	100.0	1,768	31.4
Middle	12.5	13.5	22.2	16.6	11.4	23.8	100.0	1,349	37.3
Fourth	9.8	7.4	16.8	14.9	12.7	38.4	100.0	996	48.6
Richest	5.7	6.2	15.4	15.0	13.8	43.9	100.0	847	54.2
Ethno-linguistic group of household head									
Lao-Tai	10.9	9.5	19.4	15.3	12.1	32.9	100.0	3,706	44.0
Mon-Khmer	17.6	16.0	29.6	16.4	8.9	11.5	100.0	2,535	29.4
Hmong-Mien	17.1	21.2	33.0	15.0	6.7	7.0	100.0	1,157	27.2
Chinese-Tibetan	16.5	16.0	31.6	16.0	8.9	11.0	100.0	265	29.2
Other, Missing, DK	(24.2)	(27.1)	(23.3)	(6.3)	(5.7)	(13.4)	100.0	38	(24.2)
Total	14.3	13.7	25.2	15.6	10.1	21.1	100.0	7,701	34.1

Note: Figures in parentheses are based on 25-49 unweighted cases.

The median birth interval increases with age of the mother, ranging from 21.8 months for births to women age 15-19 to 44.8 months for births to women age 40-49. The longer birth interval among older women may be attributed in part to a decrease in fecundity as women grow older. There is no substantial difference in the median birth interval by the child's sex. However, the median birth interval is almost a year shorter if the previous child died than if the previous child is still alive. The median duration decreases as birth order increases. The median interval for births to urban women is 14 months longer than for rural women (46.3 and 32.2 months, respectively), and ranges from 26.6 months in Huaphanh to 52.5 months in Vientiane Capital. The median number of months since the preceding birth among non-first births is longest for births to women who have gone to upper secondary school but do not have more than a secondary education (46.6 months). The shortest median birth interval is for births to women with no education (29.1 months). The median birth interval increases monotonically by wealth quintile from 27.9 months in the poorest quintile to 54.2 in the richest quintile. Women in Lao-Tai headed households have considerably longer birth intervals (44.0 months) compared with those in other ethno-linguistic groups (all less than 30 months).

Age at First Birth

The age at which childbearing commences is an important determinant of the overall level of fertility as well as of the health and welfare of the mother and the child. In some societies, postponement of first births due to an increase in age at marriage has contributed to overall fertility decline. Table FE.6 shows the percentage of women in Lao PDR who have given birth by specific ages, according to age at the time of the survey.

Table FE.6: Age at first birth

Percentage of women age 15-49 who gave birth by specific exact ages, percentage who have never given birth, and median age at first birth, according to current age, Lao PDR 2011-12

	Percentage who gave birth by exact age:					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
Age								
15-19	1.2	na	na	na	na	86.0	4,415	a
20-24	2.5	18.2	37.9	na	na	40.5	3,617	a
25-29	3.6	21.4	41.8	59.0	76.1	16.8	3,642	20.9
30-34	4.2	21.0	40.7	60.1	78.3	8.4	3,015	20.9
35-39	3.3	19.8	40.3	60.7	79.3	5.8	3,065	20.9
40-44	3.5	18.1	38.0	57.5	78.2	5.4	2,507	21.2
45-49	3.4	15.2	33.8	53.3	73.6	5.4	2,215	21.6
25-49	3.6	19.4	39.4	58.5	77.2	9.0	14,444	21.1

na = Not applicable due to censoring

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

Some 4 per cent of women age 25-49 give birth by the age of 15, and 19 per cent give birth by 18. Two in five (39 per cent) women have become mothers by the age of 20. The percentage of women giving birth by each exact age has varied little over time and the median age at first birth is unchanged at around 21 years.

Table FE.7 presents the median age at first birth by background characteristics. The median is presented for women age 25-49 to ensure that half of the women in every subgroup have already given birth. In Lao PDR the median age at first birth for women age 25-49 is 21.1 years. The median age at first birth for women age 25-49 in urban areas (22.6 years) is 2 years later than the median age at first birth in rural areas (20.5 years), and is lowest in the North at 20.4 years. The median age at first birth ranges from 19.8 years in Huaphanh to 23.2 years in Vientiane Capital. Median age at first birth increases with education and wealth. For example, women in the highest wealth quintile delay the onset of their childbearing by almost three years relative to women in the lowest two wealth quintiles. Women in Hmong-Mien headed households have the lowest age at first birth at 19.4 years.

Table FE.7: Median age at first birth

Median age at first birth among women age 25-49 years, Lao PDR 2011-12

	Women age 25-49
Region	
North	20.4
Central	21.5
South	21.3
Province	
Vientiane Capital	23.2
Phongsaly	20.7
Luangnamtha	21.1
Oudomxay	20.4
Bokeo	20.4
Luangprabang	20.5
Huaphanh	19.8
Xayabury	20.2
Xiengkhuang	20.5
Vientiane	21.0
Borikhamxay	20.7
Khammuane	21.1
Savannakhet	20.9
Saravane	20.5
Sekong	20.9
Champasack	21.9
Attapeu	21.0
Residence	
Urban	22.6
Rural	20.5
..Rural with road	20.5
..Rural without road	20.5

	Women age 25-49
Education	
None	20.1
Primary	20.3
Lower secondary	21.3
Upper secondary	23.5
Post secondary non tertiary	24.5
Higher	a
Wealth index quintile	
Poorest	20.4
Second	20.2
Middle	20.5
Fourth	21.0
Richest	23.0
Ethno-linguistic group of household head	
Lao-Tai	21.5
Mon-Khmer	20.1
Hmong-Mien	19.4
Chinese-Tibetan	21.1
Other, Missing, DK	(21.8)
Total	21.1

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

Early Childbearing

Sexual activity and childbearing early in life carry significant risks for young people all around the world. Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality for both mother and child. Childbearing during the teenage years frequently has adverse social consequences as well, particularly on educational attainment, because women who become mothers in their teenage years are more likely to curtail their education. Table FE. 11 presents some early childbearing indicators for women age 15-19 and 20-24 while Table FE. 12 presents the trends for early child bearing. As shown in Table FE.11, 18 per cent of women age 15-19 have begun child bearing: 14 per cent have already had a birth, and 4 per cent are pregnant with their first child. While only 2 per cent of women age 15 have started childbearing; 40 per cent of women are either mothers or are pregnant with their first child by the age of 19.

More teenagers in rural areas have started childbearing than their urban counterparts (21 and 9 per cent, respectively). A higher percentage of teenagers in the Northern region have begun childbearing than in the other regions; 28 per cent of teenagers in Bokeo, 25 per cent in Phongsaly, and 24 per cent in Luangnamtha have given birth or are currently pregnant.

There is a strong inverse relationship between early childbearing and women's education; more teenagers with lower education have started childbearing than those who are better educated. Thirty-six per cent of teenagers with no education, but less than 1 per cent with some education have begun childbearing. Four times as many teenagers in the lowest wealth quintile started childbearing early compared with women in the highest wealth quintile (28 per cent and 7 per cent, respectively).

Table FE.11: Early childbearing

Percentage of women age 15-19 years who have had a live birth or who are pregnant with the first child and percentage of women age 15-19 years who have begun childbearing, percentage of women who have had a live birth before age 15, and percentage of women age 20-24 who have had a live birth before age 18, Lao PDR 2011-12

	Percentage of women age 15-19 who:						
	Have had a live birth	Are pregnant with first child	Have begun childbearing	Have had a live birth before age 15	Number of women age 15-19	Percentage of women age 20-24 who have had a live birth before age 18[1]	Number of women age 20-24
Region							
North	17.5	4.3	21.8	1.6	1,403	26.0	1,170
Central	11.7	3.5	15.2	0.6	2,125	12.8	1,792
South	13.7	4.0	17.7	1.8	887	18.8	654
Province							
Vientiane Capital	6.9	2.4	9.3	0.0	527	3.8	583
Phongsaly	19.3	6.1	25.4	2.0	124	25.7	116
Luangnamtha	21.1	2.4	23.5	2.3	123	24.8	114
Oudomxay	19.1	2.5	21.6	3.2	271	27.7	208
Bokeo	22.1	5.8	27.9	0.9	124	33.9	109
Luangprabang	17.5	3.5	21.0	0.9	248	17.9	226
Huaphanh	15.5	5.9	21.4	1.8	246	35.2	162
Xayabury	13.0	4.5	17.5	0.0	267	23.3	236
Xiengkhuang	14.1	4.1	18.2	2.1	252	22.5	137
Vientiane	11.9	5.5	17.4	0.5	284	14.4	258
Borikhamxay	16.2	0.9	17.1	1.4	184	19.4	138
Khammuane	13.3	3.1	16.4	1.3	206	18.4	171
Savannakhet	12.9	4.1	17.0	0.3	672	16.1	505
Saravane	17.2	5.4	22.6	3.9	308	23.0	256
Sekong	15.6	5.1	20.6	2.8	94	24.4	60
Champasack	10.3	2.0	12.3	0.0	402	12.6	280
Attapeu	15.2	7.5	22.7	1.7	83	23.7	59
Residence							
Urban	6.5	2.4	8.9	0.4	1,229	5.9	1,127
Rural	16.9	4.4	21.2	1.5	3,186	23.7	2,490
..Rural with road	16.5	4.3	20.7	1.4	2,856	22.9	2,298
..Rural without road	20.3	5.4	25.7	1.7	330	33.7	192
Age							
15	1.1	1.0	2.1	0.5	920	na	na
16	4.2	2.2	6.4	0.8	928	na	na
17	10.3	3.5	13.8	1.4	905	na	na
18	23.5	7.2	30.8	1.5	867	na	na
19	34.0	5.7	39.7	1.7	794	na	na
Education							
None	29.2	7.1	36.2	4.6	448	35.2	605
Primary	22.6	5.6	28.2	2.1	1,380	24.9	1,309
Lower secondary	11.5	3.5	15.1	0.1	1,250	16.4	630
Upper secondary	2.6	1.3	3.9	0.0	1,149	3.2	427
Post secondary non tertiary	(0.0)	(2.6)	(2.6)	(0.0)	51	0.2	166
Higher	0.4	0.0	0.4	0.0	137	0.0	480
Wealth index quintile							
Poorest	24.1	4.3	28.4	3.7	685	35.9	643
Second	19.3	5.6	25.0	1.8	860	27.0	666
Middle	14.4	3.4	17.7	1.2	919	19.6	622
Fourth	11.0	4.2	15.2	0.0	952	11.9	696
Richest	4.9	2.0	6.9	0.0	999	4.2	991
Ethno-linguistic group of household head							
Lao-Tai	10.3	3.2	13.5	0.5	2,827	12.8	2,381
Mon-Khmer	20.4	4.2	24.5	2.1	1,003	26.5	815
Hmong-Mien	22.3	5.9	28.2	3.5	413	38.7	276
Chinese-Tibetan	18.4	3.2	21.6	2.2	148	22.2	120
Other, Missing, DK	*	*	*	*	24	(16.7)	25
Total	14.0	3.8	17.8	1.2	4,415	18.2	3,617

[1] **MICS indicator 5.2**

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

Almost one in five women age 20-24 reported having had their first live birth before their eighteenth birthday. There is significant regional variation; the Northern region has a higher percentage of women who had their first live birth before 18 years of age (26 per cent). Between urban and rural women, the percentage of women who had a live birth before age 18 is significantly different (6 and 24 per cent, respectively). The percentage of women age 20-24 who have had a child by 18 varies by province, with Huaphanh and Bokeo having the highest proportions (35 and 34 per cent, respectively), and Vientiane Capital having only 4 per cent. Early childbearing has a strong association with education; the proportion of women age 20-24 who reported having had a live birth by 18 decreases dramatically with increasing education. Thirty-five per cent of women with no education had a live birth by 18 compared with only 3 per cent of women with upper secondary education. Table FE.11 further reveals that early childbearing is most common among women in the poorest quintile (36 per cent), and in Hmong-Mien headed households (39 per cent).

Table FE. 12 shows the trends in early child bearing of women who have had a live birth, by age group and residence. Three per cent of women had a live birth before the age of 15, while 19 per cent of women had a live birth before the age of 18. There are differences in early child bearing between urban and rural women – 23 per cent of women had a live birth before the age of 18 in rural areas compared with 10 per cent in urban areas. Similarly, 4 per cent of women had a live birth before the age of 15 in rural areas and only 1 per cent in urban areas. Comparing age groups, there appears to be a declining trend in the percentage of women giving birth before 18 in urban areas, from 13 per cent in women age 40-44 to 6 per cent in women age 20-24; however, the pattern in rural areas seems to indicate an increase in the percentage who gave birth before 18 from the oldest age groups to the 30-34 and 25-29 age groups, and then a hint of a decline in the younger 20-24 age group.

Table FE.12: Trends in early childbearing

Percentage of women who have had a live birth, by age 15 and 18, by residence and age group, Lao PDR 2011-12

	Urban				Rural				All			
	Percentage of women with a live birth before age 15	Number of women	Percentage of women with a live birth before age 18	Number of women	Percentage of women with a live birth before age 15	Number of women	Percentage of women with a live birth before age 18	Number of women	Percentage of women with a live birth before age 15	Number of women	Percentage of women with a live birth before age 18	Number of women
Age												
15-19	0.4	1,229	na	na	1.5	3,186	na	na	1.2	4,415	na	na
20-24	0.4	1,127	5.9	1,127	3.4	2,490	23.7	2,490	2.5	3,617	18.2	3,617
25-29	0.7	1,115	9.2	1,115	4.8	2,527	26.8	2,527	3.6	3,642	21.4	3,642
30-34	1.2	899	9.8	899	5.4	2,116	25.7	2,116	4.2	3,015	21.0	3,015
35-39	2.5	881	11.7	881	3.6	2,184	23.0	2,184	3.3	3,065	19.8	3,065
40-44	1.5	734	12.6	734	4.4	1,773	20.4	1,773	3.5	2,507	18.1	2,507
45-49	2.4	664	10.9	664	3.9	1,551	17.0	1,551	3.4	2,215	15.2	2,215
Total	1.2	6,649	9.7	5,420	3.7	15,827	23.3	12,641	2.9	22,476	19.2	18,061

na = Not applicable

Desire For More Children

Information on fertility preference provides family planning programmes with an understanding of the potential demand for family planning in a given population. The 2011-12 LSIS asked women a series of questions to ascertain their fertility preferences, including the desire to have another child, and the length of time they would like to wait before having another child. Sterilised women were considered to want no more children, and therefore they were not asked questions about their desire for more children. Pregnant women were asked about their current pregnancy – whether they had wanted to become pregnant or not, and if not, whether they had wanted the pregnancy later or not at all, and, if later, how long they would have wanted to wait.

Table FE 8 shows the distribution of currently married women age 15-49 by desire for more children, according to the number of living children. Pregnant women are included in the table and the number of living children includes the current pregnancy, counting the pregnancy as an additional child. Table FE 8 shows that 9 per cent of married women want to have another child soon. One in five women (19 per cent) wants to have another child later (two or more years) – these women can be considered potential contraceptive users for birth spacing. More than half (58 per cent) of women want no more children or are sterilised. Four per cent of women consider themselves unable to become pregnant. See also Figure FE.2.

The desire for more children is related to the number of living children women already have. Four in five currently married women with no children want to have a child, with 47 per cent expressing the desire to have a child soon, 23 per cent wanting to delay having a child for at least two years, and 8 per cent undecided as to when to have a child. For women with one or more living children, the desire to stop childbearing altogether increases with the number of children. For example, only 15 per cent of currently married women with one child report that they want no more children (including those women who are sterilized) compared with 89 per cent of women with six or more children. Only 3 per cent of women with five or more living children want more children.

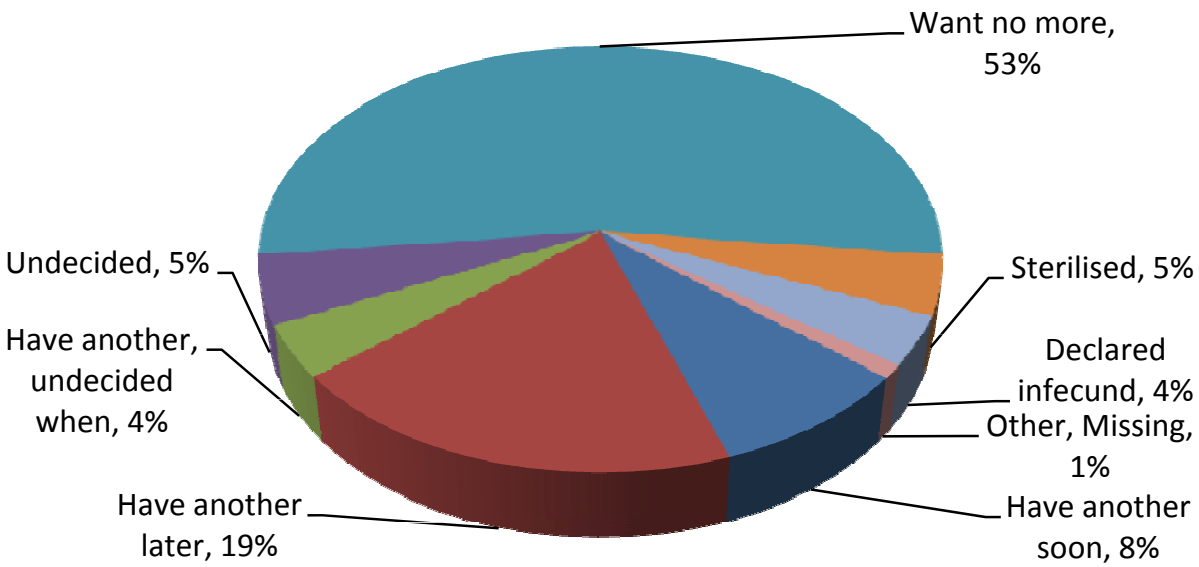
Table FE.8: Fertility preferences by number of living children

Percent distribution of currently married women age 15-49 by desire for children, according to number of living children, Lao PDR 2011-12

	Number of living children*							
	0	1	2	3	4	5	6+	Total
Desire for future birth								
Have another soon**	46.5	14.6	6.1	2.9	1.2	0.7	0.4	8.5
Have another later***	23.4	52.3	21.4	7.6	4.0	1.9	1.6	19.4
Have another, undecided when	8.0	8.1	4.8	1.9	1.9	0.5	0.8	4.1
Undecided	7.8	6.5	6.7	4.6	3.9	2.8	2.1	5.3
Want no more	4.2	13.9	53.4	70.4	76.8	81.4	84.2	53.3
Sterilised****	0.3	1.0	4.0	8.2	7.4	6.1	4.5	4.6
Declared infecund	8.7	2.9	2.5	3.2	4.0	5.7	5.5	3.8
Other, Missing	1.0	0.9	1.2	1.1	0.8	0.9	1.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,186	3,100	4,273	3,105	1,874	1,279	1,550	16,368

* The number of living children includes current pregnancy
** Wants next birth within two years
*** Wants to delay next birth for two or more years
**** Includes only female sterilisation

Figure FE.2: Desire for more children among currently married women, Lao PDR 2011-12



Desire to Limit Childbearing

Table FE.9 shows, by number of living children, the percentage of currently married women age 15-49 who want no more children (or who are sterilised), according to background characteristics. The results provide information on variations in the potential demand for fertility control. A greater percentage of women in rural areas (59 per cent), women with no education (63 per cent), and women in the poorest wealth quintile (60 per cent) report wanting no more children compared with women in urban areas (55 per cent), women with some education (37 per cent), and women in the richest quintile (54 per cent). This finding may seem contradictory to expectations. However, the rural, uneducated and poorest women all tend to have more children than their urban, educated, or richer counterparts. As such, interpretation of the relationship between urban and rural women, education level, or wealth quintile and fertility preferences needs to be based on comparisons within parity categories. For example, considering women with three living children (roughly the current TFR), 68 per cent of women with no education want no more children compared with 86 per cent of women with upper secondary or higher education. Women with no education do not reach this level until they have six children. Similarly, there is no real difference in desire for limiting children by wealth quintile among women with six or more children, but among women with two or three living children, the desire to limit childbearing increases markedly with wealth.

Table FE.9: Desire to limit childbearing

Percentage of currently married women age 15-49 who want no more children, by number of living children, Lao PDR 2011-12

	Number of living children*							
	0	1	2	3	4	5	6+	Total
Region								
North	6.0	15.3	67.7	85.5	90.9	93.2	92.8	63.5
Central	4.1	14.7	52.0	75.6	77.8	82.4	85.6	53.6
South	3.0	14.3	51.9	75.2	87.6	89.2	88.4	59.5
Province								
Vientiane Capital	3.9	23.4	67.4	82.0	87.2	(81.9)	(86.9)	55.8
Phongsaly	2.7	16.0	67.6	88.9	84.1	92.8	95.9	64.1
Luangnamtha	2.7	11.8	65.8	87.2	96.3	(92.8)	(95.7)	61.4
Oudomxay	12.3	18.4	70.2	86.6	94.0	94.4	91.8	67.9
Bokeo	1.7	12.4	65.8	85.9	79.2	91.3	85.9	59.1
Luangprabang	7.0	13.3	63.3	84.0	91.0	91.1	87.7	62.3
Huaphanh	8.7	11.7	45.4	80.6	95.4	95.0	98.7	67.8
Xayabury	3.0	17.9	80.6	88.5	89.4	(93.6)	(95.5)	60.4
Xiengkhuang	(0.0)	5.0	39.5	74.9	89.7	89.0	90.3	55.9
Vientiane	3.6	7.5	48.1	74.9	71.4	78.2	74.3	49.5
Borikhamxay	(0.0)	9.8	37.6	78.3	84.9	89.3	94.1	53.7
Khammuane	7.1	15.1	46.8	71.3	83.2	87.6	95.3	55.9
Savannakhet	5.3	13.4	43.2	71.3	70.1	79.4	83.4	52.4
Saravane	1.7	11.9	42.6	68.2	81.9	87.2	88.3	55.8
Sekong	6.9	18.4	41.3	67.8	77.2	77.5	79.4	55.1
Champasack	2.7	14.4	54.1	78.9	93.7	92.6	91.2	61.1
Attapeu	(4.0)	19.0	75.8	90.6	95.4	95.2	88.8	69.9
Residence								
Urban	3.4	16.1	61.6	83.2	87.6	88.5	90.9	55.4
Rural	5.1	14.3	55.5	76.9	83.3	87.3	88.4	58.8
..Rural with road	4.8	14.3	56.0	78.0	83.8	87.4	88.2	58.6
..Rural without road	8.0	14.5	49.1	66.7	80.4	86.3	89.5	61.2
Education								
None	9.6	18.9	49.3	68.3	78.2	85.3	86.2	63.2
Primary	4.0	15.7	59.6	80.7	87.2	88.3	90.8	61.4
Lower secondary	2.7	13.1	57.7	82.4	90.4	87.2	92.5	52.2
Upper secondary	2.0	9.0	56.7	85.9	(80.2)	*	*	42.0
Post secondary non tertiary	1.1	16.5	61.4	86.0	84.5	(99.4)	*	54.3
Higher	5.0	14.7	61.1	(87.5)	*	*	*	37.0
Wealth index quintile								
Poorest	8.0	18.8	48.3	68.0	79.2	85.1	88.4	60.1
Second	3.6	11.8	51.9	76.3	86.6	88.6	88.4	59.8
Middle	5.0	13.2	59.2	78.0	83.8	89.9	87.9	59.1
Fourth	3.9	14.1	60.5	83.8	85.4	87.2	89.9	57.3
Richest	3.4	16.6	61.7	84.2	87.9	86.0	91.5	53.9
Ethno-linguistic group of household head								
Lao-Tai	4.4	15.0	60.3	82.9	88.2	89.1	90.6	57.5
Mon-Khmer	5.7	16.0	53.2	72.4	79.9	86.5	88.4	60.7
Hmong-Mien	3.6	8.8	28.9	47.6	73.0	81.5	83.9	53.7
Chinese-Tibetan	4.2	12.9	50.9	85.0	86.5	94.1	96.0	58.2
Total	4.5	14.8	57.4	78.6	84.2	87.5	88.7	57.9

* The number of living children includes current pregnancy

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

Fertility Planning Status

The issue of unplanned and unwanted fertility was further investigated in the 2011-12 LSIS by asking women with births in the two years preceding the survey whether the births were wanted at the time ("wanted then"), wanted at a later time ("wanted later"), or not wanted at all. For women who were pregnant at the time of the interview, this question was asked with reference to the current pregnancy. In the interpretation of these results, it is important to consider that a woman may declare a birth (or pregnancy) as wanted once the child is born even if that was not her feeling during pregnancy, and this rationalisation would result in an underestimation of the true extent of unwanted births. Nevertheless, these results provide some insight into the degree to which couples are able to control their fertility.

Table FE.10 shows the percentage distribution of last births in the two years preceding the survey or current pregnancy, by fertility planning status, according to birth order and mother's age at birth. Seven of every eight births (87 per cent) were reported as wanted at the time, 5 per cent were wanted but wanted later, and 7 per cent were not wanted at all ("unwanted"). The proportion of births wanted at the time of conception generally declines with both increasing birth order and mother's age.

Table FE.10: Fertility planning status

Percent distribution of last birth or current pregnancy to women age 15-49 in the two years preceding the survey, by planning status of the birth or pregnancy, according to birth order and mother's age at birth, Lao PDR 2011-12

	Planning status of birth*					
	Wanted then	Wanted later	Wanted no more	Missing	Total	Number of women
Birth order						
1	92.8	5.2	1.5	0.5	100.0	1,549
2	90.2	5.2	2.8	1.8	100.0	1,392
3	87.1	4.7	6.1	2.0	100.0	835
4+	77.1	3.1	17.4	2.5	100.0	1,439
Mother's age at birth						
<20	90.0	6.6	2.2	1.2	100.0	884
20-24	89.9	5.4	3.5	1.1	100.0	1,552
25-29	86.9	3.7	7.5	1.8	100.0	1,246
30-34	82.8	3.2	11.0	3.1	100.0	687
35-39	72.6	2.6	22.2	2.6	100.0	363
40-44	69.4	0.9	29.5	0.3	100.0	106
45-49	(65.2)	(6.5)	(22.9)	(5.4)	100.0	30
Total	86.9	4.5	7.0	1.6	100.0	5,215

* includes current pregnancy
Note: Figures in parentheses are based on 25-49 unweighted cases.

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VII. Reproductive Health

This chapter presents information from the 2011-12 LSIS on contraceptive knowledge, use and need. Information on women's knowledge of family planning methods provides a measure of the level of awareness of contraception in the population and indicates the success of information, education and communication programmes. Information on contraceptive use and need can help assess the success of family planning programmes.

This chapter also presents findings from several areas of importance to maternal health, including antenatal, delivery and post-natal care. The data presented in this chapter provide an opportunity to identify critical issues affecting the health status of Lao women. This information will assist policy makers, planners and other collaborators in the health sector to formulate appropriate strategies and interventions to provide quality reproductive health services and a series of well-timed interventions to improve maternal health.

Contraception

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

Knowledge of contraceptive methods

Knowledge of family planning is a prerequisite to obtaining access to and using a suitable contraceptive method in a timely and effective manner. Interviewers collected information regarding knowledge of contraceptive methods by describing each method and asking female and male respondents if she/he had heard of it. Using this approach, interviewers collected information about eight modern family planning methods: female and male sterilization; the IUD; injectables; Implants; the pill; and male and female condoms. Two traditional methods were also asked about: the rhythm method (periodic abstinence) and withdrawal. Interviewers also recorded any other methods that respondents mentioned.

Table RH.1 shows the percentage of all respondents, currently married respondents, and sexually active unmarried respondents, age 15-49, who have heard of any contraceptive method, by specific method. Knowledge of at least one method of contraception is nearly universal among both women and men, regardless of marital status and sexual experience. Over 90 per cent of women and men have heard of a modern method. Both women and men are more familiar with modern methods of contraception (94 and 95 per cent, respectively) than with traditional methods (68 and 69 per cent, respectively). Unmarried sexually active women and men know of modern methods in similar proportions as their married counterparts.

Table RH.1: Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who have heard of any contraceptive method, by specific method, Lao PDR 2011-12

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women*	All men	Currently married men	Sexually active unmarried men*[1]
Any method	94.0	95.6	95.5	95.3	97.0	98.4
Any modern method	93.6	95.2	95.5	94.7	96.4	97.9
Female sterilization	77.4	80.1	77.2	70.6	77.6	70.7
Male sterilization	48.0	49.3	50.9	45.7	49.8	43.1
IUD	72.4	76.9	71.6	59.8	69.8	55.4
Injectables	89.1	92.2	87.3	79.1	86.2	75.0
Implants	44.6	47.7	32.7	30.2	34.3	22.7
Pill	91.0	93.4	90.0	85.0	90.4	85.8
Male condom	84.5	85.4	91.7	90.9	92.5	95.9
Female condom	33.9	34.2	44.5	29.0	31.7	33.2
Any traditional method	68.4	76.3	71.5	69.2	79.4	72.0
Periodic abstinence/Rhythm	65.0	72.7	59.9	57.5	69.7	52.0
Withdrawal	52.4	60.5	51.1	55.2	62.8	63.7
Other	2.9	3.5	0.6	2.5	3.2	0.5
Mean number of methods known	6.6	7.0	6.6	6.1	6.7	6.0
Number of respondents	22,476	16,368	95	9,951	6,611	422

* Had last sexual intercourse within the 28 days preceding the survey

Nine in ten women have heard about the pill and about injectables. More men report knowledge of the pill (85 per cent) and the male condom (91 per cent) than any other contraceptive methods. The least known methods among women are the female condom (34 per cent), while the least known among men are the female condom (29 per cent) and implants (30 per cent).

Current use of contraceptive methods

Current use of contraceptive methods is one of the indicators most frequently used to assess the success of family planning programmes. This section focuses on the levels, trends and differentials in current use of family planning.

Table RH.2 presents the percentage of women age 15 to 49 years who are currently married or in union and using (or whose partner is using) a contraceptive method. Further reference to 'currently married' in this section includes both formally married women and women who reported themselves to be living with a man (but who are not formally married). Fifty per cent of currently married women are using a method of contraception. The most popular method is the pill, used by 2 in 10 married women in Lao PDR. Injectables are the next most popular method, used by 14 per cent of currently married women. Five per cent of married women are sterilized, and all other modern methods are used by fewer than 2 per cent of married women. Five per cent of married women report using periodic abstinence.

Table RH.2: Use of contraception

Percentage of women age 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Lao PDR 2011-12

	Percent of women (currently married or in union) who are using:																		Number of women currently married or in union
	Not using any method	Female sterili-zation	Male sterili-zation	IUD	Injectables	Implants	Pill	Male condom	Female condom	Diaphragm/Foam/Jelly	LAM	Periodic abstinence	Withdrawal	Other	Missing	Any modern method	Any tradi-tional method	Any method[1]	
Region																			
North	43.1	4.4	0.0	1.7	17.1	0.1	27.0	0.5	0.0	0.0	1.4	4.1	0.5	0.0	0.1	50.8	6.2	57.0	5,446
Central	52.3	4.4	0.0	1.6	10.8	0.1	20.4	1.6	0.0	0.0	0.3	5.7	2.6	0.2	0.1	38.9	8.9	47.8	7,987
South	58.5	5.3	0.0	1.2	14.7	0.1	12.5	0.7	0.0	0.0	0.1	4.3	2.5	0.0	0.1	34.5	7.1	41.6	2,935
Province																			
Vientiane Capital	51.1	4.6	0.1	2.5	3.9	0.0	21.2	3.4	0.1	0.0	0.2	9.3	3.3	0.3	0.0	35.8	13.1	48.9	2,116
Phongsaly	55.3	14.3	0.0	6.2	13.8	0.0	8.0	0.5	0.0	0.0	0.0	1.3	0.6	0.0	0.0	42.8	1.9	44.7	541
Luangnamtha	43.6	6.0	0.0	1.5	17.1	0.0	28.8	0.4	0.0	0.0	0.5	1.9	0.2	0.0	0.1	53.7	2.8	56.5	477
Oudomxay	38.7	2.3	0.0	1.3	18.2	0.0	24.3	0.1	0.0	0.0	7.3	7.4	0.4	0.0	0.1	46.2	15.2	61.4	884
Bokeo	40.0	13.3	0.0	0.1	25.3	0.0	15.8	0.6	0.0	0.0	0.3	4.1	0.5	0.0	0.0	55.1	4.9	60.0	476
Luangprabang	50.4	1.6	0.0	1.2	13.6	0.0	25.3	0.8	0.0	0.0	0.1	6.6	0.4	0.0	0.2	42.5	7.3	49.8	1,141
Huaphanh	48.3	1.5	0.0	1.9	16.1	0.1	27.8	1.1	0.0	0.0	0.0	2.0	1.1	0.0	0.1	48.6	3.2	51.8	831
Xayabury	30.3	1.7	0.1	1.1	18.5	0.4	43.6	0.3	0.1	0.0	0.7	2.9	0.4	0.0	0.1	65.8	4.0	69.8	1,096
Xiengkhuang	38.0	0.8	0.0	3.4	10.1	0.0	15.2	2.6	0.0	0.0	0.0	17.7	12.0	0.1	0.4	32.1	30.2	62.3	663
Vientiane	53.9	1.3	0.0	1.1	9.0	0.0	29.4	0.9	0.0	0.0	0.9	2.5	1.0	0.0	0.3	41.6	4.8	46.3	1,288
Borikhamxay	47.0	2.8	0.0	1.0	15.9	0.0	26.7	1.2	0.0	0.0	0.0	4.7	0.7	0.0	0.1	47.6	5.6	53.1	664
Khammuane	49.5	7.9	0.0	0.8	23.0	0.1	14.6	0.7	0.0	0.0	0.0	1.4	1.9	0.1	0.1	47.1	3.6	50.6	784
Savannakhet	58.6	6.3	0.0	0.9	12.6	0.1	16.5	0.6	0.0	0.0	0.4	2.6	1.2	0.2	0.1	37.1	4.4	41.5	2,472
Saravane	56.6	5.0	0.0	1.1	17.7	0.1	12.9	0.8	0.0	0.0	0.3	4.1	1.4	0.0	0.2	37.6	6.0	43.6	1,044
Sekong	68.3	5.3	0.0	1.3	12.5	0.0	5.1	0.6	0.1	0.0	0.0	1.3	5.3	0.1	0.1	24.9	6.9	31.8	273
Champasack	59.4	5.2	0.0	0.8	11.7	0.2	13.5	0.7	0.0	0.0	0.0	5.1	3.3	0.0	0.1	32.1	8.5	40.7	1,338
Attapeu	51.8	7.3	0.0	3.3	19.7	0.0	13.0	0.5	0.0	0.0	0.0	4.4	0.0	0.0	0.1	43.8	4.5	48.3	280
Residence																			
Urban	47.5	6.7	0.0	2.9	7.4	0.1	20.6	2.8	0.1	0.0	0.3	8.5	3.0	0.1	0.1	40.6	12.0	52.6	4,301
Rural	51.4	3.8	0.0	1.1	15.8	0.1	21.4	0.5	0.0	0.0	0.8	3.7	1.5	0.1	0.1	42.6	6.1	48.8	12,066
..Rural with road	50.0	3.9	0.0	1.1	16.0	0.1	22.2	0.6	0.0	0.0	0.8	3.8	1.6	0.1	0.1	43.8	6.3	50.2	10,845
..Rural without road	63.6	2.7	0.0	1.3	13.8	0.0	14.2	0.0	0.0	0.0	0.7	2.6	1.0	0.0	0.0	32.0	4.3	36.4	1,222
Age																			
15-19	73.8	0.1	0.0	0.1	5.0	0.0	16.4	0.7	0.0	0.0	1.3	1.7	0.9	0.0	0.2	22.3	4.1	26.4	1,092
20-24	58.5	0.7	0.0	0.5	9.2	0.0	23.6	1.0	0.0	0.0	1.4	3.2	1.8	0.0	0.1	35.0	6.6	41.6	2,468
25-29	45.4	1.8	0.0	1.1	14.0	0.1	28.6	1.3	0.1	0.0	0.7	4.5	2.3	0.1	0.1	47.0	7.6	54.7	3,142
30-34	40.5	4.5	0.1	1.9	17.5	0.2	24.3	1.9	0.0	0.0	0.7	6.1	2.2	0.1	0.2	50.5	9.3	59.8	2,728
35-39	37.6	6.9	0.0	2.8	19.3	0.0	22.6	0.7	0.0	0.0	0.3	7.3	2.2	0.2	0.0	52.4	10.1	62.4	2,782
40-44	49.4	8.1	0.0	2.2	15.2	0.0	16.2	1.0	0.0	0.0	0.2	5.8	1.6	0.1	0.1	42.9	7.8	50.7	2,238
45-49	68.3	9.3	0.0	1.5	7.4	0.2	7.8	0.5	0.0	0.0	0.0	3.6	1.4	0.1	0.1	26.6	5.1	31.7	1,917

[1] MICS indicator 5.3; MDG indicator 5.3

Table RH.2: Use of contraception

Percentage of women age 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Lao PDR 2011-12

	Percent of women (currently married or in union) who are using:																		Number of women currently married or in union
	Not using any method	Female sterili-zation	Male sterili-zation	IUD	Injectables	Implants	Pill	Male condom	Female condom	Diaphragm/Foam/Jelly	LAM	Periodic abstinence	Withdrawal	Other	Missing	Any modern method	Any tradi-tional method	Any method[1]	
Number of living children																			
0	85.9	0.3	0.1	0.1	0.7	0.0	8.5	1.6	0.0	0.0	0.0	1.7	1.3	0.0	0.2	11.2	3.2	14.3	1,562
1	57.1	1.0	0.0	0.5	7.5	0.0	25.2	1.5	0.0	0.0	1.0	4.3	1.8	0.1	0.1	35.7	7.3	43.0	3,064
2	38.7	4.2	0.0	2.4	14.8	0.2	29.4	1.3	0.0	0.0	0.6	6.0	2.2	0.2	0.1	52.3	9.1	61.4	4,148
3	39.6	8.5	0.0	2.2	17.0	0.0	22.6	1.2	0.0	0.0	0.5	5.8	2.4	0.0	0.1	51.6	8.9	60.5	2,985
4+	51.3	6.2	0.0	1.5	18.6	0.1	14.5	0.5	0.0	0.0	0.7	4.9	1.6	0.1	0.1	41.4	7.4	48.8	4,608
Education																			
None	62.0	2.3	0.0	0.8	16.6	0.2	12.8	0.1	0.0	0.0	0.9	3.4	0.9	0.0	0.1	32.7	5.3	38.0	3,972
Primary	45.7	5.1	0.0	1.2	16.4	0.0	25.0	0.6	0.0	0.0	0.7	3.8	1.4	0.0	0.1	48.4	6.0	54.4	7,294
Lower secondary	45.1	5.5	0.1	2.3	9.4	0.1	25.6	1.3	0.0	0.0	0.5	6.3	3.8	0.1	0.2	44.2	10.9	55.1	2,729
Upper secondary	50.8	3.7	0.0	2.9	5.1	0.0	23.2	3.0	0.3	0.0	0.2	8.4	2.2	0.2	0.1	38.2	11.1	49.3	1,106
Post secondary non	50.6	9.3	0.0	3.2	4.6	0.2	16.6	3.1	0.0	0.0	0.1	9.7	2.0	0.5	0.0	37.1	12.3	49.4	774
Higher	52.7	5.5	0.0	2.6	3.1	0.0	8.9	8.0	0.0	0.0	0.6	11.5	6.7	0.4	0.2	28.1	19.4	47.4	494
Wealth index quintile																			
Poorest	61.1	1.1	0.0	0.5	16.0	0.0	15.2	0.3	0.0	0.0	1.7	3.2	0.8	0.0	0.1	33.2	5.9	39.1	3,027
Second	54.4	2.6	0.0	0.9	18.7	0.1	18.5	0.3	0.0	0.0	0.6	2.6	1.3	0.0	0.1	41.2	4.6	45.7	3,154
Middle	46.9	4.8	0.0	1.2	16.6	0.1	23.7	0.5	0.0	0.0	0.5	3.8	1.8	0.1	0.1	46.9	6.2	53.1	3,216
Fourth	43.7	5.7	0.0	1.6	12.8	0.1	27.6	0.8	0.0	0.0	0.4	4.9	2.3	0.1	0.2	48.6	7.9	56.5	3,407
Richest	47.1	8.0	0.0	3.3	4.9	0.1	20.0	3.4	0.1	0.0	0.1	9.5	3.2	0.2	0.1	39.9	13.0	52.9	3,564
Ethno-linguistic group of household head																			
Lao-Tai	45.7	5.7	0.0	1.7	13.1	0.1	24.2	1.4	0.0	0.0	0.2	5.4	2.3	0.1	0.1	46.3	8.1	54.4	10,789
Mon-Khmer	57.0	2.1	0.0	0.7	16.4	0.1	18.4	0.2	0.0	0.0	1.6	2.8	0.6	0.0	0.1	38.0	5.1	43.2	3,721
Hmong-Mien	68.4	1.5	0.0	1.0	7.5	0.0	7.3	0.7	0.0	0.0	1.8	8.3	3.3	0.1	0.1	18.0	13.6	31.7	1,233
Chinese-Tibetan	56.9	6.8	0.0	3.5	17.3	0.0	12.2	0.5	0.0	0.0	0.6	1.6	0.6	0.0	0.4	40.3	3.2	43.5	530
Other, Missing, DK	50.4	2.4	0.0	8.5	12.8	0.0	12.1	6.7	0.0	0.0	0.6	6.6	0.0	0.0	0.0	42.4	7.2	49.6	96
Total	50.4	4.6	0.0	1.6	13.6	0.1	21.2	1.1	0.0	0.0	0.6	4.9	1.9	0.1	0.1	42.1	7.7	49.8	16,368

[1] **MICS indicator 5.3; MDG indicator 5.3**

Some 42 per cent of married women are using a modern method of family planning. The three most popular methods in the country are also the three most popular methods in each of the three regions surveyed. However, prevalence varies across the three regions. Use is highest in the Northern region, where 50 per cent of married women are using a modern method of contraception, compared with 39 per cent of women in the Central region and 35 per cent of women in the Southern region. Use of any contraceptive method, modern or traditional, follows an expected pattern by age, being lowest among 15-19 year-olds, rising to a peak among women in their thirties, and then declining among older women. Only 2 in 10 married women age 15-19 are using a modern method of contraception compared with 5 in 10 women in their thirties. Female sterilization is the only method to noticeably break from this age pattern; increasing gradually with age.

After peaking at 48 per cent among women with primary education, use of a modern method actually declines as education increases. Use of injectables steadily decreases with increasing education, while use of periodic abstinence increases. Use of an intrauterine device (IUD) and female sterilization rises with increasing wealth quintile. Meanwhile, use of a modern method tends to increase with increasing wealth quintile, but peaks among women in the fourth wealth quintile, not the highest (in which women report more use of periodic abstinence). Use of a modern method is similarly prevalent among urban and rural women.

Source of modern contraceptive methods

Information on where women obtain their contraceptive methods is important for family planning programme managers and implementers. Interviewers asked women who reported using a modern method of contraception where they had most recently obtained it. The results are shown in Table RH.3.

Table RH.3: Source of modern contraceptive methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Lao PDR 2011-12

Source	Female sterilization	IUD	Injectables	Pill	Male condom	Total*
Public sector	90.5	80.2	88.3	57.6	33.6	71.3
Government hospital	90.1	75.2	30.3	23.3	21.9	34.8
Government health centre	0.3	4.4	47.4	27.5	8.8	29.6
Family planning clinic	0.0	0.0	0.0	0.0	2.0	0.1
Mobile clinic	0.0	0.0	1.2	0.9	0.7	0.8
Field worker	0.0	0.1	9.0	5.7	0.3	5.8
Other public sector	0.1	0.4	0.3	0.2	0.0	0.2
Private medical sector	7.4	16.2	10.4	38.5	57.5	25.7
Private Hospital/Clinic	5.5	14.4	3.2	3.7	5.8	4.2
Private Pharmacy	0.0	0.6	4.8	33.8	51.7	20.0
Private Doctor	0.0	0.7	1.7	0.9	0.0	1.0
Private mobile clinic	0.0	0.4	0.0	0.0	0.0	0.0
Private field worker	0.0	0.0	0.5	0.1	0.0	0.2
Other Private	1.9	0.0	0.1	0.0	0.0	0.2
Other source	2.0	3.6	1.3	3.9	9.0	3.0
Shop	0.0	0.0	0.1	1.7	0.0	0.9
Friend/Relative	0.0	0.0	0.3	1.0	0.7	0.6
Other source	1.8	2.8	0.5	0.5	2.6	0.8
Missing	0.2	0.8	0.4	0.7	5.7	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	749	254	2,220	3,463	182	6,888

*Total includes other modern methods but excludes lactational amenorrhea method (LAM)

Thirty-five per cent of users obtained their contraceptive method from a government hospital, and 30 per cent from a government health centre. The public sector is the major source of modern contraceptive methods in Lao PDR, serving 71 per cent of users. By comparison, 26 per cent of current users reported that their modern method of contraceptive was obtained from the private medical sector.

Unmet Need

'Women with an unmet need for contraception' refers to fecund women who are not using any method of contraception, but who wish to postpone the next birth (spacing) or who wish to stop childbearing altogether (limiting). Women with an unmet need are identified in the 2011-12 LSIS by using a set of questions eliciting current behaviour and preferences pertaining to contraceptive use, fecundity and fertility preferences. 'Women with a met need for contraception' refers to women who are using a contraceptive method. The combination of women with unmet need and women with met need for family planning constitutes the total demand for family planning.

Table RH.4 shows the levels of met need for contraception, unmet need, total demand for contraception and the proportion of demand for contraception satisfied.

Women with an unmet need for spacing are defined as women who are not using a method of contraception AND who are:

- Not pregnant and not postpartum amenorrheic,[1] and are fecund[2] and say they want to wait two or more years for their next birth, or are unsure when they want their next birth OR
- Not pregnant and not postpartum amenorrheic, and are fecund and unsure whether they want another child OR
- Pregnant and say that pregnancy was mistimed, that is they would have would have wanted to wait OR
- Postpartum amenorrheic and say that the previous birth was mistimed, and they would have wanted to wait

Women with an unmet need for limiting are defined as women who are not using a method of contraception AND who are:

- Not pregnant and not postpartum amenorrheic, and are fecund and say they do not want any more children OR
- Pregnant and say they did not want to get pregnant OR
- Postpartum amenorrheic and say that they did not want the previous birth

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

[2] A women is considered infecund if she is neither pregnant nor postpartum amenorrheic, and
(1a) Has not menstruated in the last six months, or (1b) never menstruated, or (1c) her last menstruation occurred before her last birth and her last birth was more than five years ago, or (1d) in menopause/has had a hysterectomy in response to a question on the timing of her last period OR
(2) She declares that she has had a hysterectomy, or that she has never menstruated or that she is menopausal in response to questions on why she thinks she is not physically able to get pregnant at the time of survey OR (3) She declares she cannot get pregnant when asked about desire for future birth OR
(4) She has not had a birth in the preceding five years and was married five or more years ago, and that she has been trying to get pregnant for two or more years without result or she reports she is too old in response to questions on why she thinks she is not physically able to get pregnant at the time of survey.

Total unmet need for contraception is simply the sum of unmet need for spacing and unmet need for limiting. One in five married women have an unmet need for contraception, with 12 per cent of married women having an unmet need for limiting and 8 per cent having an unmet need for spacing.

Unmet need is highest in the Southern region (24 per cent) and lower in the Central (21 per cent) and Northern (17 per cent) regions. Unmet need varies from a low of 10 per cent in Xiengkhuang to a high of 25 per cent in Champasack and Vientiane provinces, and is higher in the more remote rural areas without all access roads (28 per cent) than in both urban areas and rural areas with all access roads (19 per cent). Unmet need is highest among women with no education (26 per cent) and decreases with increasing wealth, with the exception of the richest wealth quintile. Unmet need is highest among women in Hmong-Mien headed households (31 per cent) and lowest in Lao-Tai headed households (18 per cent).

Total unmet need varies little by age. However, unmet need for spacing and limiting follow expected age patterns, with declining unmet need for spacing, but increasing unmet need for limiting, up to age group 40-44, followed by a slight decline in the 45-49 age group as women reach menopause and are no longer in need of family planning. Unmet need for spacing is highest in the Central region (10 per cent), particularly Vientiane Capital and Vientiane province, and in the upper secondary and the higher education groups (12 and 13 per cent, respectively). Unmet need for limiting is highest in the South (17 per cent), rural areas without roads (19 per cent), among women with no education (17 per cent) and among the poorest women (16 per cent).

Table RH.4: Unmet need for contraception

Percentage of women age 15-49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, Lao PDR 2011-12

	Met need for contraception			Unmet need for contraception			Total demand for contraception						
	For spacing	For limiting	Total	For spacing	For limiting	Total[2]	For spacing	For limiting	Total	Number of women currently married or in union	Percentage of demand for contraception satisfied	Percentage of demand for contraception satisfied by modern methods	Number of women currently married or in union with need for contraception
Region													
North	13.9	43.1	57.0	6.5	10.2	16.7	20.4	53.3	73.7	5,446	77.3	70.8	4,015
Central	16.8	31.0	47.8	9.6	10.9	20.6	26.4	42.0	68.4	7,987	69.9	57.3	5,463
South	12.2	29.4	41.6	7.3	16.8	24.1	19.5	46.2	65.7	2,935	63.3	52.7	1,928
Province													
Vientiane Capital	16.5	32.4	48.9	10.3	12.7	23.0	26.8	45.1	71.9	2,116	68.0	50.1	1,521
Phongsaly	4.6	40.1	44.7	10.0	12.2	22.2	14.7	52.3	67.0	541	66.8	63.9	362
Luangnamtha	11.6	44.9	56.5	10.2	10.8	21.1	21.9	55.7	77.6	477	72.9	70.0	370
Oudomxay	14.0	47.4	61.4	4.0	8.6	12.6	18.0	55.9	73.9	884	83.0	72.3	654
Bokeo	15.6	44.4	60.0	8.1	7.2	15.3	23.7	51.7	75.3	476	79.7	73.6	359
Luangprabang	13.6	36.3	49.8	5.4	15.3	20.7	19.0	51.6	70.6	1,141	70.6	60.4	805
Huaphanh	9.5	42.3	51.8	5.5	10.7	16.2	14.9	53.1	68.0	831	76.1	71.4	566
Xayabury	22.4	47.4	69.8	6.4	6.0	12.4	28.8	53.4	82.2	1,096	84.9	80.8	900
Xiengkhuang	21.6	40.8	62.3	5.1	5.2	10.4	26.7	46.0	72.7	663	85.7	44.2	482
Vientiane	18.8	27.5	46.3	12.6	12.5	25.1	31.4	40.1	71.4	1,288	64.9	59.5	920
Borikhamxay	20.1	33.0	53.1	7.1	6.8	13.9	27.2	39.8	67.0	664	79.3	70.9	445
Khammuane	17.2	33.4	50.6	7.0	11.5	18.5	24.2	44.9	69.2	784	73.2	68.1	542
Savannakhet	13.8	27.7	41.5	10.3	11.0	21.3	24.0	38.8	62.8	2,472	66.1	59.6	1,553
Saravane	13.9	29.7	43.6	7.7	15.2	22.9	21.6	44.9	66.5	1,044	65.5	57.0	694
Sekong	6.8	25.0	31.8	5.8	19.0	24.8	12.6	44.0	56.7	273	56.2	44.0	155
Champasack	12.7	27.9	40.7	7.3	18.1	25.4	20.0	46.1	66.1	1,338	61.6	48.6	884
Attapeu	8.7	39.6	48.3	7.1	14.5	21.6	15.8	54.1	69.9	280	69.1	62.6	196
Residence													
Urban	17.2	35.4	52.6	9.3	9.9	19.2	26.5	45.3	71.8	4,301	73.2	56.9	3,089
Rural	14.2	34.5	48.8	7.8	12.4	20.2	22.0	46.9	68.9	12,066	70.7	62.9	8,318
..Rural with road	14.9	35.2	50.2	7.6	11.7	19.3	22.5	47.0	69.5	10,845	72.2	64.1	7,537
..Rural without road	8.3	28.1	36.4	9.1	18.5	27.6	17.4	46.5	63.9	1,222	56.9	51.2	781

[1] **MICS indicator 5.3; MDG indicator 5.3**

[2] **MICS indicator 5.4; MDG indicator 5.6**

Table RH.4: Unmet need for contraception

Percentage of women age 15-49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, Lao PDR 2011-12

	Met need for contraception			Unmet need for contraception			Total demand for contraception						
	For spacing	For limiting	Total	For spacing	For limiting	Total[2]	For spacing	For limiting	Total	Number of women currently married or in union	Percentage of demand for contraception satisfied	Percentage of demand for contraception satisfied by modern methods	Number of women currently married or in union with need for contraception
Age													
15-19	22.8	3.6	26.4	20.7	1.9	22.6	43.5	5.5	49.0	1,092	53.9	48.2	535
20-24	30.2	11.5	41.6	16.7	4.3	21.0	46.8	15.8	62.6	2,468	66.5	58.2	1,545
25-29	26.8	27.9	54.7	10.6	7.6	18.2	37.4	35.5	72.9	3,142	75.0	65.5	2,290
30-34	15.4	44.3	59.8	7.3	12.2	19.6	22.8	56.6	79.3	2,728	75.3	64.4	2,165
35-39	5.4	57.1	62.4	3.9	17.3	21.2	9.3	74.4	83.6	2,782	74.7	63.0	2,326
40-44	1.6	49.1	50.7	2.0	20.8	22.9	3.6	70.0	73.6	2,238	68.9	58.6	1,646
45-49	0.9	30.9	31.7	0.7	14.4	15.2	1.6	45.3	46.9	1,917	67.7	56.7	900
Education													
None	7.3	30.8	38.0	9.0	16.8	25.8	16.3	47.6	63.9	3,972	59.5	52.6	2,536
Primary	15.4	39.0	54.4	6.4	11.0	17.4	21.8	50.0	71.8	7,294	75.8	68.5	5,235
Lower secondary	20.0	35.1	55.1	8.5	9.5	18.0	28.5	44.6	73.1	2,729	75.4	61.1	1,994
Upper secondary	23.4	25.9	49.3	13.1	8.6	21.8	36.5	34.6	71.1	1,106	69.4	54.0	786
Post secondary non tertiary	17.2	32.3	49.4	8.3	9.2	17.5	25.5	41.5	67.0	774	73.8	55.6	519
Higher	22.6	24.8	47.4	14.7	6.1	20.8	37.3	30.9	68.2	494	69.5	42.0	337
Wealth index quintile													
Poorest	9.6	29.5	39.1	9.5	16.2	25.6	19.0	45.7	64.7	3,027	60.4	53.9	1,959
Second	11.7	34.0	45.7	8.7	12.9	21.5	20.4	46.9	67.3	3,154	68.0	62.0	2,122
Middle	15.9	37.3	53.1	7.0	10.8	17.8	22.9	48.1	71.0	3,216	74.9	66.8	2,282
Fourth	19.2	37.3	56.5	6.5	9.7	16.2	25.7	47.0	72.6	3,407	77.8	67.5	2,474
Richest	17.8	35.1	52.9	9.3	9.9	19.2	27.1	45.0	72.1	3,564	73.4	55.5	2,570
Ethno-linguistic group of household head													
Lao-Tai	17.8	36.6	54.4	7.4	10.5	17.9	25.2	47.1	72.3	10,789	75.2	64.3	7,801
Mon-Khmer	9.6	33.5	43.2	8.4	13.3	21.7	18.1	46.8	64.8	3,721	66.6	61.1	2,412
Hmong-Mien	10.0	21.7	31.7	12.2	18.2	30.5	22.2	40.0	62.1	1,233	51.0	31.9	766
Chinese-Tibetan	6.2	37.3	43.5	13.0	11.5	24.5	19.2	48.8	68.1	530	63.9	60.2	360
Other, Missing, DK	22.6	27.0	49.6	5.4	14.7	20.1	28.0	41.7	69.7	96	71.2	61.7	67
Total	15.0	34.7	49.8	8.2	11.8	19.9	23.2	46.5	69.7	16,368	71.4	61.3	11,407

[1] MICS indicator 5.3; MDG indicator 5.3

[2] MICS indicator 5.4; MDG indicator 5.6

Met need for limiting includes women who are using (or whose partner is using) a contraceptive method and who want no more children, have used male or female sterilization, or declare themselves as infecund. Met need for spacing includes women who are using (or whose partner is using) a contraceptive method and who want to have another child or are undecided whether to have another child. The sum of met need for spacing and limiting is the total met need for contraception. Half of all married women have a met need for contraception – 15 per cent for spacing and 35 per cent for limiting.

The total demand for contraception and the percentage of demand for contraception that is satisfied are also estimated from the 2011-2012 Lao PDR data using information on contraception and unmet need. The total demand for contraception includes women who currently have an unmet need (for spacing or limiting) plus those who are currently using contraception. The percentage of demand satisfied is defined as the proportion of women currently married or in a marital union who are currently using contraception, of the total demand for contraception. The total demand for contraception includes women who currently have an unmet need (for spacing or limiting), plus those who are currently using contraception.

Seven in 10 married women have a demand for contraception – 23 per cent for spacing and 47 per cent for limiting. Total demand is highest in the Northern region (74 per cent), and ranges between 57 per cent in Sekong and 82 per cent in Xayabury. Total demand increases with age up to 35-39 and then declines in the older age groups. In general, of the total demand for contraception, one third is for spacing and two thirds for limiting; however, total demand for spacing exceeds total demand for limiting for women with upper secondary or higher education, and, as expected, for younger women.

Table RH.4 shows that the total met need (50 per cent) is higher than the total unmet need for family planning (20 per cent). The table also highlights that the percentage of demand for contraception satisfied (71 per cent) is high, though the demand satisfied in rural areas without roads is still relatively low (57 per cent). The percentage of demand satisfied is highest in the North (77 per cent) and lowest in the South (63 per cent). The percentage of demand for contraception satisfied by modern methods is somewhat lower (61 per cent).

Antenatal Care

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and to that of their infants. Better understanding of the relationship between a mother's health and foetal growth and development continues to inform what interventions should be undertaken during the time a pregnant woman seeks antenatal care (ANC). For example, if the antenatal period is used to inform women and families about the danger signs and symptoms of pregnancy-related problems, and about the risks associated with labour and delivery, it may provide a route for communicating the importance of delivering with the assistance of a health professional. The antenatal period also provides an opportunity to supply information on birth spacing, which is recognized as an important factor in improving infant survival. Tetanus immunization during pregnancy, for example, can be life-saving for both the mother and infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy, and treatment of STIs can all significantly improve foetal outcomes and maternal health. Adverse outcomes such as low birth weight can be reduced by improving women's nutritional status and preventing infections such as malaria and sexually transmitted infections (STIs) during the antenatal period. More recently, the potential of the antenatal period as an entry point for HIV prevention and care, in particular for the prevention of HIV transmission from mother to child, has led to renewed interest in access to and use of antenatal services.

WHO recommends a minimum of four antenatal visits based on a review of the effectiveness of different models of antenatal care. WHO guidelines are specific on the content of ANC visits, which should include:

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

The quality of ANC can be measured by the qualifications of the provider and the number and frequency of ANC visits. Antenatal care quality can also be monitored through the content of services received and the kinds of information given to women during their visits. These services raise awareness of the danger signs during pregnancy, delivery and the post-natal period. They also improve the health-seeking behaviour of the client, educate the client about birth preparedness issues, and provide basic preventive and therapeutic care. The 2011-2012 LSIS obtained information on ANC coverage from the responses of women who gave birth in the two years preceding the survey.

Table RH.5 shows the percentage distribution of mothers in the two years preceding the survey by type of personnel providing ANC. About fifty-four per cent of women age 15-49 years who gave birth in the two years preceding the survey received ANC from a skilled provider[3] – 46 per cent from a medical doctor, 7 per cent from a nurse or midwife, and 2 per cent from an auxiliary midwife. Only 1 per cent of women received care from a traditional birth attendant or community health worker. About 4 in every 10 Lao women (44 per cent) who gave birth in the two years preceding the survey did not receive any ANC. While this percentage is substantial, it represents a marked improvement. The 2006 MICS found that only 35 per cent of women received ANC from a skilled provider and as many as 6 in 10 women did not receive any ANC. The improvement in ANC coverage over the last five years has been impressive.

In the Central region, 63 per cent of women received ANC from health personnel, compared with 49 per cent in the South and 45 per cent in the North. Eighty-three per cent of women in urban areas received ANC from health provider, compared with 46 per cent in rural areas. ANC coverage by health professional is highly correlated with women's education and wealth. More than 90 per cent of women with upper secondary school or more education received ANC from a health professional, while only 23 per cent of those with no education did so. Ninety-two per cent of women in the richest quintile received ANC from a health professional, compared with only 23 per cent of women in the poorest quintile. The receipt of a health professional's care varied across provinces, and was reported by the fewest women in Phongsaly and Oudomxay (25 and 35 per cent, respectively). Nine in ten women in Vientiane Capital received ANC from a health professional. In Lao-Tai headed households, 72 per cent of women received ANC from a health professional. However, this figure drops to 36 per cent of women in Mon-Khmer headed households, 25 per cent in Chinese-Tibetan headed households, and 24 per cent in Hmong-Mien headed households. In summary, ANC was received by a higher percentage of women who live in urban areas (especially in Vientiane Capital where 9 in 10 women received ANC), those with at least upper secondary education, and the wealthiest women.

[3] In the Lao context, 'skilled provider/ skilled professional' is replaced by the term 'health professional', which includes doctor, nurse, mid-wife and auxiliary mid-wife.

Table RH.5: Antenatal care coverage

Percent distribution of women age 15-49 who gave birth in the two years preceding the survey by type of personnel providing antenatal care during the pregnancy for the last birth, Lao PDR 2011-12

	Person providing antenatal care									
	Medical doctor	Nurse/ Midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Other	No antenatal care received	Total	Any skilled personnel[1]	Number of women who gave birth in the preceding two years
Region										
North	34.2	9.2	1.6	0.7	1.1	1.3	52.0	100.0	45.0	1,377
Central	56.1	5.5	1.6	0.5	0.2	1.1	35.0	100.0	63.3	1,989
South	40.3	6.4	1.8	0.2	0.2	0.7	50.4	100.0	48.6	940
Province										
Vientiane Capital	80.9	7.9	1.0	0.4	0.0	1.5	8.3	100.0	89.8	415
Phongsaly	23.1	2.1	0.0	0.0	0.5	1.2	73.0	100.0	25.2	148
Luangnamtha	45.6	13.4	3.3	0.4	0.0	0.8	36.5	100.0	62.3	99
Oudomxay	27.3	2.4	5.3	0.6	3.2	0.3	61.0	100.0	34.9	266
Bokeo	33.5	4.4	0.0	0.0	0.0	0.0	62.1	100.0	37.9	141
Luangprabang	33.2	11.7	1.2	0.9	0.4	2.1	50.6	100.0	46.0	280
Huaphanh	19.7	22.1	0.3	0.0	0.0	0.7	57.2	100.0	42.1	237
Xayabury	64.3	6.5	0.0	2.5	2.1	3.2	21.4	100.0	70.9	205
Xiengkhuang	34.4	15.1	0.9	0.0	0.0	0.9	48.8	100.0	50.3	200
Vientiane	70.1	3.6	0.5	0.0	0.0	0.8	25.1	100.0	74.1	295
Borikhamxay	60.2	0.0	0.5	0.0	0.0	0.5	38.8	100.0	60.7	162
Khammuane	38.5	7.0	2.1	1.3	0.8	1.1	49.3	100.0	47.5	233
Savannakhet	46.4	2.9	2.9	0.6	0.3	1.2	45.7	100.0	52.2	683
Saravane	34.6	10.9	2.3	0.0	0.0	1.8	50.4	100.0	47.8	361
Sekong	33.3	7.1	0.0	0.0	0.0	0.3	59.3	100.0	40.4	99
Champasack	47.2	3.6	0.3	0.4	0.3	0.0	48.2	100.0	51.1	397
Attapeu	40.4	0.0	9.2	0.0	0.5	0.0	49.9	100.0	49.6	83
Residence										
Urban	75.8	6.4	1.2	0.6	0.2	1.5	14.3	100.0	83.4	957
Rural	37.0	7.1	1.8	0.4	0.6	1.0	52.2	100.0	45.9	3,349
..Rural with road	40.4	7.7	1.7	0.5	0.6	1.0	48.3	100.0	49.7	2,928
..Rural without road	13.5	2.7	2.7	0.3	0.4	0.8	79.5	100.0	19.0	421
Mother's age at birth										
Less than 20	41.0	7.5	1.1	0.5	0.5	0.5	48.9	100.0	49.6	745
20-34	48.2	7.0	1.7	0.4	0.5	1.2	40.9	100.0	56.9	3,087
35-49	36.3	5.3	2.1	0.5	0.0	1.2	54.6	100.0	43.8	474
Education										
None	17.3	4.1	1.7	0.3	0.3	1.1	75.2	100.0	23.1	1,248
Primary	46.5	7.6	2.1	0.9	0.8	0.9	41.2	100.0	56.1	1,763
Lower secondary	62.8	8.8	1.0	0.2	0.3	1.2	25.7	100.0	72.7	693
Upper secondary	82.0	7.7	0.7	0.0	0.0	0.3	9.3	100.0	90.3	334
Post secondary non tertiary	81.0	12.1	1.2	0.0	0.0	1.3	4.4	100.0	94.3	146
Higher	84.3	6.9	1.8	0.0	0.0	3.9	3.1	100.0	93.0	122
Wealth index quintile										
Poorest	17.0	4.2	1.7	0.4	0.8	0.8	75.2	100.0	22.9	1,178
Second	33.4	6.9	1.8	0.5	0.5	1.5	55.5	100.0	42.1	927
Middle	49.7	9.9	2.4	1.0	0.6	0.9	35.5	100.0	62.0	810
Fourth	67.1	8.5	1.5	0.4	0.2	0.9	21.4	100.0	77.1	707
Richest	84.6	6.3	0.8	0.2	0.0	1.5	6.6	100.0	91.7	684
Ethno-linguistic group of household head										
Lao-Tai	61.9	8.1	1.4	0.7	0.3	1.5	26.0	100.0	71.5	2,401
Mon-Khmer	28.1	5.2	2.9	0.2	1.0	0.7	61.9	100.0	36.2	1,213
Hmong-Mien	17.6	5.9	0.3	0.2	0.2	0.2	75.5	100.0	23.9	530
Chinese-Tibetan	20.0	4.2	0.4	0.3	0.0	0.0	75.1	100.0	24.6	140
Other, Missing, DK	*	*	*	*	*	*	*	*	*	21
Total	45.6	6.9	1.7	0.5	0.5	1.1	43.8	100.0	54.2	4,306

[1] **MICS indicator 5.5a; MDG indicator 5.5**

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

ANC is most beneficial in preventing adverse pregnancy outcomes when it is received early in the pregnancy and continued through to delivery. It is important that ANC be given to pregnant women at the early stages of pregnancy in order to provide them with information about healthy practices and services that decrease the likelihood of certain complications during delivery. The minimum four antenatal visits recommended by UNICEF and WHO include at least one visit in the first trimester (three months) of pregnancy, one visit in the second trimester and two visits during the third trimester.

Table RH.6 presents the percentage distribution of women by the number of ANC visits they received, among women who had a live birth in the two years preceding the survey. Thirty-seven per cent of women made four or more visits for ANC during their pregnancy. Fourteen per cent of women made two or three antenatal visits, and 5 per cent had only one antenatal visit.

Differentials by background characteristics in the percentage of women who made at least four ANC visits are as would be expected. The percentage of women making four or more visits for ANC increases sharply with increasing wealth and education level. Only 1 in 10 women from the poorest households, and those with no education received ANC four or more times compared with as many as 8 in 10 women in the richest quintile and women with at least upper secondary education. Seventy-one per cent of women in urban areas received four or more ANC visits, compared with only 27 per cent of women in rural areas. A higher percentage of women age 20-34 had at least four ANC visits (41 per cent) compared with younger and older women (27 and 28 per cent, respectively). Only 3 in 10 women in the Northern and Southern regions received four or more ANC visits, compared with 47 per cent of women in the Central region.

Table RH.6: Number of antenatal care visits

Percent distribution of women who had a live birth during the two years preceding the survey by number of antenatal care visits by any provider, Lao PDR 2011-12

	Percent distribution of women who had:							
	No antenetal care visits	One visit	Two visits	Three visits	4 or more visits[1]	DK/Missing	Total	Number of women who had a live birth in the preceding two years
Region								
North	52.0	5.2	4.8	9.1	28.7	0.1	100.0	1,377
Central	35.0	4.3	5.4	8.5	46.5	0.4	100.0	1,989
South	50.4	4.6	5.9	10.2	28.3	0.5	100.0	940
Province								
Vientiane Capital	8.3	2.0	1.4	5.4	82.0	1.0	100.0	415
Phongsaly	73.0	5.6	5.9	6.1	9.4	0.0	100.0	148
Luangnamtha	36.5	6.8	7.3	14.9	34.6	0.0	100.0	99
Oudomxay	61.0	11.1	4.7	9.8	13.4	0.0	100.0	266
Bokeo	62.1	4.4	2.4	3.8	26.9	0.4	100.0	141
Luangprabang	50.6	2.8	2.8	12.0	31.4	0.5	100.0	280
Huaphanh	57.2	3.2	7.5	7.9	24.3	0.0	100.0	237
Xayabury	21.4	2.8	4.4	9.0	62.5	0.0	100.0	205
Xiengkhuang	48.8	4.9	4.0	8.5	32.9	0.9	100.0	200
Vientiane	25.1	3.1	5.8	10.8	54.8	0.5	100.0	295
Borikhamxay	38.8	1.8	4.6	7.8	46.9	0.0	100.0	162
Khammuane	49.3	7.2	6.0	9.3	28.2	0.0	100.0	233
Savannakhet	45.7	5.8	7.9	9.1	31.5	0.0	100.0	683
Saravane	50.4	5.8	7.6	12.2	23.2	0.8	100.0	361
Sekong	59.3	3.4	6.7	5.3	25.3	0.0	100.0	99
Champasack	48.2	4.1	4.5	10.3	32.7	0.2	100.0	397
Attapeu	49.9	2.7	4.7	7.4	33.6	1.8	100.0	83
Residence								
Urban	14.3	2.3	3.5	8.6	70.6	0.7	100.0	957
Rural	52.2	5.3	5.8	9.2	27.2	0.2	100.0	3,349
..Rural with road	48.3	5.7	6.2	9.9	29.7	0.2	100.0	2,928
..Rural without road	79.5	3.1	3.2	4.2	9.9	0.1	100.0	421
Mother's age at birth								
Less than 20	48.9	7.8	6.5	10.1	26.8	0.0	100.0	745
20-34	40.9	4.0	5.1	9.0	40.7	0.4	100.0	3,087
35-49	54.6	4.3	5.2	7.8	28.0	0.1	100.0	474
Education								
None	75.2	5.0	5.1	6.0	8.8	0.1	100.0	1,248
Primary	41.2	6.0	6.6	11.9	34.0	0.3	100.0	1,763
Lower secondary	25.7	3.4	4.7	9.8	56.0	0.4	100.0	693
Upper secondary	9.3	1.9	3.5	6.5	78.0	0.7	100.0	334
Post secondary non tertiary	4.4	2.2	1.8	6.9	84.8	0.0	100.0	146
Higher	3.1	0.0	2.0	5.8	87.0	2.1	100.0	122
Wealth index quintile								
Poorest	75.2	5.1	4.8	5.5	9.1	0.2	100.0	1,178
Second	55.5	6.8	8.3	10.2	19.3	0.0	100.0	927
Middle	35.5	4.9	6.9	10.9	41.4	0.3	100.0	810
Fourth	21.4	4.2	4.2	13.0	56.8	0.4	100.0	707
Richest	6.6	1.1	1.4	7.4	82.6	0.8	100.0	684
Ethno-linguistic group of household head								
Lao-Tai	26.0	3.7	4.8	10.0	55.0	0.4	100.0	2,401
Mon-Khmer	61.9	5.8	6.8	8.8	16.5	0.3	100.0	1,213
Hmong-Mien	75.5	6.4	4.4	5.2	8.5	0.0	100.0	530
Chinese-Tibetan	75.1	4.1	4.0	10.7	6.1	0.0	100.0	140
Other, Missing, DK	*	*	*	*	*	*	*	21
Total	43.8	4.7	5.3	9.1	36.9	0.3	100.0	4,306

[1] **MICS indicator 5.5b; MDG indicator 5.5**

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

Measuring the components of ANC is essential for assessing the quality of ANC services. Pregnancy complications are a primary source of maternal and child morbidity and mortality. Therefore, pregnant women should routinely receive information on the signs of complications, and be tested for them at all ANC visits. To help assess the quality of antenatal services, respondents were asked whether they received certain screening tests during at least one of their ANC visits (see Table RH.7). Among those women who had a live birth during the two years preceding the survey, 47 per cent reported that their blood pressure was checked, 23 per cent reported that a urine specimen was taken, and 23 per cent reported that a blood sample was taken during an ANC visit. Only 18 per cent of women reported that they received all three types of ANC services. Women in the Central region (especially in Vientiane Capital), age 20-34, urban residents, women with at least upper secondary education, and women in the highest wealth quintiles were more likely to report receiving each of the specified services.

Table RH.7: Content of antenatal care

Percentage of women age 15-49 years who had their blood pressure measured, urine sample taken, and blood sample taken as part of antenatal care, Lao PDR 2011-12

	Percentage of pregnant women who had:				
	Blood pressure measured	Urine sample taken	Blood sample taken	Blood pressure measured, urine and blood sample taken[1]	Number of women who had a live birth in the preceding two years
Region					
North	43.5	17.7	15.8	12.7	1,377
Central	52.5	29.4	32.1	25.2	1,989
South	39.9	15.2	15.3	12.0	940
Province					
Vientiane Capital	88.4	68.5	72.8	62.6	415
Phongsaly	24.9	11.0	4.8	3.5	148
Luangnamtha	58.4	21.7	25.4	17.0	99
Oudomxay	36.3	9.2	2.2	1.9	266
Bokeo	36.7	19.8	24.2	17.5	141
Luangprabang	44.8	32.0	29.4	26.5	280
Huaphanh	36.8	3.6	4.0	1.6	237
Xayabury	69.6	26.9	25.9	21.9	205
Xiengkhuang	40.7	12.5	8.3	8.3	200
Vientiane	52.5	19.6	19.5	14.9	295
Borikhamxay	60.3	24.6	23.4	21.9	162
Khammuane	40.2	12.9	19.0	9.9	233
Savannakhet	36.6	21.6	26.4	17.8	683
Saravane	34.7	17.7	16.0	13.0	361
Sekong	37.4	4.0	2.8	2.8	99
Champasack	44.2	16.5	19.1	14.2	397
Attapeu	45.1	11.7	9.8	8.6	83
Residence					
Urban	77.9	49.2	54.1	43.6	957
Rural	38.0	14.9	14.4	11.1	3,349
..Rural with road	41.0	16.0	15.8	12.1	2,928
..Rural without road	17.4	7.6	4.7	4.0	421
Mother's age at birth					
Less than 20	39.4	17.4	16.9	12.0	745
20-34	50.0	24.6	25.8	20.3	3,087
35-49	38.6	17.5	16.7	15.3	474
Education					
None	17.9	6.6	5.9	4.3	1,248
Primary	47.2	19.6	19.3	14.9	1,763
Lower secondary	64.1	30.6	32.0	25.3	693
Upper secondary	82.7	52.0	57.2	47.2	334
Post secondary non tertiary	88.8	50.7	58.7	46.1	146
Higher	92.8	68.3	72.9	58.2	122
Wealth index quintile					
Poorest	18.0	5.7	4.2	3.5	1,178
Second	34.8	13.5	12.5	10.0	927
Middle	50.1	21.6	19.5	15.8	810
Fourth	68.2	29.0	33.0	24.3	707
Richest	87.0	58.2	65.0	52.0	684
Ethno-linguistic group of household head					
Lao-Tai	62.4	32.6	35.1	27.7	2,401
Mon-Khmer	30.5	11.5	9.5	7.8	1,213
Hmong-Mien	19.2	5.1	4.1	2.7	530
Chinese-Tibetan	23.8	10.7	7.3	6.5	140
Other, Missing, DK	*	*	*	*	21
Total	46.9	22.6	23.2	18.3	4,306

[1] **MICS indicator 5.6**

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

Use of Iron Pills

Iron deficiency anaemia occurs when iron stores are exhausted and the supply of iron to the tissues is insufficient. Pregnant women are especially at risk of problems resulting from iron deficiency anaemia, which can contribute to the severity of complications during childbirth, such as haemorrhage, premature delivery and low birth weight. To prevent iron deficiency anaemia, iron pills are usually supplied to pregnant women during their ANC visits. It is recommended that pregnant women take at least 90 iron pills during their pregnancy.

Table RH.8 presents the percentage distribution of women by the number of iron pills they took during pregnancy, among women who had a live birth in the two years preceding the survey. Nearly one half (48 per cent) did not take any iron pills during their pregnancy, a quarter took fewer than 90 iron pills and one quarter took the recommended number of 90 iron pills or more. Thus, among the 52 per cent of women who took iron pills during pregnancy, 49 per cent had taken 90 or more iron pills, 46 per cent had taken fewer than 90 iron pills, and the other 5 per cent did not know how many pills they had taken.

Differentials in receiving the recommended level of iron supplementation by education and wealth of women are as expected. Differences are not very large according to the age of mothers. While 37 per cent of women in Lao-Tai headed households had taken 90 or more iron pills, this figure drops to 13 per cent of women in Chinese-Tibetan headed households, 11 per cent of women in Mon-Khmer headed households, and 8 per cent of women in Hmong-Mien headed households.

Table RH.8: Iron pills taken during pregnancy

Percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by the number of iron pills taken during pregnancy, Lao PDR 2011-12

	Iron pills taken during pregnancy				
	Did not take iron pills during pregnancy	<90	90+	DK/Missing	Number of women who had a live birth in the preceding two years
Region					
North	53.8	24.7	19.4	2.1	1,377
Central	42.0	23.7	32.3	2.0	1,989
South	50.8	23.9	19.6	5.7	940
Province					
Vientiane Capital	16.4	33.1	49.5	0.9	415
Phongsaly	75.3	14.2	9.2	1.4	148
Luangnamtha	35.0	16.2	47.1	1.6	99
Oudomxay	70.5	12.2	16.4	1.0	266
Bokeo	61.2	9.1	25.2	4.5	141
Luangprabang	50.6	27.9	18.6	2.8	280
Huaphanh	59.6	20.2	17.4	2.9	237
Xayabury	18.3	64.4	16.6	0.7	205
Xiengkhuang	53.7	7.8	35.8	2.7	200
Vientiane	28.4	29.0	42.5	0.1	295
Borikhamxay	37.3	17.7	44.9	0.0	162
Khammuane	59.6	18.7	15.9	5.8	233
Savannakhet	55.0	23.5	19.1	2.4	683
Saravane	51.0	23.8	18.5	6.7	361
Sekong	64.1	25.8	8.3	1.9	99
Champasack	47.0	23.7	24.1	5.1	397
Attapeu	52.9	23.3	15.7	8.2	83
Residence					
Urban	20.7	30.6	46.4	2.2	957
Rural	55.4	22.2	19.4	3.0	3,349
..Rural with road	52.2	23.6	21.1	3.1	2,928
..Rural without road	77.6	12.9	7.2	2.3	421
Mother's age at birth					
Less than 20	52.9	25.6	19.0	2.5	745
20-34	45.1	24.4	27.7	2.8	3,087
35-49	56.0	20.0	20.3	3.7	474
Education					
None	77.8	13.9	5.5	2.9	1,248
Primary	45.5	27.7	23.3	3.4	1,763
Lower secondary	32.0	26.0	40.0	2.1	693
Upper secondary	9.7	35.7	52.0	2.6	334
Post secondary non tertiary	12.1	27.8	59.9	0.2	146
Higher	6.8	29.1	62.6	1.6	122
Wealth index quintile					
Poorest	75.5	16.7	5.1	2.6	1,178
Second	59.7	20.6	16.7	3.0	927
Middle	41.0	27.9	27.7	3.4	810
Fourth	27.2	31.5	37.9	3.3	707
Richest	12.5	29.2	56.5	1.8	684
Ethno-linguistic group of household head					
Lao-Tai	30.7	29.2	36.9	3.1	2,401
Mon-Khmer	66.0	20.2	11.0	2.8	1,213
Hmong-Mien	76.3	13.5	8.1	2.0	530
Chinese-Tibetan	75.7	10.6	12.5	1.2	140
Other, Missing, DK	*	*	*	*	21
Total	47.7	24.1	25.4	2.8	4,306

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

Assistance at Delivery

The single most critical intervention for safe motherhood is to ensure a competent health professional with midwifery skills is present at every birth, and transport is available to a referral facility for obstetric care in case of emergency. A *World Fit for Children* (WFFC) goal is to ensure that women have ready and affordable access to skilled attendance at delivery, and progress towards this goal is indicated by the proportion of women assisted during childbirth by a health professional and the proportion of women who deliver in health facilities. The term 'health professional' includes a doctor, nurse, midwife or auxiliary midwife. The indicator measuring health professional attendance is also used to track progress toward the Millennium Development Goal of reducing the maternal mortality ratio by three quarters between 1990 and 2015.

Table FH.9 presents the percentage distribution of women age 15-49 who had a live birth in the two years preceding the survey, according to the person who assisted at the delivery. About forty-two per cent were assisted at the time of delivery by a health professional. Specifically, doctors assisted 37 per cent of women, nurses and midwives assisted 4 per cent, and auxiliary midwives assisted 2 per cent of women. Beyond professional delivery attendance, 3 in 10 women reported assistance from a relative or friend, while smaller percentages reported assistance from a traditional birth attendant or some other source (12 and 13 per cent, respectively). Assistance from a health professional at delivery increased dramatically over the five years prior to the survey, from 20 per cent (2006 MICS) to 42 per cent.

Table RH.9: Assistance during delivery

Percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by person assisting at delivery and percentage of births delivered by caesarean section (C-section), Lao PDR 2011-12

	Person assisting at delivery											
	Medical doctor	Nurse/ Midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Relative/ Friend	Other	No attendant	Total	Delivery assisted by any health professional[1]	Percent delivered by C-section[2]	Number of women who had a live birth in preceding two years
Region												
North	25.5	4.7	0.8	5.2	1.9	42.2	15.4	4.2	100.0	31.0	2.3	1,377
Central	49.2	2.2	1.4	7.7	2.0	20.8	13.9	2.8	100.0	52.8	5.1	1,989
South	26.0	4.4	2.7	30.6	1.5	24.7	7.0	3.2	100.0	33.1	2.7	940
Province												
Vientiane Capital	80.9	4.0	0.4	6.0	1.9	6.2	0.5	0.0	100.0	85.4	15.0	415
Phongsaly	17.6	1.2	0.0	1.3	5.2	55.8	17.7	1.2	100.0	18.7	0.4	148
Luangnamtha	39.3	2.4	2.7	9.5	0.6	33.2	11.8	0.5	100.0	44.4	1.2	99
Oudomxay	18.9	1.8	1.5	1.3	1.8	70.8	2.6	1.3	100.0	22.2	1.1	266
Bokeo	27.6	4.5	0.0	2.3	0.0	45.7	13.7	6.2	100.0	32.1	4.3	141
Luangprabang	29.7	5.8	1.1	5.2	1.0	34.9	16.4	5.7	100.0	36.7	2.8	280
Huaphanh	13.7	10.7	0.0	3.5	2.2	22.6	38.7	8.5	100.0	24.5	1.8	237
Xayabury	39.7	3.8	0.5	15.1	2.5	29.8	5.1	3.6	100.0	44.0	4.0	205
Xiengkhuang	32.1	2.7	1.9	5.9	2.1	45.8	8.6	0.9	100.0	36.7	2.3	200
Vientiane	53.5	0.9	0.0	3.0	3.5	29.9	1.9	7.3	100.0	54.4	3.1	295
Borikhamxay	55.8	0.5	0.0	4.2	1.2	20.7	15.1	2.6	100.0	56.3	3.0	162
Khammuane	29.0	2.8	3.3	13.9	1.5	28.5	15.0	6.1	100.0	35.1	2.5	233
Savannakhet	38.5	1.7	2.0	10.2	1.7	15.8	28.0	2.1	100.0	42.2	2.3	683
Saravane	21.7	6.4	3.0	19.4	1.6	36.9	5.1	5.9	100.0	31.1	1.4	361
Sekong	23.4	1.2	0.0	2.3	0.6	69.7	2.8	0.0	100.0	24.6	0.5	99
Champasack	32.2	4.3	3.3	42.3	0.9	5.5	10.0	1.5	100.0	39.9	4.3	397
Attapeu	18.1	0.0	1.5	56.4	4.9	10.0	5.9	3.1	100.0	19.7	2.6	83
Residence												
Urban	75.5	3.3	0.8	3.7	0.6	10.0	5.7	0.3	100.0	79.6	10.0	957
Rural	25.5	3.5	1.7	14.2	2.2	33.8	14.9	4.2	100.0	30.7	1.9	3,349
..Rural with road	27.8	3.8	1.7	13.7	2.4	32.7	13.7	4.2	100.0	33.3	2.1	2,928
..Rural without road	9.3	1.7	1.5	18.0	0.6	41.1	23.3	4.6	100.0	12.4	0.0	421
Mother's age at birth												
Less than 20	35.3	4.5	1.3	11.7	1.9	30.8	12.4	2.1	100.0	41.0	1.8	745
20-34	38.2	3.4	1.4	11.4	2.0	27.9	12.4	3.3	100.0	43.0	3.9	3,087
35-49	28.1	2.7	2.0	15.5	1.2	28.5	16.4	5.5	100.0	32.9	5.2	474

[1] MICS indicator 5.7; MDG indicator 5.2

[2] MICS indicator 5.9

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

Table RH.9: Assistance during delivery

Percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by person assisting at delivery and percentage of births delivered by caesarean section (C-section), Lao PDR 2011-12

	Person assisting at delivery											
	Medical doctor	Nurse/ Midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Relative/ Friend	Other	No attendant	Total	Delivery assisted by any health professional[1]	Percent delivered by C-section[2]	Number of women who had a live birth in preceding two years
Place of delivery												
Public sector health facility	91.4	6.2	1.3	0.0	0.1	0.3	0.6	0.0	100.0	98.9	9.7	1,578
Private sector health facility	(93.0)	(2.8)	(0.0)	(1.2)	(0.0)	(0.0)	(3.0)	(0.0)	100.0	(95.8)	(16.3)	37
Home	3.5	2.0	1.7	19.8	3.1	46.3	18.9	4.8	100.0	7.2	0.0	2,518
Other	7.3	1.5	0.0	12.7	0.9	47.7	9.5	20.4	100.0	8.8	0.0	114
Missing/DK	3.8	0.0	0.0	0.0	0.0	2.0	94.1	0.0	100.0	3.8	0.0	59
Education												
None	13.2	2.1	0.7	9.2	1.2	44.2	22.8	6.6	100.0	16.1	0.6	1,248
Primary	29.8	3.4	1.6	17.6	2.1	30.3	12.2	2.9	100.0	34.8	2.5	1,763
Lower secondary	55.6	5.3	2.9	9.3	3.3	16.0	6.3	1.3	100.0	63.9	4.2	693
Upper secondary	80.6	4.6	1.0	4.9	0.6	5.5	2.5	0.2	100.0	86.3	10.3	334
Post secondary non tertiary	83.7	4.9	0.9	3.6	0.3	6.4	0.2	0.0	100.0	89.6	14.0	146
Higher	88.7	3.9	0.2	2.7	1.5	1.7	1.2	0.0	100.0	92.8	18.1	122
Wealth index quintile												
Poorest	8.9	1.7	0.3	11.5	2.0	46.1	21.6	7.9	100.0	10.8	0.1	1,178
Second	20.0	2.7	1.2	14.6	2.3	39.2	17.2	2.8	100.0	23.9	1.1	927
Middle	36.4	6.2	2.4	15.2	1.4	24.9	11.3	2.2	100.0	45.0	2.2	810
Fourth	56.2	5.1	3.0	13.7	2.2	13.7	5.3	0.8	100.0	64.3	5.7	707
Richest	86.8	2.9	1.1	3.3	1.2	3.0	1.5	0.2	100.0	90.7	13.1	684
Ethno-linguistic group of household head												
Lao-Tai	52.1	4.2	2.2	14.3	2.0	16.0	8.0	1.3	100.0	58.5	5.8	2,401
Mon-Khmer	17.0	2.8	0.9	12.1	2.0	40.3	18.4	6.4	100.0	20.8	0.8	1,213
Hmong-Mien	15.2	2.5	0.0	2.8	1.1	50.1	22.5	5.8	100.0	17.8	1.4	530
Chinese-Tibetan	17.0	1.3	0.0	5.7	0.9	59.8	13.6	1.6	100.0	18.3	0.9	140
Other, Missing, DK	*	*	*	*	*	*	*	*	*	*	*	21
Total	36.6	3.5	1.5	11.9	1.9	28.5	12.9	3.3	100.0	41.5	3.7	4,306

[1] MICS indicator 5.7; MDG indicator 5.2

[2] MICS indicator 5.9

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

A significantly higher proportion of women in the Northern region were assisted by a health professional (31 per cent) than in the Southern (33 per cent) and Central regions (53 per cent). Only 7 per cent of women who delivered at home were attended by a health professional. The proportion of urban women assisted by a health professional (80 per cent) is more than double that of women in rural areas (31 per cent). The vast majority of women in Vientiane Capital (85 per cent) received professional attendance at delivery. Slightly more than half of women in Borikhamxay and Vientiane provinces received professional assistance, while all other provinces reported smaller percentages, and the lowest levels were reported in Attapeu and Phongsaly. The percentage of women assisted at delivery by a health professional increases steadily with education and wealth quintile. More than half of women in Lao-Tai headed households were assisted by a health professional, compared with only one in five women in other ethno-linguistic groups.

Table RH.9 also presents the proportion of births delivered by caesarean section (C-section), which totaled 4 per cent. The most highly educated mothers and those in the wealthiest quintiles had a higher percentage of births delivered by C-section than other women. Fifteen per cent of women in Vientiane Capital reported delivering by C-section.

Place of Delivery

Increasing the proportion of births delivered in health facilities is an important factor in reducing health risks to both mothers and babies. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infection that can cause the death or serious illness of the mother and/or the newborn baby.

Table RH.10 presents the percentage distribution of women age 15-49 who had a live birth in the two years preceding the survey, according to place of delivery. Thirty-eight per cent of births in Lao PDR are delivered in a health facility; the majority in public sector facilities. Six in 10 births occur in the woman's home. The percentage of health facility deliveries more than doubled from 17 per cent at the time of the 2006 MICS to 38 per cent in the current survey, while home deliveries decreased sharply from 85 to 59 per cent.

The Central region has the highest proportion of health facility deliveries (50 per cent), ranging by province from less than 20 per cent in Phongsaly and Attapeu to more than 50 per cent in Vientiane Capital, Vientiane province and Borikhamxay. Delivery in a health facility is more common among mothers age 20-34 (39 per cent), mothers who had at least four ANC visits (69 per cent), mothers with at least upper secondary education, and mothers in the highest wealth quintiles. Urban births are notably more likely than rural births to be delivered in a health facility (74 and 27 per cent, respectively). Some 52 per cent of women in Lao-Tai headed households give birth in a health facility, compared with only 20 per cent of those in Mon-Khmer headed households, 19 per cent of those in Chinese-Tibetan headed households, and 17 per cent of those in Hmong-Mien headed households.

Table RH.10: Place of delivery

Percent distribution of women age 15-49 who had a live birth in two years preceding the survey by place of delivery, Lao PDR 2011-12

	Place of delivery						Delivered in health facility[1]	Number of women who had a live birth in preceding two years
	Public sector health facility	Private sector health facility	Home	Other	DK /Missing	Total		
Region								
North	27.1	0.6	69.7	1.6	1.0	100.0	27.7	1,377
Central	48.7	1.3	47.1	1.8	1.1	100.0	50.0	1,989
South	25.1	0.3	66.1	6.0	2.5	100.0	25.4	940
Province								
Vientiane Capital	81.6	2.3	15.1	0.5	0.5	100.0	83.9	415
Phongsaly	18.1	0.0	81.1	0.4	0.4	100.0	18.1	148
Luangnamtha	42.3	0.0	56.7	0.0	1.0	100.0	42.3	99
Oudomxay	20.5	0.3	77.0	1.9	0.3	100.0	20.8	266
Bokeo	25.5	5.2	63.7	3.3	2.3	100.0	30.7	141
Luangprabang	34.1	0.0	64.0	1.2	0.7	100.0	34.1	280
Huaphanh	21.4	0.0	74.6	1.5	2.5	100.0	21.4	237
Xayabury	33.1	0.0	64.9	2.0	0.0	100.0	33.1	205
Xiengkhuang	34.7	0.0	62.6	0.0	2.7	100.0	34.7	200
Vientiane	52.8	0.5	45.3	1.3	0.1	100.0	53.3	295
Borikhamxay	51.7	0.5	47.8	0.0	0.0	100.0	52.2	162
Khammuane	27.1	2.4	67.9	0.9	1.7	100.0	29.6	233
Savannakhet	37.7	1.2	55.5	4.1	1.5	100.0	38.9	683
Saravane	26.5	0.2	59.1	11.1	3.1	100.0	26.7	361
Sekong	25.6	0.0	62.6	10.0	1.9	100.0	25.6	99
Champasack	25.1	0.3	70.3	1.7	2.6	100.0	25.5	397
Attapeu	18.7	0.5	80.8	0.0	0.0	100.0	19.2	83
Residence								
Urban	72.7	1.5	23.1	1.2	1.4	100.0	74.2	957
Rural	26.4	0.7	68.6	3.1	1.4	100.0	27.0	3,349
..Rural with road	28.5	0.8	66.7	2.7	1.4	100.0	29.2	2,928
..Rural without road	11.6	0.0	81.7	5.5	1.2	100.0	11.6	421
Mother's age at birth								
Less than 20	36.0	1.3	58.8	2.6	1.2	100.0	37.3	745
20-34	38.0	0.8	57.2	2.7	1.3	100.0	38.8	3,087
35-49	28.8	0.2	66.3	2.4	2.2	100.0	29.1	474
Number of antenatal care visits								
None	10.6	0.2	82.1	4.1	3.0	100.0	10.8	1,885
1-3 visits	36.4	1.1	60.4	2.1	0.0	100.0	37.5	820
4+ visits	67.4	1.5	29.8	1.2	0.1	100.0	68.9	1,588
DK/Missing	*	*	*	*	*	*	*	14
Education								
None	14.9	0.1	77.9	5.5	1.6	100.0	15.0	1,248
Primary	29.6	0.9	66.4	1.8	1.4	100.0	30.4	1,763
Lower secondary	54.6	1.0	41.6	1.8	1.0	100.0	55.6	693
Upper secondary	79.1	2.2	17.4	0.3	1.1	100.0	81.3	334
Post secondary non tertiary	84.1	0.6	13.0	0.6	1.7	100.0	84.7	146
Higher	86.2	4.2	8.4	0.0	1.2	100.0	90.4	122
Wealth index quintile								
Poorest	10.4	0.1	83.0	4.8	1.7	100.0	10.5	1,178
Second	21.3	0.3	74.9	2.5	1.0	100.0	21.6	927
Middle	36.9	0.5	58.9	2.4	1.4	100.0	37.4	810
Fourth	53.9	1.2	41.8	1.8	1.3	100.0	55.1	707
Richest	84.4	3.0	10.9	0.4	1.3	100.0	87.4	684
Ethno-linguistic group of household head								
Lao-Tai	50.5	1.3	45.6	1.2	1.4	100.0	51.8	2,401
Mon-Khmer	19.9	0.2	72.2	6.4	1.3	100.0	20.1	1,213
Hmong-Mien	16.4	0.3	81.4	0.4	1.5	100.0	16.7	530
Chinese-Tibetan	19.1	0.0	77.3	2.4	1.2	100.0	19.1	140
Other, Missing, DK	*	*	*	*	*	*	*	21
Total	36.7	0.8	58.5	2.7	1.4	100.0	37.5	4,306

[1] **MICS indicator 5.8**

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

Post-natal Health Checks

The post-natal period begins immediately after birth and extends for about six weeks. It is a time when the mother's body returns to how it was before pregnancy. A large proportion of maternal and neonatal deaths occur during the 48 hours after delivery, and these first two days following delivery are critical for monitoring complications arising from the delivery. Thus, post-natal care (PNC) is important for both the mother and the child, not only to treat complications arising from the delivery, but also to provide the mother with important information on how to care for herself and her child.

Post-partum stay in health facility

Table RH.11 presents the percentage distribution of women age 15-49 years who gave birth in a health facility in the two years prior to the survey, according to duration of stay in the health facility. Sixty-five per cent of women stayed in the health facility for 12 hours or more after their delivery, 44 per cent of women stayed for 1-2 days and 17 per cent stayed for three or more days. In general, stays of 12 or more hours increased with education and wealth. As may be expected, a higher percentage of women with C-section deliveries stayed for 12 or more hours relative to women without C-sections (93 and 62 per cent, respectively). Differences in the duration of stay were not very large according to region, age of mother or type of health facility.

Table RH.11: Post-partum stay in health facility

Percent distribution of women age 15-49 years who gave birth in a health facility in the two years preceding the survey by duration of stay in health facility, Lao PDR 2011-12

	Duration of stay in health facility								
	Less than 6 hours	6-11 hours	12-23 hours	1-2 days	3 days or more	DK/ Missing	Total	12 hours or more[1]	Number of women who gave birth in a health facility in the preceding two years
Region									
North	26.1	7.4	3.8	47.0	15.3	0.4	100.0	66.1	381
Central	25.7	8.3	4.1	43.7	16.9	1.3	100.0	64.8	995
South	24.6	9.8	2.7	39.7	21.2	1.9	100.0	63.7	239
Province									
Vientiane Capital	3.7	6.5	5.9	53.5	29.8	0.6	100.0	89.2	348
Phongsaly	(46.4)	(8.5)	(2.3)	(20.5)	(19.9)	(2.4)	100.0	(42.7)	27
Luangnamtha	24.6	25.2	18.4	20.7	11.0	0.0	100.0	50.1	42
Oudomxay	12.4	5.7	0.7	75.9	5.4	0.0	100.0	82.0	55
Bokeo	3.8	0.0	0.0	60.7	33.1	2.5	100.0	93.8	43
Luangprabang	24.4	4.5	2.7	56.2	12.2	0.0	100.0	71.1	95
Huaphanh	52.2	7.6	6.2	25.9	8.1	0.0	100.0	40.2	51
Xayabury	27.2	6.0	0.0	44.1	22.7	0.0	100.0	66.8	68
Xiengkhuang	38.6	9.5	0.7	42.3	7.7	1.1	100.0	50.8	69
Vientiane	26.2	7.7	6.4	50.1	9.6	0.0	100.0	66.1	157
Borikhamxay	40.4	10.8	0.0	38.9	9.9	0.0	100.0	48.8	85
Khammuane	14.3	11.8	1.3	52.5	17.1	3.0	100.0	70.9	69
Savannakhet	49.0	8.9	3.4	26.6	9.0	3.0	100.0	39.1	266
Saravane	29.9	15.9	0.8	36.1	16.3	0.9	100.0	53.2	96
Sekong	34.5	3.2	0.0	31.8	18.8	11.7	100.0	50.6	25
Champasack	15.7	6.9	5.3	45.5	26.6	0.0	100.0	77.4	101
Attapeu	(33.0)	(2.4)	(2.4)	(37.5)	(20.7)	(4.1)	100.0	(60.6)	16
Residence									
Urban	19.4	7.5	4.8	46.3	21.6	0.3	100.0	72.8	710
Rural	30.4	8.9	3.1	42.0	13.7	1.9	100.0	58.8	905
..Rural with road	31.0	9.1	3.1	41.7	14.2	0.9	100.0	59.0	856
..Rural without road	20.7	6.0	2.3	46.5	5.6	18.9	100.0	54.4	49
Mother's age at birth									
Less than 20	31.2	8.2	4.7	39.0	15.6	1.4	100.0	59.3	278
20-34	24.6	8.2	3.4	45.5	17.3	0.9	100.0	66.3	1,199
35-49	23.0	9.2	6.0	39.7	19.0	3.1	100.0	64.7	138
Type of health facility									
Public	25.6	8.5	3.9	44.1	16.8	1.1	100.0	64.8	1,578
Private	(24.9)	(0.0)	(0.0)	(36.5)	(34.4)	(4.2)	100.0	(70.9)	37
Type of delivery									
C-section	5.5	1.1	4.1	11.8	77.6	0.0	100.0	93.4	159
Not via C-section	27.8	9.1	3.8	47.4	10.6	1.3	100.0	61.8	1,456
Education									
None	33.2	10.6	1.8	36.3	11.8	6.4	100.0	49.8	187
Primary	31.3	7.6	3.3	44.8	12.0	1.0	100.0	60.1	537
Lower secondary	26.5	9.0	4.5	42.2	17.9	0.0	100.0	64.5	385
Upper secondary	19.2	8.0	3.7	45.0	23.3	0.7	100.0	72.1	271
Post secondary non tertiary	12.8	9.7	3.9	50.7	22.9	0.0	100.0	77.5	124
Higher	11.9	4.6	8.1	47.9	27.4	0.0	100.0	83.5	110
Wealth index quintile									
Poorest	25.6	14.0	2.4	41.3	7.9	8.9	100.0	51.6	124
Second	37.7	6.6	2.3	42.1	8.9	2.4	100.0	53.4	200
Middle	33.8	12.0	2.4	40.8	10.8	0.3	100.0	53.9	303
Fourth	29.7	6.9	3.6	42.6	17.3	0.0	100.0	63.5	390
Richest	14.7	6.8	5.6	47.5	25.0	0.4	100.0	78.1	598
Ethno-linguistic group of household head									
Lao-Tai	24.2	8.2	4.2	44.3	18.5	0.5	100.0	67.0	1,243
Mon-Khmer	33.0	9.4	2.2	42.7	8.3	4.5	100.0	53.1	243
Hmong-Mien	24.4	7.5	4.2	49.0	14.8	0.0	100.0	68.0	88
Chinese-Tibetan	(28.0)	(8.1)	(4.5)	(22.1)	(31.0)	(6.4)	100.0	(57.6)	27
Other, Missing, DK	*	*	*	*	*	*	*	*	13
Total	25.6	8.3	3.8	43.9	17.2	1.2	100.0	64.9	1,615

[1] **MICS indicator 5.10**

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

Post-natal health checks for newborns

Safe motherhood programmes have recently increased emphasis on the importance of PNC, recommending that all women and newborns receive a health check within two days of delivery. To assess the extent of PNC utilization, women were asked whether they and their newborn received a health check after the delivery, the timing of the first check, and the type of health provider for the woman's last birth in the two years preceding the survey.

Table RH.12 presents the percentage of newborns born in the last two years who received health checks or PNC visits. Less than half (41 per cent) received either a health check or PNC visit within two days of delivery. Four in 10 received a health check while in the health facility or at home, while 7 per cent received a PNC visit within two days following delivery. The majority of newborns (88 per cent) did not complete a PNC visit at any time after delivery. More newborns received health checks or PNC visits in the Central region (50 per cent) than in the Southern (37 per cent) and Northern (30 per cent) regions. PNC for newborns varied across provinces, ranging from 84 per cent in Vientiane Capital to 20 per cent in Oudomxay. Mothers of newborns born in a health facility as opposed to in the home more frequently reported health checks and PNC visits (84 per cent and 15 per cent, respectively). PNC was increasingly reported for newborns as education and wealth increased. Mothers of newborns in Lao-Tai headed households reported newborn PNC within two days of delivery more frequently than other ethno-linguistic groups (56 per cent).

Table RH.12: Post-natal health checks for newborns

Percentage of newborns born in the last two years who received health checks and post-natal care (PNC) visits from any health provider after birth, Lao PDR 2011-12

	Health check while in facility or at home following delivery	Post-natal care visit						Any health check following delivery or post-natal care visit within two days of delivery[1]	Number of births in the two years preceding the survey
		Within 2 days of delivery	2-6 days after delivery	After the first week	No post-natal care visit	DK /Missing	Total		
Region									
North	29.6	5.7	2.0	1.1	90.7	0.6	100.0	30.2	1,377
Central	48.4	9.9	1.8	3.3	84.6	0.4	100.0	49.5	1,989
South	36.4	4.5	3.0	1.7	90.3	0.5	100.0	37.0	940
Province									
Vientiane Capital	83.5	9.9	3.7	10.3	75.7	0.4	100.0	84.0	415
Phongsaly	21.8	2.2	2.9	1.3	93.6	0.0	100.0	22.3	148
Luangnamtha	44.9	8.7	0.0	1.7	89.5	0.0	100.0	46.2	99
Oudomxay	19.7	1.6	0.3	0.0	98.1	0.0	100.0	19.7	266
Bokeo	27.6	0.8	0.3	1.2	97.4	0.3	100.0	27.6	141
Luangprabang	36.0	7.1	2.7	1.4	87.7	1.1	100.0	36.0	280
Huaphanh	18.6	6.5	2.0	0.7	90.7	0.0	100.0	20.5	237
Xayabury	45.7	12.6	4.6	2.0	78.9	2.0	100.0	46.8	205
Xiengkhuang	37.1	1.6	0.7	0.9	96.8	0.0	100.0	37.1	200
Vientiane	54.2	9.1	1.0	1.1	88.7	0.0	100.0	56.3	295
Borikhamxay	34.7	16.5	0.6	0.0	82.9	0.0	100.0	35.3	162
Khammuane	36.9	11.5	3.1	0.8	84.6	0.0	100.0	38.6	233
Savannakhet	35.0	10.5	1.2	2.2	85.1	1.0	100.0	36.3	683
Saravane	34.7	6.6	2.5	2.1	88.8	0.0	100.0	35.5	361
Sekong	25.2	0.6	0.0	0.0	99.4	0.0	100.0	25.7	99
Champasack	36.4	4.4	4.7	1.7	88.0	1.1	100.0	36.7	397
Attapeu	58.0	0.0	0.8	1.7	97.0	0.4	100.0	58.0	83
Residence									
Urban	70.5	12.6	4.3	6.4	75.8	0.9	100.0	70.9	957
Rural	31.0	5.9	1.5	1.0	91.2	0.4	100.0	31.9	3,349
..Rural with road	33.3	6.3	1.6	1.1	90.7	0.4	100.0	34.3	2,928
..Rural without road	14.7	3.3	1.0	0.7	95.1	0.0	100.0	15.2	421

[1] **MICS indicator 5.11**

Health checks while in facility and health checks at home following delivery refer to checks provided by any health provider regardless of timing.

Any health check following delivery or post-natal care visit within 2 days of delivery includes checks performed while in the health facility and at home following delivery, regardless of timing, as well as post-natal care visits within two days of delivery

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

Table RH.12: Post-natal health checks for newborns

Percentage of newborns born in the last two years who received health checks and post-natal care (PNC) visits from any health provider after birth, Lao PDR 2011-12

	Health check while in facility or at home following delivery	Post-natal care visit						Any health check following delivery or post-natal care visit within two days of delivery[1]	Number of births in the two years preceding the survey
		Within 2 days of delivery	2-6 days after delivery	After the first week	No post-natal care visit	DK /Missing	Total		
Mother's age at birth									
Less than 20	38.1	6.5	2.4	1.3	89.5	0.3	100.0	38.7	745
20-34	41.1	7.6	2.2	2.6	87.1	0.5	100.0	41.9	3,087
35-49	33.6	7.4	1.5	0.9	89.8	0.5	100.0	34.8	474
Place of delivery									
Home	13.9	3.4	1.6	0.8	94.0	0.2	100.0	15.0	2,518
Health facility	83.9	14.1	3.1	4.4	77.4	0.9	100.0	84.0	1,615
Public	83.8	14.0	3.2	4.4	77.4	1.0	100.0	83.8	1,578
Private	(85.0)	(18.0)	(0.0)	(4.4)	(77.6)	(0.0)	100.0	(90.8)	37
Other/DK/Missing	4.7	2.6	0.6	2.2	93.8	0.9	100.0	7.3	173
Education									
None	15.7	4.0	0.5	0.3	95.1	0.0	100.0	16.3	1,248
Primary	35.4	6.3	2.2	1.6	89.2	0.7	100.0	36.3	1,763
Lower secondary	57.9	10.0	2.1	2.5	84.6	0.8	100.0	58.8	693
Upper secondary	76.6	11.7	4.3	5.2	77.9	0.8	100.0	77.6	334
Post secondary non tertiary	83.4	22.1	3.2	6.9	67.8	0.0	100.0	84.5	146
Higher	92.9	13.7	10.1	14.6	61.7	0.0	100.0	92.9	122
Wealth index quintile									
Poorest	12.8	2.8	0.6	0.4	96.0	0.2	100.0	13.6	1,178
Second	24.5	5.5	1.0	0.8	92.5	0.3	100.0	25.4	927
Middle	42.4	6.9	2.4	1.8	88.7	0.2	100.0	43.3	810
Fourth	59.2	14.5	1.9	2.4	79.6	1.7	100.0	60.5	707
Richest	83.7	10.9	6.3	7.6	74.7	0.4	100.0	83.8	684
Ethno-linguistic group of household head									
Lao-Tai	55.0	10.6	3.2	3.5	82.1	0.6	100.0	56.1	2,401
Mon-Khmer	22.2	3.9	0.7	0.5	94.4	0.5	100.0	23.0	1,213
Hmong-Mien	15.7	1.7	0.3	0.0	97.8	0.2	100.0	15.7	530
Chinese-Tibetan	17.9	2.4	2.2	0.4	95.0	0.0	100.0	18.4	140
Other, Missing, DK	*	*	*	*	*	*	*	*	21
Total	39.8	7.4	2.1	2.2	87.8	0.5	100.0	40.6	4,306

[1] **MICS indicator 5.11**

Health checks while in facility and health checks at home following delivery refer to checks provided by any health provider regardless of timing.

Any health check following delivery or post-natal care visit within 2 days of delivery includes checks performed while in the health facility and at home following delivery, regardless of timing, as well as post-natal care visits within two days of delivery

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

Table RH.13 shows the distribution of newborns born in the two years prior to the survey who received a PNC visit within one week of delivery, according to the location and provider of that first PNC. Among newborns receiving PNC within one week of birth, 82 per cent received the PNC from a health professional, and 54 per cent received PNC at a public sector health facility. Among the newborns who received a PNC visit and were born at a health facility, most received PNC from a health professional (96 per cent). Of babies born at home who received a PNC visit, 52 per cent received PNC from a health professional, and 34 per cent received PNC from a traditional birth attendant.

Table RH.13: Post-natal care (PNC) visits for newborns

Percent distribution of newborns born in the last two years who received a PNC visit within one week of delivery, by location and provider of the first PNC visit, Lao PDR 2011-12

	Location of first PNC visit				Provider of first PNC visit					Number of newborns born in the preceding two years with a PNC visit within the first week of life
	Home	Public Sector	Private sector	Total	Doctor/ nurse/ midwife	Auxiliary midwife	Community health worker	Traditional birth attendant	Total	
Region										
North	55.0	45.0	0.0	100.0	73.7	2.7	9.2	14.4	100.0	106
Central	36.7	62.6	0.7	100.0	78.5	7.4	3.9	10.2	100.0	233
South	61.6	38.4	0.0	100.0	68.7	10.6	7.8	13.0	100.0	71
Residence										
Urban	40.5	58.9	0.5	100.0	87.7	7.7	1.4	3.2	100.0	162
Rural	49.1	50.5	0.3	100.0	67.6	6.1	8.9	17.4	100.0	248
..Rural with road	48.2	51.4	0.4	100.0	69.0	6.6	9.6	14.8	100.0	230
..Rural without road	*	*	*	*	*	*	*	*	*	18
Mother's age at birth										
Less than 20	42.2	57.8	0.0	100.0	74.4	9.2	2.7	13.7	100.0	66
20-34	45.0	54.4	0.6	100.0	77.9	6.2	6.8	9.1	100.0	301
35-49	(56.2)	(43.8)	(0.0)	100.0	(60.7)	(6.4)	(4.8)	(28.1)	100.0	42
Place of delivery										
Home	95.1	4.9	0.0	100.0	42.1	9.8	14.4	33.8	100.0	126
Health facility	23.2	76.2	0.6	100.0	90.9	5.5	2.2	1.3	100.0	278
Public	22.0	78.0	0.0	100.0	91.5	5.6	2.3	0.6	100.0	271
Private	*	*	*	*	*	*	*	*	*	7
Other/DK/Missing	*	*	*	*	*	*	*	*	*	5
Education										
None	33.0	67.0	0.0	100.0	71.9	9.4	5.4	13.3	100.0	56
Primary	52.3	47.1	0.6	100.0	62.6	7.6	8.4	21.4	100.0	149
Lower secondary	43.5	56.5	0.0	100.0	86.8	2.7	4.9	5.5	100.0	84
Upper secondary	(46.3)	(53.7)	(0.0)	100.0	(77.3)	(9.2)	(6.9)	(6.7)	100.0	54
Post secondary non tertiary	(39.1)	(58.6)	(2.3)	100.0	(90.7)	(5.4)	(2.3)	(1.6)	100.0	37
Higher	(50.2)	(49.8)	(0.0)	100.0	(94.0)	(6.0)	(0.0)	(0.0)	100.0	29
Wealth index quintile										
Poorest	(59.2)	(40.8)	(0.0)	100.0	(49.1)	(4.1)	(18.8)	(28.0)	100.0	40
Second	42.4	57.6	0.0	100.0	63.3	8.3	10.2	18.2	100.0	60
Middle	50.8	48.1	1.1	100.0	74.5	7.7	4.9	12.8	100.0	75
Fourth	35.6	64.4	0.0	100.0	81.1	6.9	4.8	7.2	100.0	115
Richest	49.5	49.8	0.7	100.0	86.0	6.0	1.2	6.7	100.0	118
Ethno-linguistic group of household head										
Lao-Tai	46.2	53.3	0.5	100.0	77.1	7.2	4.3	11.4	100.0	331
Mon-Khmer	42.3	57.7	0.0	100.0	65.6	5.3	15.9	13.1	100.0	56
Hmong-Mien	*	*	*	*	*	*	*	*	*	11
Chinese-Tibetan	*	*	*	*	*	*	*	*	*	6
Other, Missing, DK	*	*	*	*	*	*	*	*	*	5
Total	45.7	53.9	0.4	100.0	75.5	6.7	5.9	11.8	100.0	409

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

Post-natal health checks for mothers

Table RH.14 presents the percentage of women age 15-49 who gave birth in the two years prior to the survey who received health checks or PNC visits. PNC for mothers follows similar trends to those observed for newborns; however, the proportion of women reporting recommended care is generally less than that reported for newborns. Less than half of mothers (40 per cent) received either a health check after delivery or a PNC visit within two days of delivery. Thirty-nine per cent received a health check after delivery while in the health facility or at home, while 3 per cent received a PNC visit within two days following delivery. The majority of women (93 per cent) did not have a PNC visit at any time after delivery. More women received health checks or PNC visits in the Central region (48 per cent) than in the Southern (36 per cent) and Northern (29 per cent) regions. PNC for women varied across provinces, ranging from 81 per cent in Vientiane Capital to 17 per cent in Huaphanh. Women who gave birth in a health facility as opposed to in the home more frequently reported health checks and PNC visits (84 per cent and 13 per cent, respectively). PNC was increasingly reported for women as education and wealth increased. Women in Lao-Tai headed households reported a health check after delivery or a PNC visit within two days of delivery more frequently than other ethno-linguistic groups (54 per cent).

Table RH.14: Post-natal health checks for mothers

Percentage of women age 15-49 years who gave birth in the 2 years preceding the survey who received health checks and post-natal care (PNC) visits from any health provider after birth, Lao PDR 2011-12

	Health check while in facility or at home following delivery	Post-natal care visit						Any health check following delivery or post-natal care visit within two days of delivery[1]	Number of women who gave birth in the two years preceding the survey
		Within 2 days of delivery	2-6 days after delivery	After the first week	No post-natal care visit	DK/Missing	Total		
Region									
North	28.7	2.5	1.4	0.7	95.2	0.2	100.0	29.4	1,377
Central	47.3	4.1	1.5	3.2	91.1	0.1	100.0	48.2	1,989
South	35.5	2.0	2.9	2.0	93.0	0.1	100.0	35.8	940
Province									
Vientiane Capital	80.9	4.9	3.8	9.1	82.2	0.0	100.0	81.4	415
Phongsaly	22.2	1.8	2.5	0.4	95.3	0.0	100.0	22.7	148
Luangnamtha	43.9	1.1	0.0	0.0	98.9	0.0	100.0	45.0	99
Oudomxay	19.0	0.0	0.0	0.3	99.7	0.0	100.0	19.0	266
Bokeo	29.1	1.5	0.3	1.2	96.6	0.3	100.0	29.1	141
Luangprabang	35.1	1.9	2.4	0.4	95.0	0.4	100.0	35.5	280
Huaphanh	15.5	4.4	0.7	0.0	95.0	0.0	100.0	17.0	237
Xayabury	44.6	6.0	3.6	2.5	87.4	0.5	100.0	46.2	205
Xiengkhuang	37.1	2.1	0.7	0.9	96.4	0.0	100.0	37.1	200
Vientiane	53.8	6.1	1.0	0.5	92.5	0.0	100.0	54.7	295
Borikhamxay	34.7	2.7	1.6	0.5	95.2	0.0	100.0	35.3	162
Khammuane	36.4	3.7	1.9	2.6	91.2	0.7	100.0	37.2	233
Savannakhet	33.7	3.7	0.5	2.5	93.3	0.0	100.0	35.4	683
Saravane	34.7	1.9	2.7	2.7	92.7	0.0	100.0	35.4	361
Sekong	24.9	0.3	0.0	0.0	99.7	0.0	100.0	25.0	99
Champasack	34.5	2.8	4.5	2.1	90.3	0.2	100.0	34.5	397
Attapeu	55.8	0.0	0.0	0.9	99.1	0.0	100.0	55.8	83
Residence									
Urban	69.3	4.4	3.1	5.9	86.4	0.2	100.0	69.5	957
Rural	30.0	2.7	1.4	1.1	94.7	0.1	100.0	30.9	3,349
..Rural with road	32.4	2.9	1.5	1.1	94.4	0.1	100.0	33.3	2,928
..Rural without road	13.9	1.5	0.9	0.9	96.5	0.3	100.0	14.4	421
Mother's age at birth									
Less than 20	35.8	2.3	1.6	1.1	94.9	0.2	100.0	36.6	745
20-34	40.5	3.0	1.9	2.6	92.4	0.1	100.0	41.0	3,087
35-49	32.1	4.8	1.4	1.1	92.4	0.2	100.0	34.1	474

[1] **MICS indicator 5.12**

Health checks while in facility and health checks at home following delivery refer to checks provided by any health provider regardless of timing.
Any health check following delivery or post-natal care visit within 2 days of delivery includes checks performed while in the health facility and at home following delivery, regardless of timing, as well as post-natal care visits within two days of delivery

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

Table RH.14: Post-natal health checks for mothers

Percentage of women age 15-49 years who gave birth in the 2 years preceding the survey who received health checks and post-natal care (PNC) visits from any health provider after birth, Lao PDR 2011-12

	Health check while in facility or at home following delivery	Post-natal care visit						Any health check following delivery or post-natal care visit within two days of delivery[1]	Number of women who gave birth in the two years preceding the survey
		Within 2 days of delivery	2-6 days after delivery	After the first week	No post-natal care visit	DK/Missing	Total		
Place of delivery									
Home	12.4	2.5	1.3	1.0	95.2	0.1	100.0	13.4	2,518
Health facility	83.5	4.2	2.8	4.0	88.9	0.2	100.0	83.6	1,615
Public	83.3	4.1	2.9	4.0	88.9	0.2	100.0	83.4	1,578
Private	(90.8)	(7.6)	(0.0)	(4.4)	(88.0)	(0.0)	100.0	(90.8)	37
Other/DK/Missing	4.7	2.4	0.6	1.7	95.3	0.0	100.0	7.1	173
Type of delivery									
C-section	95.0	8.3	7.6	11.6	72.0	0.5	100.0	95.0	159
Not via C-section	36.6	2.9	1.6	1.8	93.6	0.1	100.0	37.4	4,147
Education									
None	15.8	1.2	0.7	0.5	97.5	0.1	100.0	16.4	1,248
Primary	33.7	2.6	1.6	1.6	94.0	0.2	100.0	34.4	1,763
Lower secondary	56.9	5.6	2.1	2.1	90.2	0.0	100.0	57.9	693
Upper secondary	76.7	4.1	3.9	5.1	86.6	0.3	100.0	77.3	334
Post secondary non tertiary	80.1	10.2	1.2	6.3	82.2	0.0	100.0	81.2	146
Higher	90.2	3.6	9.1	14.9	72.5	0.0	100.0	90.2	122
Wealth index quintile									
Poorest	12.6	1.2	0.6	0.2	97.9	0.1	100.0	13.4	1,178
Second	24.2	2.1	0.7	1.3	95.9	0.0	100.0	24.6	927
Middle	41.5	2.8	2.1	2.1	92.8	0.1	100.0	42.4	810
Fourth	56.5	6.1	1.8	3.2	88.6	0.3	100.0	58.0	707
Richest	81.8	4.9	5.0	5.6	84.3	0.1	100.0	81.9	684
Ethno-linguistic group of household head									
Lao-Tai	53.4	4.5	2.7	3.5	89.2	0.1	100.0	54.3	2,401
Mon-Khmer	21.7	1.5	0.4	0.3	97.6	0.1	100.0	22.4	1,213
Hmong-Mien	16.0	0.9	0.4	0.0	98.7	0.0	100.0	16.1	530
Chinese-Tibetan	18.3	0.8	2.2	0.4	96.6	0.0	100.0	18.3	140
Other, Missing, DK	*	*	*	*	*	*	*	*	21
Total	38.8	3.1	1.8	2.2	92.8	0.1	100.0	39.5	4,306

[1] **MICS indicator 5.12**

Health checks while in facility and health checks at home following delivery refer to checks provided by any health provider regardless of timing.
Any health check following delivery or post-natal care visit within 2 days of delivery includes checks performed while in the health facility and at home following delivery, regardless of timing, as well as post-natal care visits within two days of delivery

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

Table RH.15 shows the distribution of the women who gave birth in the two years prior to the survey and did receive a PNC visit within one week of delivery, according to the location and provider of the first PNC visit. Among these women, 74 per cent received PNC from a health professional and 30 per cent received PNC at a public sector health facility. Among the women who received a PNC visit and delivered at a health facility, most received PNC from a health professional (95 per cent). Among the women who received a PNC visit and had delivered at home, 50 per cent received PNC from a health professional, and 34 per cent received PNC from a traditional birth attendant.

Table RH.15: Post-natal care (PNC) visits for mothers

Percent distribution of women age 15-49 years who gave birth in the preceding 2 years and received a post-natal care visit within one week of delivery, by location and provider of the first post-natal care visit, Lao PDR 2011-12

	Location of first post-natal care visit			Provider of first post-natal care visit					Number of women who gave birth in the two years preceding survey and received a post-natal care visit within one week of delivery
	Home	Public Sector	Total	Doctor/ nurse/ midwife	Auxiliary midwife	Community health worker	Traditional birth attendant	Total	
Region									
North	(87.1)	(12.9)	100.0	(64.7)	(2.9)	(13.8)	(18.5)	100.0	42
Central	59.5	40.5	100.0	67.3	10.2	8.0	14.5	100.0	102
South	(77.9)	(22.1)	100.0	(68.5)	(2.1)	(12.2)	(17.2)	100.0	36
Residence									
Urban	(61.2)	(38.8)	100.0	(92.3)	(0.0)	(2.4)	(5.3)	100.0	58
Rural	73.7	26.3	100.0	54.9	10.1	13.9	21.1	100.0	123
..Rural with road	72.7	27.3	100.0	56.8	11.0	15.1	17.1	100.0	113
..Rural without road	*	*	*	*	*	*	*	*	10
Mother's age at birth									
Less than 20	(75.3)	(24.7)	100.0	(68.3)	(4.8)	(9.6)	(17.3)	100.0	26
20-34	64.9	35.1	100.0	73.1	5.8	10.1	11.0	100.0	127
35-49	*	*	*	*	*	*	*	*	27
Place of delivery									
Home	98.1	1.9	100.0	37.9	11.8	16.7	33.6	100.0	80
Health facility	46.5	53.5	100.0	91.5	3.2	5.3	0.0	100.0	96
Public	44.9	55.1	100.0	91.2	3.3	5.5	0.0	100.0	93
Private	*	*	*	*	*	*	*	*	3
Other/DK/Missing	*	*	*	*	*	*	*	*	5
Type of delivery									
C-section	*	*	*	*	*	*	*	*	24
Not via C-section	73.1	26.9	100.0	61.8	7.9	11.8	18.4	100.0	157
Education									
None	*	*	*	*	*	*	*	*	21
Primary	72.8	27.2	100.0	50.1	6.1	14.8	29.0	100.0	63
Lower secondary	(59.0)	(41.0)	100.0	(80.8)	(8.6)	(7.3)	(3.3)	100.0	44
Upper secondary	*	*	*	*	*	*	*	*	25
Post secondary non tertiary	*	*	*	*	*	*	*	*	16
Higher	*	*	*	*	*	*	*	*	11
Wealth index quintile									
Poorest	*	*	*	*	*	*	*	*	20
Second	*	*	*	*	*	*	*	*	22
Middle	(75.1)	(24.9)	100.0	(53.5)	(7.7)	(17.4)	(21.4)	100.0	34
Fourth	(67.1)	(32.9)	100.0	(73.0)	(16.8)	(3.2)	(7.0)	100.0	47
Richest	(65.1)	(34.9)	100.0	(83.6)	(0.0)	(2.4)	(13.9)	100.0	58
Ethno-linguistic group of household head									
Lao-Tai	70.5	29.5	100.0	67.7	8.4	8.9	15.0	100.0	148
Mon-Khmer	*	*	*	*	*	*	*	*	21
Hmong-Mien	*	*	*	*	*	*	*	*	7
Chinese-Tibetan	*	*	*	*	*	*	*	*	4
Other, Missing, DK	*	*	*	*	*	*	*	*	1
Total	69.6	30.4	100.0	66.9	6.9	10.2	16.0	100.0	181

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

Table RH.16 presents information about health checks and PNC visits for mothers and newborns. Thirty-eight per cent of both mothers and newborns received a health check or PNC visit within two days of delivery. For nearly 6 in 10 (58 per cent) mother-newborn pairs, neither the mother nor the newborn received any health check or PNC visit. In the Central region, 47 per cent of both mothers and newborns received PNC. This figure was less in the Southern (35 per cent) and in the Northern (28 per cent) regions. Eighty-one per cent of both mothers and newborns who delivered at a health facility received PNC, compared with only 13 per cent of those who delivered at home. It was rare that a mother or newborn received care without the other also receiving care. Higher percentages of PNC were reported for both mothers and newborns two days after delivery if the mothers were from urban areas (especially in Vientiane Capital, with 79 per cent), had more education or were relatively wealthy.

Table RH.16: Post-natal health checks for mothers and newborns

Percent distribution of women age 15-49 who gave birth in the two years preceding the survey by receipt of health checks and post-natal care (PNC) visits within 2 days of delivery, for the mother and newborn, Lao PDR 2011-12

	Health check following delivery or post-natal care visit within two days of delivery for:						Number of women age 15-49 years who gave birth in the 2 years preceding the survey
	Both mothers and newborns	Mothers only	Newborns only	Neither mother nor newborn	DK/Missing	Total	
Region							
North	28.2	1.1	1.9	68.7	0.1	100.0	1,377
Central	46.6	1.7	2.9	48.8	0.0	100.0	1,989
South	34.8	0.9	2.1	62.2	0.1	100.0	940
Province							
Vientiane Capital	78.7	2.7	5.3	13.3	0.0	100.0	415
Phongsaly	22.3	0.4	0.0	77.3	0.0	100.0	148
Luangnamtha	44.4	0.6	1.8	53.3	0.0	100.0	99
Oudomxay	18.7	0.3	1.0	80.0	0.0	100.0	266
Bokeo	27.3	1.5	0.0	70.9	0.3	100.0	141
Luangprabang	33.9	1.6	2.1	62.4	0.0	100.0	280
Huaphanh	15.1	1.9	5.4	77.7	0.0	100.0	237
Xayabury	44.7	1.0	1.6	52.2	0.5	100.0	205
Xiengkhuang	37.1	0.0	0.0	62.9	0.0	100.0	200
Vientiane	54.7	0.0	1.7	43.7	0.0	100.0	295
Borikhamxay	34.3	1.0	1.0	63.7	0.0	100.0	162
Khammuane	33.7	3.6	5.0	57.8	0.0	100.0	233
Savannakhet	33.6	1.8	2.7	61.9	0.0	100.0	683
Saravane	34.8	0.6	0.7	63.9	0.0	100.0	361
Sekong	25.0	0.0	0.6	74.3	0.0	100.0	99
Champasack	33.1	1.3	3.4	62.0	0.2	100.0	397
Attapeu	54.8	1.0	3.1	41.0	0.0	100.0	83
Residence							
Urban	68.2	1.2	2.6	27.9	0.1	100.0	957
Rural	29.5	1.3	2.4	66.7	0.0	100.0	3,349
..Rural with road	31.7	1.5	2.6	64.1	0.0	100.0	2,928
..Rural without road	14.4	0.0	0.8	84.8	0.0	100.0	421
Mother's age at birth							
Less than 20	35.7	0.9	3.0	60.5	0.0	100.0	745
20-34	39.6	1.3	2.2	56.7	0.0	100.0	3,087
35-49	31.9	2.0	2.8	63.2	0.2	100.0	474
Place of delivery							
Home	12.6	0.8	2.4	84.2	0.0	100.0	2,518
Health facility	81.2	2.3	2.7	13.7	0.1	100.0	1,615
Public	80.9	2.4	2.8	13.8	0.1	100.0	1,578
Private	(90.8)	(0.0)	(0.0)	(9.2)	(0.0)	100.0	37
Other/DK/Missing	7.1	0.0	0.2	92.7	0.0	100.0	173
Type of delivery							
C-section	91.0	3.6	1.1	3.9	0.5	100.0	159
Not via C-section	36.1	1.2	2.5	60.2	0.0	100.0	4,147
Education							
None	15.4	1.0	0.9	82.7	0.0	100.0	1,248
Primary	33.2	1.1	3.0	62.5	0.1	100.0	1,763
Lower secondary	56.1	1.8	2.8	39.4	0.0	100.0	693
Upper secondary	75.2	2.1	2.4	20.3	0.0	100.0	334
Post secondary non tertiary	79.4	1.8	5.1	13.8	0.0	100.0	146
Higher	88.4	1.8	4.5	5.3	0.0	100.0	122
Wealth index quintile							
Poorest	12.8	0.5	0.8	85.9	0.0	100.0	1,178
Second	23.4	1.2	1.9	73.4	0.0	100.0	927
Middle	40.4	2.0	2.9	54.7	0.0	100.0	810
Fourth	56.2	1.5	4.0	38.0	0.3	100.0	707
Richest	80.1	1.8	3.7	14.3	0.0	100.0	684
Ethno-linguistic group of household head							
Lao-Tai	52.2	2.0	3.8	42.0	0.1	100.0	2,401
Mon-Khmer	22.0	0.4	1.0	76.6	0.0	100.0	1,213
Hmong-Mien	15.5	0.6	0.2	83.7	0.0	100.0	530
Chinese-Tibetan	17.4	0.9	1.0	80.7	0.0	100.0	140
Other, Missing, DK	*	*	*	*	*	*	21
Total	38.1	1.3	2.4	58.1	0.1	100.0	4,306

Health checks or post-natal care visits within 2 days of delivery includes checks performed while in the health facility and at home following delivery, regardless of timing, as well as post-natal care visits within two days of delivery

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

VIII. Adult and Maternal Mortality

Adult and maternal mortality rates are key indicators of the health status of a population. In Lao PDR, they are also national development indicators. Estimation of these mortality rates requires comprehensive and accurate reporting of adult and maternal deaths.

Estimates of adult and maternal mortality are based on the sibling history data collected in the Maternal Mortality Module of the 2011-12 LSIS Women's Questionnaire. To obtain a sibling history, the 2011-12 LSIS interviewers first asked each female respondent to list all of the children born to her biological mother, starting with the firstborn. The interviewer then asked the respondent whether each of these siblings was still alive. For siblings still alive at the time of the survey, the respondent was asked the current age of each. For siblings who have died, the respondent was asked to report how old the sibling was at the time of his/her death, and the number of years that have passed since the death (how long ago did the sibling die). When a respondent could not provide precise information on age at death or years since death, approximate but quantitative answers were accepted. These are the data used to estimate adult mortality.

To estimate maternal mortality, further information was collected on sisters who died at the age of 12 or older. Respondents were asked three questions to determine whether the sibling deaths were maternal: 'Was [NAME OF SISTER] pregnant when she died?'; and, if the response was negative, 'Did she die during childbirth?'; and, if negative again, 'Did she die within two months after the end of a pregnancy or childbirth?' The term 'maternal mortality' used in this chapter corresponds to the term 'pregnancy-related mortality' defined by WHO as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death.[1] In keeping with this definition, the LSIS Maternal Mortality Module measures only the timing of deaths, and not the cause of death. Note that the LSIS asked the respondent about deaths within two months of termination of pregnancy in full knowledge that the definition of a maternal death is within 42 days of termination of pregnancy; asking the respondent to report age at death within 42 days expects a level of accuracy of reporting that is unrealistic for most respondents, especially when reporting events that occurred in the past – assuming that respondents can report relative to a two-month time span is more realistic.

This chapter also includes a summary measure ($_{35}q_{15}$) that represents the probability of dying between 15 and 50.

Assessment of Data Quality

Table DQ. 20 (see Appendix D) shows that the 2011-12 LSIS recorded a total of 116,669 sibling histories. The survival status was not reported for 54 siblings (0.05 per cent). Among surviving siblings, current age was not reported for 117 siblings (0.1 per cent). Among deceased siblings, both age at death (AD) and years since death (YSD) were missing for 17 siblings (0.1 per cent). Both age at death and years since death were reported for more than 99 per cent of deceased siblings. The sex ratio of the enumerated siblings (the ratio of brothers to sisters multiplied by 100) is 107 (Table DQ. 21 in Appendix D), which is higher than the expected value of 102–106; a difference that may suggest some under reporting of sisters. Of the sisters who were reported as having died age between 15 and 49, 4 per cent of deaths could not be classified as either maternal or non-maternal.

[1] http://www.who.int/healthinfo/statistics/indmaternalmortality/en/index.html

Estimates of Adult Mortality

One way to assess the quality of data used to estimate maternal mortality is to evaluate the plausibility and stability of overall adult mortality estimates. If the estimated rates of overall adult mortality are implausible, rates based on a subset of deaths — maternal mortality in particular — are likely to have serious problems. Of course, levels and trends in overall adult mortality have important implications for Lao health and social programmes in their own right.

The direct estimation of adult mortality uses the reported ages at death and years since death of the respondents' brothers and sisters. Mortality rates are calculated by dividing the number of deaths in each age group of women and men by the total person-years of exposure to the risk of dying in that age group during a specified period prior to the survey. To have a sufficiently large number of adult deaths to generate a robust estimate, the rates are calculated for the seven-year period preceding the survey (roughly 2005 to 2011). Nevertheless, the age-specific mortality rates obtained in this manner are subject to considerable sampling variation.

Table MM.1 shows age-specific mortality rates for women and men age 15-49 for the seven-year period preceding the survey. The level of adult mortality is slightly higher among men than women (3.1 and 2.3 deaths per 1,000 population, respectively). Age-specific mortality rates are higher for men than women in all age groups, except 15-19 year olds. The age-specific mortality rates generally show the expected increases with increasing age, for both women and men.

Table MM.2 presents the risk of dying between the ages of 15 and 50 ($_{35}q_{15}$) for women and men for the seven years preceding the survey. Based on the 2011-12 LSIS, 8.4 per cent of women and 11.7 per cent of men are likely to die between ages of 15 and 50.

MM.1: Adult mortality rates

Direct estimates of female and male mortality rates for the seven years preceding the survey, by five-year age groups, Lao PDR 2011-12

	Female			Male		
Age	Deaths	Exposure years	Mortality rates*	Deaths	Exposure years	Mortality rates*
15-19	76	43,871	1.73	55	46,996	1.17
20-24	67	51,754	1.30	112	54,237	2.06
25-29	72	48,721	1.49	113	50,449	2.24
30-34	82	41,758	1.96	116	44,609	2.60
35-39	71	34,023	2.09	116	35,252	3.29
40-44	89	24,120	3.69	129	24,064	5.37
45-49	76	14,435	5.28	122	14,948	8.16
Total 15-49**	534	258,684	2.27	762	270,557	3.12

* Expressed per 1,000 population
** Age-adjusted rate

MM.2: Adult mortality probabilities		
The probability of dying between the ages of 15 and 50 for women and men for the seven years preceding the survey, Lao PDR 2011-12		
Survey	Women $_{35}q_{15}$*	Men $_{35}q_{15}$*
Lao PDR 2011-12	84	117
* The probability of dying between exact ages 15 and 50, expressed per 1,000 person-years of exposure		

Estimates of Maternal Mortality

Table MM.3 presents direct estimates of maternal mortality for the seven-year period preceding the survey (roughly 2005 to 2011), which is long enough to generate a robust estimate (the mid-point of the time period to which the maternal mortality estimates refer is 2008). The maternal mortality rate among women age 15-49 is 0.38 maternal deaths per 1,000 woman-years of exposure. By five-year age groups, the maternal mortality rate is highest among women age 25-34 (0.5 maternal deaths per 1,000 woman-years of exposure). Confidence intervals for the maternal mortality rates can be found in Appendix Table SE.27. According to the 2011-12 LSIS, maternal deaths represent 19 per cent of all deaths of women age 15-49. The percentage of female deaths that are maternal varies by age, ranging from 7 per cent among women age 45-49 to 35 per cent of all deaths among women age 25-29.

The maternal mortality rate can be converted to a maternal mortality ratio (MMR – expressed as deaths per 100,000 live births) by dividing the maternal mortality rate by the general fertility rate (GFR) of 107 that prevailed during the same time period, and multiplying the result by 100,000. This procedure produces a maternal mortality ratio of 357 deaths per 100,000 live births during the seven-year period preceding the survey. In other words, for every 1,000 live births in Lao PDR, about four women (3.57) died during pregnancy, during childbirth, or within two months of childbirth during the seven years preceding the 2011-12 LSIS. The lifetime risk of maternal death (0.012) indicates that about 1 per cent of women died during pregnancy, during childbirth, or within two months of childbirth.

MM.3: Maternal mortality

Direct estimates of maternal mortality for the seven years preceding the survey, by five-year age groups, Lao PDR 2011-12

Age	Percentage of female deaths that are maternal	Maternal deaths	Exposure (years)	Maternal mortality rates (per 1000 years of exposure)
15-19	15.1	11	43,871	0.26
20-24	31.0	21	51,754	0.40
25-29	34.5	25	48,721	0.51
30-34	26.5	22	41,758	0.52
35-39	15.0	11	34,023	0.31
40-44	8.2	7	24,120	0.30
45-49	7.2	5	14,435	0.38
Total 15-49****	19.2	102	258,684	0.38

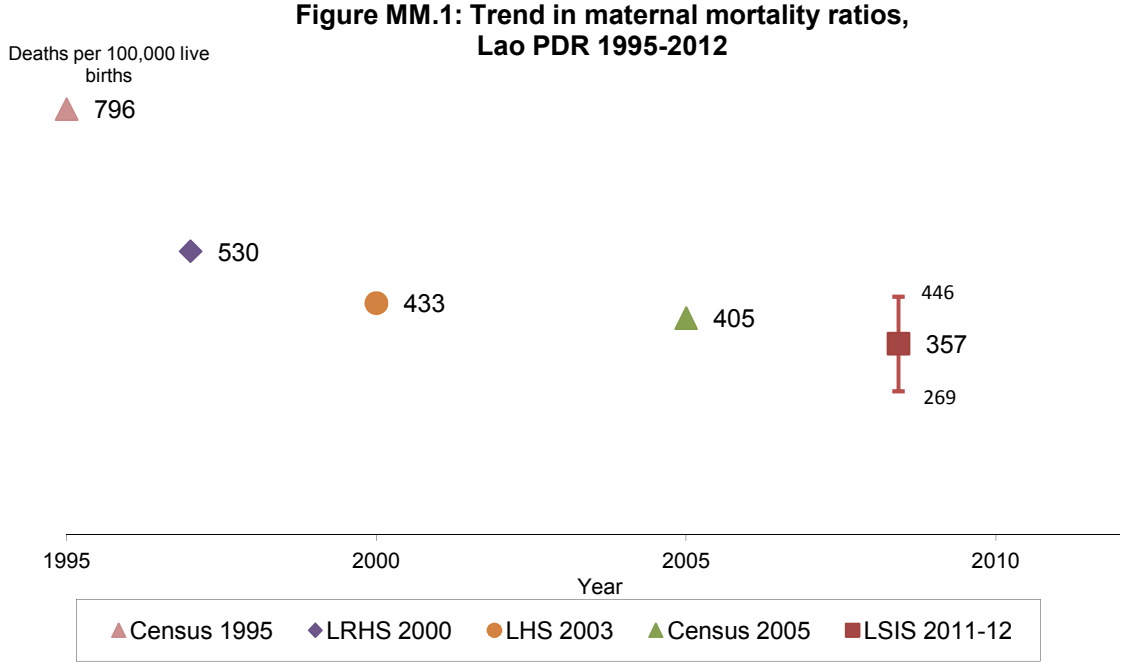
General fertility rate*	107	
Maternal mortality ratio**	357	CI: (269, 446)
Lifetime risk of maternal death***	0.012	

[2] MICS indicator 5.13; MDG indicator 5.1

CI: Confidence interval
* Expressed per 1,000 woman-years of exposure
** Maternal mortality ratio is calculated as the maternal mortality rate divided by the general fertility rate, expressed per 1,000 women age 15-49
*** Calculated as $1-(1-MMR)^{TFR}$ where TFR represents the total fertility rate for the seven years preceding the survey
**** The maternal mortality rate and general fertility rate are age-adjusted

Every survey estimate contains a level of uncertainty. The point MMR estimate of 357 should more appropriately be interpreted as an interval estimate. The LSIS survey data are able to tell us with 95 per cent certainty that the MMR falls somewhere between 269 and 446 deaths per 1,000 live births during the seven year period preceding the survey. The previous estimate of MMR from the 2005 Census is 405 deaths per 1,000 live births, which falls within the confidence interval of the current survey estimate; thus, while the LSIS estimate appears lower, the LSIS is unable to detect a statistically significant change from the Census estimate.

Figure MM.1: Trend in maternal mortality ratios, Lao PDR 1995-2012



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IX. Child Health

Vaccinations

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

A *World Fit for Children* (WFFC) goal is to ensure full immunization of children less than one year of age at 90 per cent nationally, with at least 80 per cent coverage in every district or equivalent administrative unit.

According to UNICEF and WHO guidelines, a child should receive a Bacille-Calmette-Guerin (BCG) vaccination to protect against tuberculosis; three doses of Diphteria Pertussis Tetanus (DPT) to protect against diphtheria, pertussis and tetanus; three doses of polio vaccine; and a measles vaccination by the age of 12 months. The pentavalent vaccine DPT-HepB-Hib, introduced in October 2009, has replaced the previous DPT vaccine. This new vaccine protects against diphtheria, pertussis, tetanus, hepatitis B and Haemophilus influenzae type b.

The vaccination schedule followed by the Expanded National Immunization Programme provides all the above-mentioned vaccinations. The vaccination policy in Lao PDR calls for BCG vaccination at birth, three doses of DPT-HepB-Hib vaccine at approximately 6, 10 and 14 weeks of age, three doses of oral polio vaccine at approximately the same time pentavalent is given, and measles vaccine after reaching 9 months of age. All vaccinations should be received during the first year of life. Taking into consideration this vaccination schedule, estimates for full immunization coverage from the LSIS are based on children age 12-23 months.

Information on vaccination coverage was collected for all children under five years of age. All mothers or caretakers were asked to provide vaccination cards. If the vaccination card for a child was available, interviewers copied vaccination information from the cards onto the LSIS questionnaire. If no vaccination card was available for the child or if a vaccine on the card had not been recorded as being given, the interviewer asked the mother/caretaker to recall whether or not the child had received each of the vaccinations, and (for polio, DPT, and hepatitis B) how many doses were received. The final vaccination coverage estimates are based on both information obtained from the vaccination card and the mother's report of vaccinations received by the child.

The percentage of children age 12 to 23 months who have received each vaccine is shown in Table CH.1, according to source of information (vaccination card and mother's recollection). The denominator for every column of the table is comprised of children age 12-23 months so that only children who are old enough to be fully vaccinated are counted. In the first three columns of the table, the numerator includes all children who were vaccinated at any time before the survey according to the vaccination card or the mother's report. In the last column, only those children who were vaccinated before their first birthday are included in the numerator. For children without vaccination cards, the proportion of vaccinations given before the first birthday is assumed to be the same as it is for children with vaccination cards. The calculation of "all vaccinations" includes BCG, DPT+HepB+HiB 1-3, Polio 1-3, and measles. Hepatitis B at birth is not considered in the calculation of "all vaccinations" or "no vaccinations."

Table CH.1: Vaccinations in first year of life

Percentage of children age 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, Lao PDR 2011-12

	Vaccinated at any time before the survey according to			Vaccinated by 12 months of age
	Vaccination card	Mother's report	Either	
BCG[1]	44.7	33.6	78.3	77.1
Polio				
1	44.3	34.0	78.3	76.5
2	41.6	26.8	68.4	65.5
3[2]	37.0	15.6	52.6	49.1
HepB at birth	27.6	9.3	36.9	36.6
DPT-HepB-HiB				
1	44.6	32.2	76.8	75.1
2	41.8	25.4	67.2	64.2
3[3]	36.8	18.6	55.5	51.5
Measles[4]	34.0	29.7	63.7	55.3
All vaccinations	33.5	9.4	42.9	34.0
No vaccinations	0.0	15.7	15.7	15.9
Number of children age 12-23 months	2,141	2,141	2,141	2,141

[1] MICS indicator 3.1;

[2] MICS indicator 3.2;

[3] MICS indicator 3.3

[4] MICS indicator 3.4; MDG indicator 4.3

HepB at birth is not included in the calculation of “All vaccinations” and “No vaccinations"

Some 34 per cent of children age 12-23 months received all the recommended vaccinations before their first birthday; 43 per cent were fully vaccinated at some point prior to the survey. Seventy-seven per cent of children age 12-23 months had received a BCG vaccination by the age of 12 months and 75 per cent had received the first dose of DPT. The proportion receiving subsequent doses of DPT by 12 months of age declines to 64 per cent receiving the second dose, and 52 per cent receiving the third dose. A similar trend is apparent in follow-up doses of polio vaccine, with 77 per cent of children receiving polio 1 by 12 months of age but only 49 per cent receiving the third dose (Figure CH.1). While nearly two thirds of children (64 per cent) were vaccinated against measles, only about half (55 per cent) had received the vaccine by 12 months of age. The late administration of measles vaccine (to some children) is the main contributing factor to the difference between the 43 per cent of children receiving all vaccinations and only 34 per cent receiving all vaccinations by their first birthday. Only 37 per cent of infants receive hepatitis B vaccine at birth (which is not included in the calculation of “all vaccinations” or “no vaccinations” in Table CH.1 or CH.2). The current coverage of all vaccinations by 12 months of age shows dramatic improvement compared to 2006 MICS data reporting 14 per cent coverage of 12 to 23-month-olds. Despite dramatic improvement, however, the ultimate coverage goal is yet to be reached.

Figure CH.1: Percentage of children age 12-23 months who received the recommended vaccinations by 12 months of age, Lao PDR 2011-12

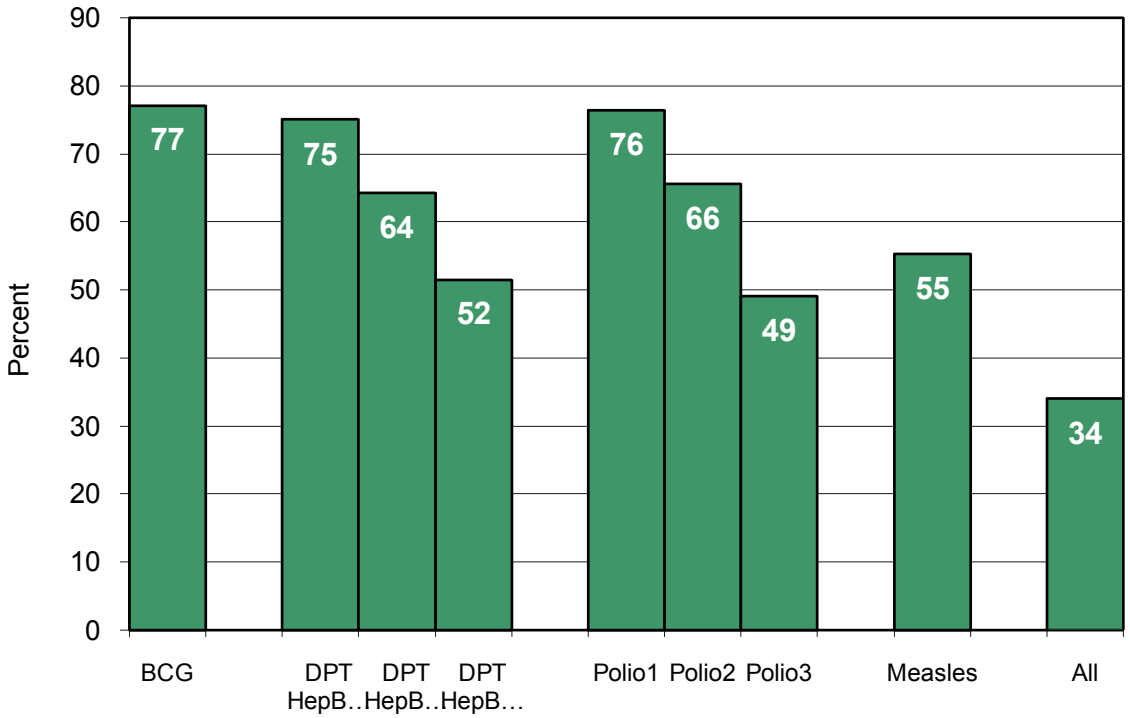


Table CH.2 presents vaccination coverage estimates among children age 12-23 months according to background characteristics. The table reports the percentage of children vaccinated at any time up to the date of the survey and is based on information from both the vaccination cards and mothers'/ caretakers' reports. Vaccination cards were seen by interviewers for nearly half (47 per cent) of the children, although the percentage seen varied from region to region. The highest percentage of vaccination cards seen was in the North (59 per cent), followed by 45 per cent in the Central region and only 35 per cent of children in the South.

Vaccination coverage does not vary much by children's gender. About half of children in urban areas have received all vaccinations (54 per cent), compared to only 39 per cent of rural children. Nearly half of the children in the Southern region had received all vaccinations (48 per cent), compared with 45 per cent in the Northern and only 40 per cent in the Central region. A wide degree of variation is observed across the country by province; the LSIS found the lowest coverage in Phongsaly and Savannakhet, where fewer than 25 per cent have received all the recommended vaccinations, and the highest coverage in Xayabury at 79 per cent.

Full vaccination coverage steadily increases with the mother's education. Only 24 per cent of children whose mothers have no education are fully vaccinated compared with73 per cent of children of higher educated mothers. Similarly, only 29 per cent of children in the lowest wealth quintile are fully vaccinated, compared with 61 per cent of children in the highest wealth quintile, even though vaccinations are provided free of charge. Children of Hmong-Mien headed households have the lowest vaccination coverage compared with children in other ethno-linguistic households; only 20 per cent have received all vaccinations and as many as 35 per cent have not received any vaccinations.

Table CH.2: Vaccinations by background characteristics

Percentage of children age 12-23 months currently vaccinated against childhood diseases, Lao PDR 2011-12

	Percentage of children who received:											Percentage with vaccination card seen	Number of children age 12-23 months
		Polio				DPT-HepB-HiB							
	BCG	1	2	3	HepB at birth	1	2	3	Measles	None	All		
Sex													
Male	76.5	76.0	67.0	52.0	36.1	75.8	67.2	55.4	61.4	17.3	41.2	46.6	1,087
Female	80.1	80.6	69.9	53.1	37.8	78.0	67.2	55.5	66.1	14.0	44.7	47.6	1,055
Region													
North	78.9	78.9	69.4	55.5	38.5	76.0	66.4	56.2	62.1	14.0	44.6	58.9	696
Central	72.9	73.1	64.4	48.5	39.1	72.9	64.1	52.6	59.5	20.7	39.5	44.5	984
South	88.9	88.4	75.8	57.0	29.9	86.7	75.2	60.6	75.1	7.3	47.5	34.8	461
Province													
Vientiane Capital	86.1	82.8	81.1	65.4	66.7	86.1	79.9	66.5	71.3	13.9	53.4	61.8	179
Phongsaly	51.9	56.1	45.3	28.4	26.1	52.2	37.6	23.8	42.4	29.9	21.1	36.1	71
Luangnamtha	93.2	93.6	87.6	72.4	53.6	87.8	76.7	67.9	78.0	3.0	57.5	60.1	52
Oudomxay	82.4	83.1	67.3	50.7	40.9	82.6	67.9	54.4	57.9	7.2	36.4	61.4	145
Bokeo	71.0	65.5	54.0	40.3	27.4	61.8	47.3	37.6	53.2	22.6	31.1	48.9	76
Luangprabang	85.2	84.4	76.7	59.5	48.4	79.9	72.1	59.1	64.6	11.5	50.1	65.1	138
Huaphanh	67.3	70.1	59.7	52.6	15.6	65.5	60.1	52.9	53.9	24.2	38.2	57.2	121
Xayabury	97.8	95.5	94.3	83.8	58.5	96.6	95.5	91.8	88.2	2.2	79.0	72.9	93
Xiengkhuang	70.1	77.2	67.2	41.8	25.7	72.3	60.0	36.5	48.6	18.3	27.8	49.4	106
Vientiane	86.8	83.9	73.6	57.1	44.4	85.2	75.1	68.7	74.8	12.4	52.3	60.3	160
Borikhamxay	92.5	83.8	73.3	61.2	52.5	86.5	72.2	65.6	75.1	6.5	57.0	51.4	94
Khammuane	84.8	83.1	76.9	58.7	39.6	84.3	78.9	66.6	72.7	10.6	45.4	50.9	114
Savannakhet	50.4	54.9	43.1	30.2	23.0	52.2	44.1	34.0	40.4	36.7	22.7	21.9	331
Saravane	92.4	91.6	77.9	65.1	31.8	90.5	77.7	67.6	81.0	3.5	57.8	38.7	183
Sekong	92.3	92.6	75.6	49.1	18.1	82.2	62.4	40.3	74.8	6.4	33.0	27.7	52
Champasack	87.4	86.5	77.4	54.6	31.0	86.5	79.1	61.8	72.8	9.0	44.1	32.6	188
Attapeu	75.8	77.4	58.5	41.2	31.3	75.8	61.6	49.6	58.7	17.9	35.4	36.0	39
Residence													
Urban	86.3	84.2	77.6	63.8	60.9	84.3	78.7	67.7	71.7	11.1	54.0	56.9	506
Rural	75.8	76.5	65.6	49.1	29.4	74.5	63.6	51.7	61.2	17.1	39.4	44.1	1,635
..Rural with road	77.4	77.5	66.4	50.6	30.8	75.7	64.6	53.8	62.4	16.0	41.1	45.9	1,447
..Rural without road	63.9	68.5	59.6	37.1	18.5	65.5	56.0	35.5	52.5	25.4	26.5	30.3	188
Mother's education													
None	62.0	64.7	48.5	32.8	17.1	59.9	46.0	33.4	44.9	27.7	24.4	31.6	649
Primary	79.5	79.5	69.8	54.9	32.9	79.1	68.5	57.1	66.2	14.0	44.6	47.9	876
Lower secondary	91.2	88.1	84.2	67.0	52.2	87.9	84.2	72.0	75.2	7.6	55.9	59.7	309
Upper secondary	95.4	92.3	89.4	68.8	68.6	94.8	88.5	76.5	84.9	3.7	60.1	60.5	170
Post secondary non tertiary	97.3	95.2	91.9	75.6	79.6	95.2	94.6	86.0	82.4	2.7	65.6	71.2	82
Higher	97.8	96.0	93.1	83.3	85.4	96.3	93.2	86.9	87.4	2.2	73.0	69.5	55
Wealth index quintile													
Poorest	65.7	69.3	54.4	38.4	17.6	63.8	50.3	36.8	50.5	23.8	28.8	36.8	585
Second	71.3	71.7	59.7	46.2	22.8	69.6	57.8	46.6	55.6	20.8	36.1	42.6	443
Middle	83.6	80.3	71.9	57.5	36.9	82.4	72.3	59.4	68.8	11.1	47.3	50.3	392
Fourth	85.7	84.9	77.8	59.9	48.8	83.7	79.0	67.6	72.2	12.1	51.9	52.3	388
Richest	95.1	92.6	89.6	71.5	75.8	94.9	89.9	81.4	81.9	4.0	61.0	61.4	334
Ethno-linguistic group of household head													
Lao-Tai	86.0	84.3	77.5	61.2	48.3	85.3	78.5	66.9	72.7	10.4	51.7	53.1	1,180
Mon-Khmer	74.9	77.1	64.6	48.6	23.8	73.2	60.5	49.1	61.3	15.9	37.5	40.5	593
Hmong-Mien	56.6	58.2	42.1	27.5	18.9	52.4	39.5	26.6	35.3	35.1	20.0	36.9	287
Chinese-Tibetan	61.3	64.8	53.6	38.7	23.5	61.4	42.8	31.5	44.2	26.4	28.6	41.8	65
Other, Missing, DK	*	*	*	*	*	*	*	*	*	*	*	*	15
Total	78.3	78.3	68.4	52.6	36.9	76.8	67.2	55.5	63.7	15.7	42.9	47.1	2,141

HepB at birth is not included in the calculation of "None" and "All" columns

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

Neonatal Tetanus Protection

The prevention of maternal and neonatal tetanus is critical to maternal and child health. MDG and WFFC both outline goals for the reduction of maternal and infant mortality via strategies to eliminate tetanus among these populations.

Specifically, pregnant women should receive at least two doses of tetanus toxoid vaccine. If a woman has not received at least two doses of tetanus toxoid during pregnancy, she (and her newborn) are also considered to be protected against tetanus if the woman has received:

- At least two doses of tetanus toxoid vaccine, the last within the previous 3 years
- At least 3 doses, the last within the previous 5 years
- At least 4 doses, the last within the previous 10 years
- Five or more doses at any time during her life

To assess the status of tetanus vaccination coverage, women who had a live birth during the two years before the survey were asked if they had received tetanus toxoid injections during the pregnancy for their most recent birth, and if so, how many. Women who did not receive two or more tetanus toxoid vaccinations during this pregnancy were then asked about tetanus toxoid vaccinations they may have received prior to this pregnancy. Interviewers also asked women to present their vaccination card on which dates of tetanus toxoid injections are recorded and referred to information from the cards when available. Table CH.3 presents the results.

Some 66 per cent of women with a live birth in the previous two years were protected against tetanus; an improvement over the 56 per cent estimated in the 2006 MICS survey (based on women with live births in the previous two years). Thirty-six per cent of women interviewed in the LSIS reported receiving two or more tetanus toxoid doses during their last pregnancy (similar to the 38 per cent reported in 2006 MICS). Twenty-nine per cent of women did not receive two doses during their last pregnancy but were still protected by having received earlier doses of tetanus toxoid: 22 per cent received two doses; including a dose in the previous three years, 4 per cent received three doses, including a dose within the previous 5 years; 3 per cent received four doses, including a dose within the previous 10 years; and five or more doses during their lifetime.

Protection against tetanus ranges from a high of 82 per cent among women in Xayabury province to a low of 44 per cent in Phongsaly province. Seventy-four per cent of women residing in urban areas were protected, while only 63 per cent of women residing in rural areas were protected, falling to 54 per cent among women living in rural areas without roads. Nearly three quarters (73 per cent) of women living in Lao-Tai headed households were protected against tetanus, compared with only about half of women in Hmong-Mien (53 per cent) and Chinese-Tibetan (54 per cent) households.

Table CH.3: Neonatal tetanus protection

Percentage of women age 15-49 years with a live birth in the last 2 years protected against neonatal tetanus, Lao PDR 2011-12

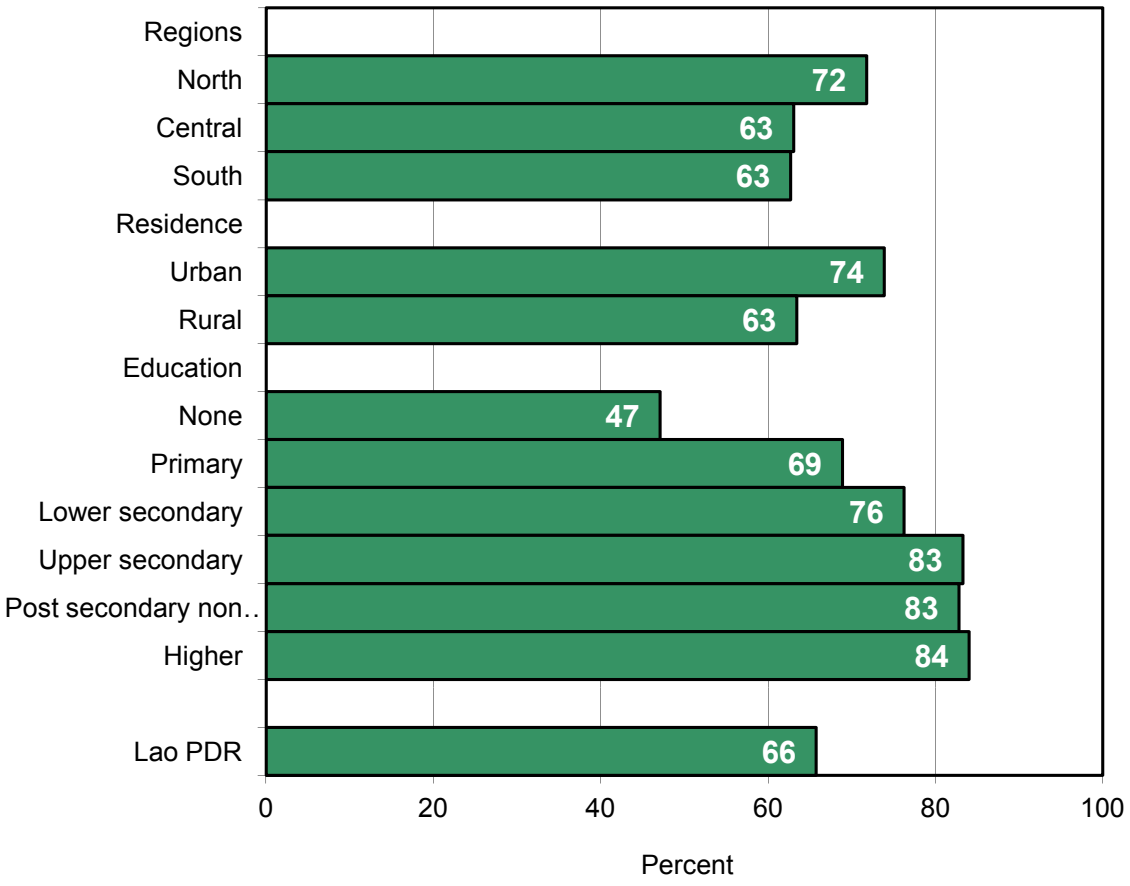
	Percentage of women who received at least 2 doses during last pregnancy	Percentage of women who did not receive two or more doses during last pregnancy but received:				Protected against tetanus[1]	Number of women with a live birth in the last 2 years
		2 doses, the last within prior 3 years	3 doses, the last within prior 5 years	4 doses, the last within prior 10 years	5 or more doses during lifetime		
Region							
North	37.7	27.8	3.2	2.3	0.8	71.8	1,377
Central	34.0	19.1	4.5	4.0	1.4	63.0	1,989
South	39.7	18.5	2.2	1.5	0.7	62.7	940
Province							
Vientiane Capital	49.7	19.9	3.6	4.0	0.4	77.6	415
Phongsaly	22.6	19.6	0.7	0.4	0.4	43.7	148
Luangnamtha	32.6	25.8	10.4	5.9	1.2	76.0	99
Oudomxay	48.0	27.6	1.3	0.5	0.0	77.4	266
Bokeo	25.7	40.5	3.1	2.6	0.4	72.4	141
Luangprabang	38.6	29.4	3.3	2.8	1.6	75.8	280
Huaphanh	29.1	31.1	3.5	3.1	0.4	67.2	237
Xayabury	54.6	19.9	3.7	2.4	1.5	82.0	205
Xiengkhuang	15.4	25.9	6.8	4.3	0.7	53.0	200
Vientiane	33.0	19.1	7.5	10.1	3.1	72.7	295
Borikhamxay	37.7	28.7	7.0	6.0	1.0	80.4	162
Khammuane	45.3	15.3	2.5	1.0	3.1	67.2	233
Savannakhet	25.5	15.7	3.3	1.7	1.2	47.4	683
Saravane	31.1	16.2	1.2	2.1	0.8	51.3	361
Sekong	36.8	12.6	4.9	0.8	0.4	55.6	99
Champasack	49.7	23.8	2.1	0.7	0.4	76.8	397
Attapeu	32.6	10.1	3.9	4.1	2.6	53.3	83
Residence							
Urban	40.8	22.5	4.6	4.5	1.5	73.9	957
Rural	35.2	21.5	3.3	2.4	1.0	63.4	3,349
..Rural with road	36.0	21.9	3.2	2.7	1.0	64.8	2,928
..Rural without road	29.6	18.8	4.2	0.8	0.6	54.1	421
Education							
None	25.1	17.9	2.8	0.9	0.4	47.1	1,248
Primary	39.1	22.6	3.3	2.9	1.0	68.9	1,763
Lower secondary	40.4	25.8	4.9	3.8	1.3	76.2	693
Upper secondary	47.3	24.0	3.9	5.1	3.0	83.3	334
Post secondary non tertiary	48.0	23.9	4.3	5.1	1.5	82.8	146
Higher	47.2	17.3	8.4	9.2	1.9	84.0	122
Wealth index quintile							
Poorest	27.8	21.7	2.0	1.1	0.2	52.6	1,178
Second	34.9	19.8	3.3	2.1	0.9	61.0	927
Middle	38.2	21.9	5.7	3.6	1.0	70.6	810
Fourth	40.6	24.7	3.2	4.0	2.3	74.8	707
Richest	46.8	21.2	4.8	5.2	1.7	79.8	684
Ethno-linguistic group of household head							
Lao-Tai	41.1	22.5	4.0	3.7	1.5	72.8	2,401
Mon-Khmer	34.5	19.0	2.8	1.6	0.6	58.5	1,213
Hmong-Mien	21.5	24.5	4.0	2.7	0.4	53.2	530
Chinese-Tibetan	25.6	23.2	3.9	1.3	0.4	54.4	140
Other, Missing, DK	*	*	*	*	*	*	21
Total	36.4	21.7	3.6	2.9	1.1	65.8	4,306

[1] **MICS indicator 3.7**

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

Figure CH.2 shows the percentage of women protected against neonatal tetanus by region, residence and level of education. Women's education level and protection against tetanus are highly correlated. Eighty-three per cent of women with upper secondary or higher education were protected against neonatal tetanus during their previous pregnancy, compared with only 47 per cent of those with no education. Similarly, 80 per cent of women in the highest wealth quintile were protected against tetanus during their previous pregnancy, compared with only 53 per cent of the poorest women.

Figure CH.2: Percentage of women with a live birth in the last 2 years who are protected against neonatal tetanus, Lao PDR 2011-12



Oral Rehydration Treatment

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

The goals are to: 1) reduce by one half the deaths due to diarrhoea among children age under five by 2010 compared to 2000 (WFFC); and 2) reduce by two thirds the mortality rate among children age under five by 2015 compared to 1990 (MDG). In addition, the WFFC calls for a reduction in the incidence of diarrhoea by 25 per cent.

In the LSIS, the prevalence of diarrhoea was estimated by asking mothers or caretakers whether their child age under five years had an episode of diarrhoea in the two weeks prior to the survey. When mothers reported that the child had diarrhoea, questions were asked about the treatment of the illness, including what the child had to drink and eat during the episode and whether this was more or less than usual.

Ten per cent of children age under five had diarrhoea in the two weeks preceding the survey (Table CH.4). Diarrhoea prevalence was higher in the Northern (15 per cent) than in the Southern (8 per cent) and Central region (7 per cent). The peak of diarrhoea prevalence occurs among children age 12-23 months.

Table CH.4 also shows the percentage of children receiving recommended liquids during the episode of diarrhoea. Since children may have been given more than one type of liquid, the percentages do not necessarily add to 100. Thirty-seven per cent of children with diarrhoea received fluids from ORS packets, 16 per cent received pre-packaged ORS fluids, and 13 per cent received RHFs. Thus, nearly half (48 per cent) of children with diarrhoea received ORS or an RHF during the episode of diarrhoea. The 2006 MICS also reported half of children with diarrhoea receiving fluids either from ORS packets, ORS pre-package fluids, or RHFs (51 per cent), but the 2006 MICS reported somewhat lower use of ORS packets (31 per cent) and higher use of RHFs (30 per cent).

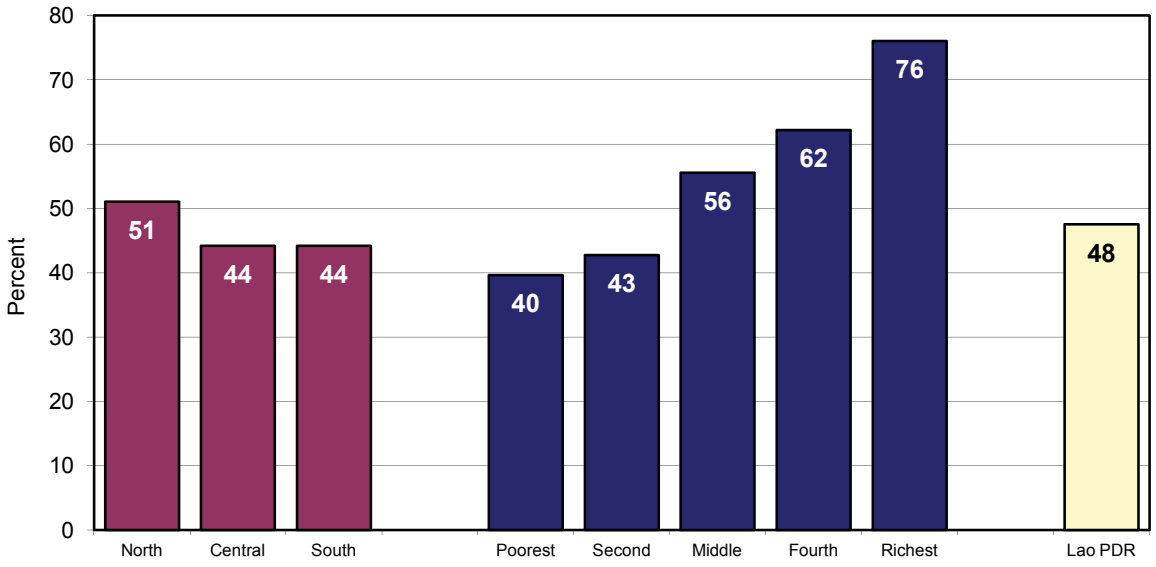
Table CH.4: Oral rehydration solutions and recommended homemade fluids

Percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration solutions and recommended homemade fluids, Lao PDR 2011-12

			Children with diarrhoea who received:					
			Oral rehydration solution (ORS)			Recommended homemade fluids		
	Had diarrhoea in last two weeks	Number of children age 0-59 months	Fluid from ORS packet	Pre-packaged ORS fluid	ORS (Fluid from ORS packet or pre-packaged ORS fluid)	Coconut water or rice water	ORS or any recommended homemade fluid	Number of children age 0-59 months with diarrhoea in last two weeks
Sex								
Male	10.5	5,593	39.9	16.3	45.2	13.7	51.8	589
Female	9.5	5,474	33.1	16.3	39.0	11.7	42.6	520
Region								
North	15.3	3,502	39.2	19.5	46.0	12.5	51.0	537
Central	7.4	5,154	33.2	11.5	38.5	13.0	44.2	381
South	7.9	2,411	36.6	16.8	39.4	12.9	44.2	191
Province								
Vientiane Capital	5.3	1,058	(67.0)	(25.2)	(81.9)	(23.2)	(88.2)	56
Phongsaly	16.0	368	29.3	22.2	30.3	1.1	30.3	59
Luangnamtha	10.0	280	31.3	39.5	66.6	47.4	78.7	28
Oudomxay	16.8	676	38.1	44.3	50.8	2.5	50.8	113
Bokeo	23.8	335	43.7	7.4	44.3	13.6	54.5	80
Luangprabang	17.7	752	45.5	12.7	48.2	17.1	50.3	133
Huaphanh	12.1	606	26.5	5.5	32.0	16.8	47.9	73
Xayabury	10.4	486	(52.9)	(6.6)	(59.5)	(8.9)	(61.6)	51
Xiengkhuang	12.3	540	27.0	0.0	27.0	0.0	27.0	67
Vientiane	4.3	767	(33.0)	(15.7)	(33.0)	(12.4)	(37.3)	33
Borikhamxay	6.9	402	(49.1)	(28.8)	(52.6)	(50.1)	(77.9)	28
Khammuane	6.5	603	(13.6)	(8.4)	(22.0)	(14.7)	(31.4)	39
Savannakhet	8.9	1,784	26.1	8.4	30.9	8.0	34.6	158
Saravane	10.4	923	30.0	6.3	32.8	8.2	36.5	96
Sekong	12.2	269	12.4	9.8	21.2	9.8	31.0	33
Champasack	6.0	1,003	(58.6)	(35.6)	(58.6)	(21.9)	(62.4)	61
Attapeu	1.0	216	*	*	*	*	*	2
Residence								
Urban	5.4	2,319	57.5	24.8	64.6	21.0	69.4	126
Rural	11.2	8,748	34.1	15.2	39.5	11.7	44.7	983
..Rural with road	10.5	7,661	35.3	14.9	40.7	12.4	46.3	806
..Rural without road	16.3	1,086	28.4	16.4	33.6	8.4	37.6	178
Age								
0-11 months	11.4	2,307	24.7	13.1	30.5	5.6	33.7	262
12-23 months	15.0	2,141	41.2	20.1	46.9	15.1	50.9	322
24-35 months	9.8	2,193	44.4	17.4	51.7	17.7	59.1	215
36-47 months	7.7	2,302	33.2	12.5	37.3	14.1	44.6	177
48-59 months	6.2	2,124	42.0	16.5	45.9	11.3	51.5	132
Mother's education								
None	13.1	3,580	29.7	12.9	34.2	11.6	40.4	471
Primary	10.2	4,556	39.5	16.2	44.6	10.5	47.5	466
Lower secondary	6.8	1,613	44.1	26.3	54.2	21.3	64.7	110
Upper secondary	5.2	695	(54.8)	(18.0)	(57.7)	(22.4)	(67.3)	36
Post secondary non tertiary	5.5	368	*	*	*	*	*	20
Higher	2.3	255	*	*	*	*	*	6
Wealth index quintile								
Poorest	15.0	3,233	30.6	11.5	35.0	9.2	39.7	486
Second	11.6	2,346	32.0	15.6	36.8	11.4	42.7	272
Middle	8.4	2,019	44.6	20.0	51.5	11.1	55.5	170
Fourth	5.7	1,807	53.6	24.2	55.6	25.3	62.2	102
Richest	4.7	1,663	51.7	29.5	69.3	26.7	76.1	78
Ethno-linguistic group of household head								
Lao-Tai	6.4	6,030	40.0	18.7	46.1	16.6	51.5	388
Mon-Khmer	14.3	3,189	38.7	17.2	44.4	9.9	49.0	457
Hmong-Mien	13.6	1,439	28.0	8.3	30.5	9.2	36.7	196
Chinese-Tibetan	17.3	357	28.1	20.7	39.9	19.6	45.9	62
Other, Missing, DK	12.4	52	*	*	*	*	*	7
Total	10.0	11,067	36.7	16.3	42.3	12.7	47.5	1,109

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

Figure CH.3: Percentage of children under age 5 with diarrhoea who received oral rehydration treatment, Lao PDR 2011-12



Mothers and caretakers are encouraged to continue feeding and to increase the amount of liquids given to their children when they suffer from diarrhoeal illnesses. These practices help to reduce the risk of dehydration and also minimize the adverse consequences of diarrhoea on the child's nutritional state. Mothers and caretakers in the LSIS were asked whether they gave the child who had diarrhoea in the two weeks preceding the survey more or less fluid and food than usual. Feeding practices for children with diarrhoea are presented in Table CH.5.

While most children with diarrhoea do continue eating and drinking, they do not receive increased amounts of fluid. When asked whether children were given nothing, less, the same or more than usual to eat during the episode of diarrhoea, 92 per cent of children were reported to have been given either somewhat less, about the same, or more than usual to eat. These are the children who continued feeding, as is recommended. When asked whether children were given less, about the same, or more than usual to drink (including breastmilk) during the episode of diarrhoea, only 27 per cent of children were given more liquids than usual. Seven per cent of children with diarrhoea were given much less than usual to drink, and 4 per cent were given much less to eat.

Table CH.5: Feeding practices during diarrhoea

Percent distribution of children age 0-59 months with diarrhoea in the last two weeks by amount of liquids and food given during episode of diarrhoea, Lao PDR 2011-12

			Drinking practices during diarrhoea:							Eating practices during diarrhoea:								
	Had diarrhoea in last two weeks	Number of children age 0-59 months	Given much less to drink	Given somewhat less to drink	Given about the same to drink	Given more to drink	Given nothing to drink	Missing/ DK	Total	Given much less to eat	Given somewhat less to eat	Given about the same to eat	Given more to eat	Stopped food	Had never been given food	Missing/ DK	Total	Number of children age 0-59 months with diarrhoea in last two weeks
Sex																		
Male	10.5	5,593	6.7	28.7	32.5	28.8	1.2	2.0	100.0	3.7	38.5	33.0	19.9	0.5	3.1	1.3	100.0	589
Female	9.5	5,474	6.7	30.7	34.4	25.5	1.7	0.9	100.0	3.4	38.8	35.2	18.1	2.0	1.8	0.7	100.0	520
Region																		
North	15.3	3,502	5.8	30.9	30.9	30.6	0.6	1.1	100.0	3.9	40.0	28.7	23.8	0.5	2.3	0.7	100.0	537
Central	7.4	5,154	6.0	25.9	40.1	23.7	2.0	2.3	100.0	3.0	31.1	44.6	16.9	0.5	2.2	1.8	100.0	381
South	7.9	2,411	11.0	33.8	27.1	25.0	2.3	0.9	100.0	3.7	50.1	27.9	9.9	4.5	3.5	0.4	100.0	191
Province																		
Vientiane Capital	5.3	1,058	(16.9)	(38.7)	(13.1)	(26.0)	(0.0)	(5.3)	100.0	(8.5)	(38.2)	(21.6)	(28.8)	(0.0)	(2.9)	(0.0)	100.0	56
Phongsaly	16.0	368	8.7	51.9	24.7	13.7	0.0	1.1	100.0	4.4	61.9	25.5	8.2	0.0	0.0	0.0	100.0	59
Luangnamtha	10.0	280	14.7	51.5	26.0	7.8	0.0	0.0	100.0	11.0	52.4	24.5	12.2	0.0	0.0	0.0	100.0	28
Oudomxay	16.8	676	0.9	18.1	43.6	34.9	0.0	2.5	100.0	0.9	18.9	37.9	39.8	0.0	0.0	2.5	100.0	113
Bokeo	23.8	335	11.7	33.8	21.7	32.2	0.0	0.6	100.0	9.1	59.5	19.2	2.0	3.5	6.7	0.0	100.0	80
Luangprabang	17.7	752	5.0	26.7	25.8	39.2	2.6	0.8	100.0	4.1	29.2	23.6	41.4	0.0	1.7	0.0	100.0	133
Huaphanh	12.1	606	3.7	21.7	33.3	41.3	0.0	0.0	100.0	2.4	43.9	35.5	13.6	0.0	4.6	0.0	100.0	73
Xayabury	10.4	486	(4.3)	(43.1)	(37.2)	(13.2)	(0.0)	(2.2)	100.0	(0.0)	(47.4)	(32.9)	(15.3)	(0.0)	(2.2)	(2.2)	100.0	51
Xiengkhuang	12.3	540	0.0	25.1	47.5	22.0	5.3	0.0	100.0	0.0	15.6	63.7	20.7	0.0	0.0	0.0	100.0	67
Vientiane	4.3	767	(4.0)	(34.7)	(47.4)	(8.1)	(3.7)	(2.1)	100.0	(7.9)	(39.0)	(38.6)	(4.3)	(0.0)	(8.2)	(2.1)	100.0	33
Borikhamxay	6.9	402	(15.5)	(22.7)	(42.6)	(19.3)	(0.0)	(0.0)	100.0	(6.6)	(22.0)	(51.2)	(10.0)	(7.1)	(3.2)	(0.0)	100.0	28
Khammuane	6.5	603	(10.6)	(35.7)	(8.7)	(37.7)	(2.6)	(4.6)	100.0	(5.2)	(51.5)	(6.4)	(31.6)	(0.0)	(3.2)	(2.0)	100.0	39
Savannakhet	8.9	1,784	2.2	18.0	52.4	24.0	1.3	2.1	100.0	0.0	29.9	54.2	11.3	0.0	1.2	3.4	100.0	158
Saravane	10.4	923	14.9	29.0	24.3	26.5	4.5	0.8	100.0	2.0	53.3	25.2	5.0	7.3	6.3	0.8	100.0	96
Sekong	12.2	269	0.9	38.2	33.1	25.0	0.0	2.8	100.0	0.0	51.1	31.4	11.4	5.0	1.0	0.0	100.0	33
Champasack	6.0	1,003	(9.1)	(40.1)	(28.4)	(22.3)	(0.0)	(0.0)	100.0	(8.6)	(45.4)	(30.8)	(15.2)	(0.0)	(0.0)	(0.0)	100.0	61
Attapeu	1.0	216	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2

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

Table CH.5: Feeding practices during diarrhoea

Percent distribution of children age 0-59 months with diarrhoea in the last two weeks by amount of liquids and food given during episode of diarrhoea, Lao PDR 2011-12

			Drinking practices during diarrhoea:							Eating practices during diarrhoea:								
	Had diarrhoea in last two weeks	Number of children age 0-59 months	Given much less to drink	Given somewhat less to drink	Given about the same to drink	Given more to drink	Given nothing to drink	Missing/ DK	Total	Given much less to eat	Given somewhat less to eat	Given about the same to eat	Given more to eat	Stopped food	Had never been given food	Missing/ DK	Total	Number of children age 0-59 months with diarrhoea in last two weeks
Residence																		
Urban	5.4	2,319	8.0	29.5	25.7	33.6	0.0	3.2	100.0	6.4	39.9	27.8	22.9	0.0	2.1	0.9	100.0	126
Rural	11.2	8,748	6.6	29.7	34.4	26.5	1.6	1.3	100.0	3.2	38.5	34.8	18.5	1.4	2.5	1.1	100.0	983
..Rural with road	10.5	7,661	6.9	29.7	32.3	27.9	1.8	1.4	100.0	3.4	39.5	33.2	18.5	1.5	2.8	1.0	100.0	806
..Rural without road	16.3	1,086	5.0	29.5	44.0	20.1	0.6	0.8	100.0	2.1	34.1	42.0	18.5	0.7	1.0	1.6	100.0	178
Age																		
0-11 months	11.4	2,307	7.0	27.9	41.0	20.4	2.6	1.0	100.0	2.4	28.5	37.9	17.7	2.1	10.4	1.0	100.0	262
12-23 months	15.0	2,141	7.2	34.4	25.7	30.7	0.9	1.0	100.0	5.0	43.1	30.8	19.6	1.0	0.0	0.5	100.0	322
24-35 months	9.8	2,193	5.1	28.9	34.8	28.3	0.6	2.3	100.0	3.6	37.5	34.2	21.7	1.6	0.0	1.4	100.0	215
36-47 months	7.7	2,302	7.5	26.1	33.2	30.9	0.5	1.7	100.0	3.6	42.9	32.2	19.7	0.3	0.0	1.4	100.0	177
48-59 months	6.2	2,124	6.7	27.4	35.1	25.9	2.8	2.1	100.0	2.3	44.4	36.1	15.3	0.5	0.0	1.3	100.0	132
Mother's education																		
None	13.1	3,580	5.9	27.6	38.6	24.2	1.9	1.9	100.0	3.0	37.7	38.3	15.7	1.7	1.7	1.7	100.0	471
Primary	10.2	4,556	4.9	32.2	30.7	30.7	1.1	0.3	100.0	2.6	39.1	31.0	23.3	1.0	3.0	0.1	100.0	466
Lower secondary	6.8	1,613	10.8	33.6	26.7	26.5	0.0	2.4	100.0	3.4	44.9	29.7	17.8	0.0	2.7	1.5	100.0	110
Upper secondary	5.2	695	(24.0)	(17.2)	(21.5)	(22.8)	(3.4)	(11.2)	100.0	(18.8)	(29.2)	(36.3)	(12.6)	(0.0)	(0.0)	(3.0)	100.0	36
Post secondary non tertiary	5.5	368	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20
Higher	2.3	255	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6
Wealth index quintile																		
Poorest	15.0	3,233	6.0	28.2	34.4	27.7	1.6	1.9	100.0	3.0	38.0	36.2	19.0	0.8	1.2	1.8	100.0	486
Second	11.6	2,346	2.8	32.2	35.8	26.1	2.4	0.6	100.0	1.4	39.7	34.2	17.1	2.9	4.0	0.6	100.0	272
Middle	8.4	2,019	7.6	26.7	35.9	29.2	0.0	0.6	100.0	2.9	37.2	32.6	24.8	0.5	2.1	0.0	100.0	170
Fourth	5.7	1,807	12.3	40.2	26.0	18.8	1.2	1.6	100.0	5.7	47.8	27.6	13.9	0.0	3.9	1.1	100.0	102
Richest	4.7	1,663	15.5	22.6	22.8	35.3	0.0	3.8	100.0	13.4	30.8	31.2	19.9	1.1	3.6	0.0	100.0	78
Ethno-linguistic group of household head																		
Lao-Tai	6.4	6,030	9.9	27.3	32.4	27.7	1.1	1.6	100.0	4.2	39.7	31.4	18.9	1.5	3.6	0.7	100.0	388
Mon-Khmer	14.3	3,189	4.2	27.3	35.2	30.0	1.7	1.5	100.0	2.5	36.4	35.7	21.3	1.0	1.6	1.5	100.0	457
Hmong-Mien	13.6	1,439	4.0	34.3	35.4	22.7	1.8	1.8	100.0	4.0	35.1	40.4	16.7	1.2	1.7	1.0	100.0	196
Chinese-Tibetan	17.3	357	10.5	50.2	23.8	15.5	0.0	0.0	100.0	3.9	61.8	21.3	8.0	0.8	4.1	0.0	100.0	62
Other, Missing, DK	12.4	52	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7
Total	10.0	11,067	6.7	29.7	33.4	27.3	1.4	1.5	100.0	3.6	38.7	34.0	19.0	1.2	2.5	1.0	100.0	1,109

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

Table CH.6 presents the percentage of children age 0-59 months with diarrhoea in the two weeks prior to the survey who received oral rehydration therapy (ORT) with continued feeding. Oral rehydration therapy is defined as being given one of the following: fluid from an ORS packet; fluid from a pre-packaged ORS liquid; an RHF (such as rice water with salt or coconut water); or more fluids than usual. Combining the information from Table CH.4 on oral rehydration salts and RHFs with the information from Table CH.5 on drinking practices provides the data for calculating the percentage of children given ORT. Combining the calculation of ORT with information from Table CH.5 on eating practices provides the data for calculating the percentage of children given ORT with continued feeding. Some 57 per cent of children with diarrhoea received ORT and continued feeding at the same time, as recommended. The 2006 MICS estimated that 49 per cent of children had received ORT and continued feeding (among children with diarrhoea in the two weeks prior to the survey).

A higher percentage of children with diarrhoea received ORT and continued feeding in the Northern (61 per cent) than in the Southern and Central regions. Seventy-one per cent of children in urban areas received ORT and continued feeding, compared with only 56 per cent of rural children. Treatment of children with diarrhoea with ORT and continued feeding increases by wealth quintile, with 70 per cent of children in the richest wealth quintile receiving ORT and continued feeding, compared with about 65 per cent of children in the middle quintiles and 55 per cent and 52 per cent in the lowest wealth quintiles, respectively. Twenty per cent were not given any type of treatment.

Table CH.6 also presents the percentage of children with diarrhoea who received other treatments. About one quarter of children (28 per cent) received an anti-motility treatment,[1] and 16 per cent received an antibiotic pill or syrup, while only 1 per cent of children received zinc. Four per cent were given a home remedy or herbal medicine.

[1] 'Anti-motility' treatment is used to reduce the frequency of bowel movements (peristalsis) by slowing the pace of fluids going through the bowel.

Table CH.6: Oral rehydration therapy with continued feeding and other treatments

Percentage of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments, Lao PDR 2011-12

	Children with diarrhoea who received:			Other treatments:												
				Pill or syrup					Injection							
	ORS or increased fluids	ORT (ORS or recommended homemade fluids or increased fluids)	ORT with continued feeding[1]	Anti-biotic	Anti-motility	Zinc	Other	Unknown	Anti-biotic	Non-antibiotic	Unknown	Intra-venous	Home remedy, herbal medicine	Other	Not given any treatment or drug	Number of children age 0-59 months with diarrhoea in last two weeks
Sex																
Male	60.6	65.1	60.7	16.0	28.7	1.2	2.3	0.5	2.5	0.7	1.6	0.8	4.2	8.1	18.1	589
Female	54.4	56.8	53.6	15.3	27.9	0.7	1.6	0.2	3.4	0.7	1.3	0.8	3.6	6.5	22.2	520
Region																
North	62.7	65.8	61.4	16.0	22.9	1.5	1.2	0.4	3.6	0.3	2.0	1.0	3.7	7.8	18.9	537
Central	52.0	56.1	53.4	14.6	34.6	0.2	2.7	0.0	2.0	1.6	0.6	0.5	2.8	7.6	20.3	381
South	54.8	58.4	54.1	16.9	31.0	0.8	2.8	1.1	3.0	0.0	1.7	1.0	6.8	5.4	22.6	191
Province																
Vientiane Capital	(85.3)	(88.2)	(76.8)	(19.1)	(31.8)	(0.0)	(6.5)	(0.0)	(0.0)	3.9	(0.0)	(0.0)	(0.0)	20.7	(0.0)	56
Phongsaly	37.8	37.8	35.6	18.7	12.1	0.0	2.2	1.9	9.3	1.0	0.8	0.0	1.3	32.3	35.2	59
Luangnamtha	68.5	80.6	72.1	3.4	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	1.8	16.9	28
Oudomxay	64.2	64.2	64.2	7.5	27.2	0.0	0.0	0.0	2.4	0.0	1.8	1.1	7.2	3.3	18.7	113
Bokeo	63.6	71.0	58.8	14.5	8.3	1.3	0.0	1.4	1.4	0.0	0.8	0.7	1.5	12.5	15.3	80
Luangprabang	74.2	75.0	70.7	19.3	34.7	1.9	1.8	0.0	6.2	0.9	4.2	0.9	2.4	2.5	14.3	133
Huaphanh	52.4	59.8	55.0	17.0	6.0	0.0	2.4	0.0	2.7	0.0	1.2	0.0	7.5	4.6	23.1	73
Xayabury	(68.3)	(70.4)	(68.2)	(31.1)	(53.6)	(8.9)	(2.0)	(0.0)	(0.0)	(0.0)	(2.2)	(4.5)	(0.0)	(4.4)	(13.0)	51
Xiengkhuang	41.5	41.5	41.5	10.3	49.0	1.4	0.0	0.0	0.0	0.0	1.2	0.0	6.8	1.4	32.7	67
Vientiane	(33.0)	(37.3)	(33.3)	(11.9)	(39.1)	(0.0)	(8.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(11.0)	(24.6)	33
Borikhamxay	(59.1)	(77.9)	(71.4)	(21.5)	(16.3)	(0.0)	(0.0)	(0.0)	(9.4)	(0.0)	(0.0)	(0.0)	(0.0)	(6.3)	(15.9)	28
Khammuane	(48.4)	(57.9)	(55.2)	(3.5)	(36.6)	(0.0)	(2.7)	(0.0)	(3.2)	(0.0)	(0.0)	(0.0)	(3.2)	(13.5)	(18.8)	39
Savannakhet	48.2	50.7	50.7	16.9	31.4	0.0	1.9	0.0	2.3	2.5	1.0	1.2	2.9	3.6	22.6	158
Saravane	50.2	52.6	50.8	13.1	30.2	0.0	3.3	2.1	2.9	0.0	1.3	1.0	7.2	7.1	28.5	96
Sekong	37.3	43.9	40.0	4.1	27.9	0.0	2.1	0.0	0.0	0.0	1.0	2.8	5.8	2.0	31.0	33
Champasack	(71.0)	(74.8)	(66.1)	(27.8)	(33.4)	(2.7)	(2.4)	(0.0)	(4.8)	(0.0)	(2.7)	(0.0)	(6.9)	(4.7)	(9.2)	61
Attapeu	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2

[1] **MICS indicator 3.8**

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

Table CH.6: Oral rehydration therapy with continued feeding and other treatments

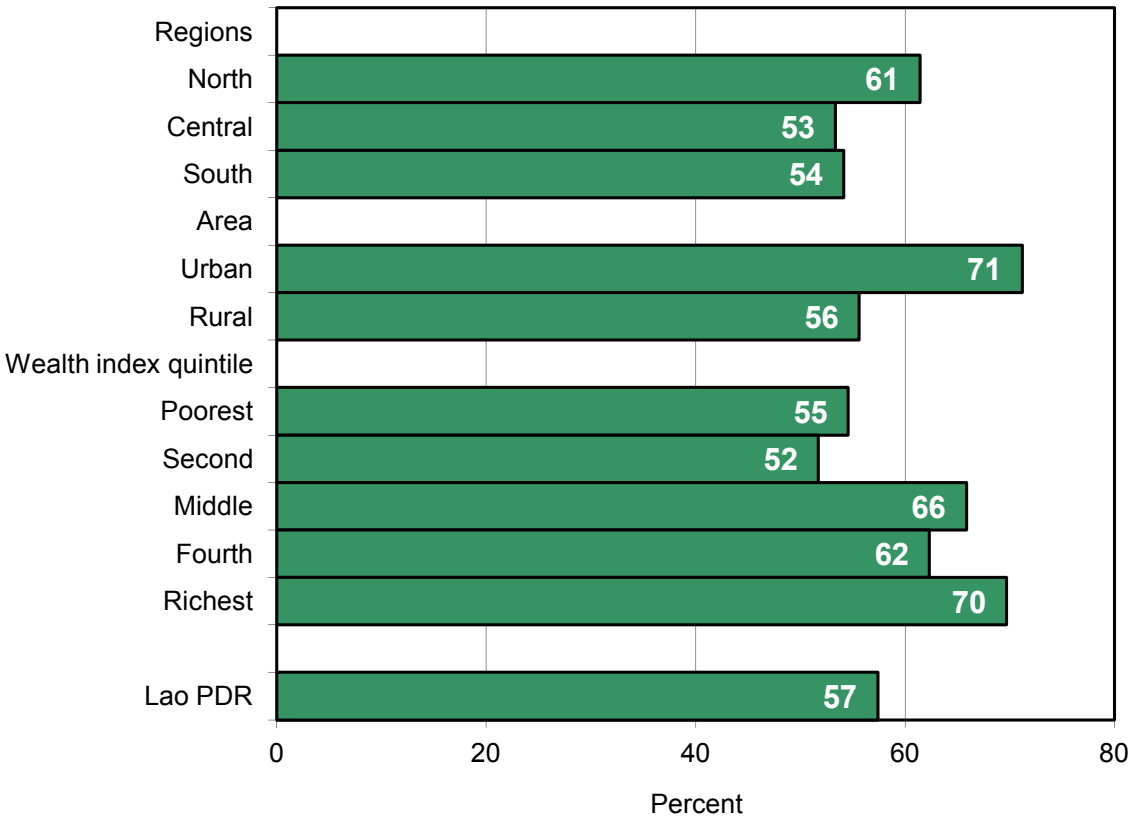
Percentage of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments, Lao PDR 2011-12

	Children with diarrhoea who received:			Other treatments:												
				Pill or syrup					Injection							
	ORS or increased fluids	ORT (ORS or recommended homemade fluids or increased fluids)	ORT with continued feeding[1]	Anti-biotic	Anti-motility	Zinc	Other	Unknown	Anti-biotic	Non-antibiotic	Unknown	Intra-venous	Home remedy, herbal medicine	Other	Not given any treatment or drug	Number of children age 0-59 months with diarrhoea in last two weeks
Residence																
Urban	74.7	78.1	71.2	21.5	30.2	0.9	4.9	0.9	2.2	0.0	1.6	1.2	1.3	11.5	7.0	126
Rural	55.5	59.0	55.6	14.9	28.1	1.0	1.6	0.3	3.1	0.8	1.5	0.8	4.3	6.8	21.7	983
..Rural with road	57.2	61.0	57.3	15.9	28.9	1.0	2.0	0.4	3.2	1.0	1.8	0.7	4.3	7.0	19.9	806
..Rural without road	47.4	50.3	48.1	10.4	24.4	0.7	0.2	0.0	2.3	0.0	0.0	1.1	4.3	6.0	29.7	178
Age																
0-11 months	44.7	47.6	42.3	16.3	26.2	1.4	2.7	0.4	1.4	1.6	1.5	0.9	2.8	7.5	28.4	262
12-23 months	62.2	65.4	61.0	18.0	31.3	1.0	2.8	0.7	2.2	0.0	1.5	0.7	2.8	9.8	15.6	322
24-35 months	66.9	70.8	67.0	21.0	29.7	1.2	1.4	0.0	4.6	1.5	0.4	1.4	3.8	5.0	14.7	215
36-47 months	54.5	59.6	57.7	6.7	27.2	0.0	1.5	0.6	3.8	0.0	3.2	0.5	5.6	4.5	22.8	177
48-59 months	61.4	64.4	62.3	12.1	24.6	0.8	0.5	0.0	4.2	0.5	0.7	0.2	6.7	8.6	19.3	132
Mother's education																
None	50.7	55.2	52.3	8.1	23.9	1.1	1.4	0.7	2.0	0.4	2.5	1.0	5.0	5.8	25.4	471
Primary	60.8	62.4	59.0	20.1	32.1	1.1	2.6	0.0	4.0	0.8	0.2	0.6	3.6	8.5	18.1	466
Lower secondary	66.0	72.4	69.5	23.6	32.3	0.0	2.2	0.0	4.2	0.0	1.8	1.1	2.0	4.1	12.4	110
Upper secondary	(69.2)	(78.8)	(62.5)	(24.2)	(21.6)	(1.5)	(2.8)	(0.0)	(0.0)	(6.0)	(4.5)	(0.0)	(2.3)	(14.1)	(8.6)	36
Post secondary non tertiary	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	20
Higher	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6
Wealth index quintile																
Poorest	54.1	56.9	54.6	10.2	24.6	1.2	1.1	0.2	2.3	0.2	1.8	0.9	4.9	4.5	25.1	486
Second	50.7	54.6	51.7	13.5	30.9	0.2	2.7	0.4	5.7	1.4	1.5	0.6	3.1	8.6	24.2	272
Middle	65.7	68.6	65.9	22.1	31.8	0.0	2.6	0.3	3.0	0.4	0.5	0.8	4.7	9.2	13.0	170
Fourth	62.0	68.6	62.3	25.9	30.9	3.8	1.0	0.5	1.1	0.0	1.6	0.0	1.2	13.6	10.4	102
Richest	80.8	85.1	69.7	29.7	31.4	0.7	5.2	1.4	0.0	2.8	1.5	2.0	2.3	8.4	1.6	78
Ethno-linguistic group of household head																
Lao-Tai	60.5	63.9	59.0	21.2	36.1	1.4	3.1	0.0	2.5	1.2	1.0	0.3	2.8	7.4	14.5	388
Mon-Khmer	61.5	64.7	62.0	12.8	25.0	0.6	1.1	0.4	4.0	0.3	2.1	1.1	4.5	6.6	21.6	457
Hmong-Mien	45.4	50.1	46.4	13.2	27.2	1.0	1.7	0.6	1.8	1.1	1.3	1.4	5.7	6.6	23.1	196
Chinese-Tibetan	49.8	54.0	47.0	8.2	8.1	0.8	1.1	1.8	2.0	0.0	0.8	0.0	0.7	14.0	32.4	62
Other, Missing, DK	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7
Total	57.7	61.2	57.4	15.7	28.3	1.0	2.0	0.4	3.0	0.7	1.5	0.8	3.9	7.3	20.0	1,109

[1] **MICS indicator 3.8**

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

Figure CH.4: Percentage of children under age 5 with diarrhoea who received ORT or increased fluids, AND continued feeding, Lao PDR 2011-12



Care Seeking and Antibiotic Treatment of Pneumonia

Pneumonia is one of the leading causes of death in children. Administering antibiotics to children with suspected pneumonia is a key intervention. A WFFC goal is to reduce the deaths due to acute respiratory infections by one third.

In the LSIS, the prevalence of suspected pneumonia was estimated by asking mothers and caretakers whether their children age under five had an illness with a cough accompanied by rapid or difficult breathing, and whether symptoms were due to a problem in the chest, or a problem involving both the chest and a blocked nose.

Table CH.7: Care seeking for suspected pneumonia and antibiotic use during suspected pneumonia

Percentage of children age 0-59 months with suspected pneumonia in the last two weeks who were taken to a health provider and percentage of children who were given antibiotics, Lao PDR 2011-12

			Children with suspected pneumonia who were taken to:												
			Public sources				Private sources				Other source				
	Had suspected pneumonia in the last two weeks	Number of children age 0-59 months	Govt. hospital	Govt. health centre	Village health worker	Mobile/ outreach clinic	Private hospital/ clinic	Private physician	Private pharmacy	Mobile clinic	Relative or friend	Other	Any appropriate provider[1]	Percentage of children with suspected pneumonia who received antibiotics in the last two weeks[2]	Number of children age 0-59 months with suspected pneumonia in the last two weeks
Sex															
Male	3.6	5,593	23.6	16.5	7.6	0.0	8.0	1.3	3.7	0.4	0.2	0.0	53.2	55.7	202
Female	2.9	5,474	23.8	19.5	7.3	1.4	4.9	1.9	4.5	0.7	0.0	0.4	55.9	59.7	161
Region															
North	2.4	3,502	22.9	11.1	13.1	0.0	5.8	4.4	3.9	2.4	0.0	0.8	56.5	59.9	86
Central	3.0	5,154	31.1	17.7	2.1	1.4	11.0	1.2	5.2	0.0	0.0	0.0	59.5	65.3	156
South	5.0	2,411	14.8	22.7	10.3	0.0	1.6	0.0	2.7	0.0	0.3	0.0	46.4	45.6	121
Province															
Vientiane Capital	2.1	1,058	*	*	*	*	*	*	*	*	*	*	*	*	22
Phongsaly	5.9	368	(26.8)	(8.1)	(8.8)	(0.0)	(0.0)	(0.0)	(3.0)	(0.0)	(0.0)	(0.0)	(43.8)	(46.4)	22
Luangnamtha	0.4	280	*	*	*	*	*	*	*	*	*	*	*	*	1
Oudomxay	1.0	676	*	*	*	*	*	*	*	*	*	*	*	*	7
Bokeo	4.5	335	(18.0)	(11.0)	(4.4)	(0.0)	(3.4)	(14.3)	(7.2)	(0.0)	(0.0)	(4.4)	(51.1)	(64.1)	15
Luangprabang	3.4	752	*	*	*	*	*	*	*	*	*	*	*	*	25
Huaphanh	2.1	606	*	*	*	*	*	*	*	*	*	*	*	*	13
Xayabury	0.4	486	*	*	*	*	*	*	*	*	*	*	*	*	2
Xiengkhuang	0.2	540	*	*	*	*	*	*	*	*	*	*	*	*	1
Vientiane	1.6	767	*	*	*	*	*	*	*	*	*	*	*	*	13
Borikhamxay	1.2	402	*	*	*	*	*	*	*	*	*	*	*	*	5
Khammuane	2.8	603	*	*	*	*	*	*	*	*	*	*	*	*	17
Savannakhet	5.5	1,784	(26.7)	(15.4)	(3.4)	(2.2)	(8.4)	(0.0)	(4.1)	(0.0)	(0.0)	(0.0)	(51.5)	(59.5)	98
Saravane	8.6	923	7.0	24.7	7.2	0.0	0.0	0.0	3.8	0.0	0.0	0.0	38.9	46.7	80
Sekong	10.5	269	28.3	18.3	7.8	0.0	1.2	0.0	1.1	0.0	0.0	0.0	54.9	35.8	28
Champasack	1.3	1,003	*	*	*	*	*	*	*	*	*	*	*	*	13
Attapeu	0.3	216	*	*	*	*	*	*	*	*	*	*	*	*	1
Residence															
Urban	2.1	2,319	56.8	4.5	3.1	4.5	24.6	0.0	8.5	0.0	0.7	0.0	79.0	74.3	49
Rural	3.6	8,748	18.6	19.9	8.1	0.0	3.8	1.8	3.4	0.7	0.0	0.2	50.6	54.8	314
..Rural with road	3.6	7,661	19.9	20.3	7.9	0.0	4.4	1.7	3.5	0.7	0.0	0.2	52.3	56.9	277
..Rural without road	3.4	1,086	(8.7)	(16.8)	(10.0)	(0.0)	(0.0)	(2.7)	(2.7)	(0.0)	(0.0)	(0.0)	(37.8)	(39.1)	37

[1] **MICS indicator 3.9**

[2] **MICS indicator 3.10**

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

Table CH.7: Care seeking for suspected pneumonia and antibiotic use during suspected pneumonia

Percentage of children age 0-59 months with suspected pneumonia in the last two weeks who were taken to a health provider and percentage of children who were given antibiotics, Lao PDR 2011-12

			Children with suspected pneumonia who were taken to:												
			Public sources				Private sources				Other source				
	Had suspected pneumonia in the last two weeks	Number of children age 0-59 months	Govt. hospital	Govt. health centre	Village health worker	Mobile/ outreach clinic	Private hospital/ clinic	Private physician	Private pharmacy	Mobile clinic	Relative or friend	Other	Any appropriate provider[1]	Percentage of children with suspected pneumonia who received antibiotics in the last two weeks[2]	Number of children age 0-59 months with suspected pneumonia in the last two weeks
Age															
0-11 months	2.9	2,307	14.3	6.0	5.1	3.2	3.2	2.9	3.9	1.3	0.0	0.0	36.0	48.5	67
12-23 months	4.0	2,141	28.0	22.8	7.6	0.0	5.2	2.0	4.5	0.0	0.0	0.0	57.1	56.2	85
24-35 months	3.3	2,193	23.2	26.5	7.8	0.0	7.9	0.0	4.8	1.7	0.5	0.0	65.5	60.3	71
36-47 months	3.8	2,302	23.9	18.4	8.7	0.0	7.6	1.2	0.0	0.0	0.0	0.0	58.3	58.3	87
48-59 months	2.4	2,124	29.2	12.2	7.6	0.0	9.9	2.0	9.5	0.0	0.0	1.3	51.9	65.6	52
Mother's education															
None	3.3	3,580	10.8	20.6	6.8	0.0	2.5	1.8	0.5	0.0	0.0	0.6	40.4	38.4	118
Primary	3.6	4,556	21.5	18.3	9.5	1.3	5.7	0.7	5.5	0.0	0.2	0.0	53.5	62.0	165
Lower secondary	2.9	1,613	(39.0)	(18.3)	(4.4)	(0.0)	(16.0)	(0.0)	(4.5)	(4.4)	(0.0)	(0.0)	(75.2)	(77.7)	47
Upper secondary	2.3	695	*	*	*	*	*	*	*	*	*	*	*	*	16
Post secondary non tertiary	2.6	368	*	*	*	*	*	*	*	*	*	*	*	*	9
Higher	3.2	255	*	*	*	*	*	*	*	*	*	*	*	*	8
Wealth index quintile															
Poorest	4.1	3,233	10.3	18.9	11.5	0.0	0.7	1.2	2.0	0.6	0.0	0.5	42.1	47.4	132
Second	4.3	2,346	21.4	21.8	4.4	0.0	3.1	0.0	1.8	0.0	0.4	0.0	48.7	49.0	101
Middle	2.5	2,019	31.1	14.1	8.1	0.0	11.9	3.1	7.7	0.0	0.0	0.0	63.6	63.9	50
Fourth	2.4	1,807	(30.6)	(21.2)	(4.9)	(0.0)	(17.2)	(0.0)	(9.1)	(2.7)	(0.0)	(0.0)	(69.7)	(88.3)	44
Richest	2.1	1,663	(62.4)	(3.2)	(3.2)	(6.3)	(18.6)	(7.4)	(6.9)	(0.0)	(0.0)	(0.0)	(85.5)	(71.9)	34
Ethno-linguistic group of household head															
Lao-Tai	3.2	6,030	27.3	16.3	4.9	1.1	10.8	1.3	6.2	0.6	0.0	0.0	56.8	60.1	193
Mon-Khmer	4.5	3,189	20.8	21.3	11.0	0.0	1.6	1.5	2.0	0.6	0.2	0.0	54.3	54.3	144
Hmong-Mien	1.3	1,439	*	*	*	*	*	*	*	*	*	*	*	*	18
Chinese-Tibetan	1.9	357	*	*	*	*	*	*	*	*	*	*	*	*	7
Other, Missing, DK	1.9	52	*	*	*	*	*	*	*	*	*	*	*	*	1
Total	3.3	11,067	23.7	17.8	7.5	0.6	6.6	1.6	4.1	0.6	0.1	0.2	54.4	57.4	363

[1] **MICS indicator 3.9**

[2] **MICS indicator 3.10**

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

Table CH.7 presents the prevalence of suspected pneumonia and, if care was sought outside the home, the site of care. Three per cent of children age 0 - 59 months were reported to have had symptoms of pneumonia during the two weeks preceding the survey. At 9 and 11 per cent, respectively, prevalence of pneumonia among children was higher in Saravane and Sekong than in other provinces. Fifty-four per cent of all children with suspected pneumonia were taken to an appropriate healthcare provider. A smaller proportion of children with suspected pneumonia were taken to a healthcare provider in the Southern (46 per cent) compared with children in the Northern (57 per cent) and Central (60 per cent) regions. A larger proportion of children living in urban than rural areas were taken to a healthcare provider (79 per cent and 51 per cent, respectively).

Table CH.7 also presents the use of antibiotics for the treatment of suspected pneumonia. Fifty-seven per cent of children under the age of five with suspected pneumonia during the two weeks prior to the survey had received an antibiotic. The percentage of children being treated with antibiotics is similar to the percentage of children who are taken to an appropriate healthcare provider. Antibiotic treatment of suspected pneumonia is lower than the national average among the poorest households (47 per cent) and among children whose mothers or caretakers have no education (38 per cent). The use of antibiotics rises somewhat with the age of the child.

Mothers' knowledge of the danger signs of illness is an important determinant of care-seeking behaviour. Women were asked to identify, without suggestions from the interviewer, what symptoms would prompt them to immediately take a child to a health facility. Responses are presented in Table CH.8. Special consideration is given to the symptoms difficult breathing and fast breathing since these are two particularly dangerous symptoms and may be signs of pneumonia. Fourteen per cent of women identified difficult breathing as a reason to take a child to a health facility right away, and 7 per cent stated that fast breathing would prompt them to do so. However, only 3 per cent of mothers and caretakers reported both symptoms as reason to take their child to a health facility. The most commonly identified symptoms for taking a child to a health facility are fever (reported by 79 per cent), cough (43 per cent), and drinking poorly (reported by 39 per cent).

Table CH.8: Knowledge of the two danger signs of pneumonia

Percentage of mothers and caretakers of children age 0-59 months by symptoms that would cause them to take the child immediately to a health facility, and percentage of mothers who recognize fast and difficult breathing as signs for seeking care immediately, Lao PDR 2011-12

	Percentage of mothers/caretakers of children age 0-59 months who think that a child should be taken immediately to a health facility if the child:										Mothers/caretakers who recognize the two danger signs of pneumonia	Number of mothers/caretakers of children age 0-59 months
	Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficult breathing	Has blood in stool	Has diarrhoea	Has a cough	Is drinking poorly	Has other symptoms		
Region												
North	6.0	23.9	77.9	9.5	21.0	7.5	6.2	45.6	44.8	12.2	5.3	2,518
Central	1.6	11.6	79.5	4.1	9.8	1.4	1.7	34.7	40.2	18.9	1.0	3,782
South	2.0	28.1	80.3	9.9	14.2	7.9	3.8	60.0	25.8	9.4	3.7	1,631
Province												
Vientiane Capital	4.8	8.7	84.4	9.0	21.4	4.7	5.8	40.6	53.4	17.9	3.4	863
Phongsaly	20.6	72.5	60.7	12.0	41.9	22.9	1.5	30.7	15.1	11.7	8.5	252
Luangnamtha	11.9	22.6	65.3	8.4	34.9	20.7	11.0	49.1	28.0	10.5	3.9	212
Oudomxay	0.7	14.5	64.1	5.9	8.9	8.0	0.9	18.3	17.2	12.0	3.2	457
Bokeo	1.4	18.7	90.9	5.6	13.2	3.4	2.4	75.0	58.7	20.2	1.3	239
Luangprabang	9.7	33.1	85.7	22.0	32.7	6.2	15.2	51.4	63.4	4.9	13.0	557
Huaphanh	1.6	16.9	86.0	3.9	13.1	1.3	0.9	72.4	54.0	23.2	0.7	396
Xayabury	1.6	2.3	84.5	3.1	10.3	0.5	7.4	32.1	60.5	7.9	2.5	405
Xiengkhuang	0.9	20.6	86.8	2.8	5.2	1.0	0.5	50.2	46.3	9.0	1.3	357
Vientiane	0.2	15.0	81.1	1.2	3.9	0.2	0.5	22.9	31.5	6.5	0.2	579
Borikhamxay	1.0	22.2	85.1	0.5	2.7	0.3	0.9	40.3	66.8	6.5	0.0	298
Khammuane	1.8	12.0	65.5	2.5	11.3	0.7	1.1	30.4	29.9	28.2	0.0	413
Savannakhet	0.5	6.7	76.5	4.0	7.0	0.2	0.3	31.8	30.7	27.9	0.3	1,273
Saravane	2.8	44.0	85.7	17.3	19.7	19.2	8.4	55.3	12.8	4.5	7.4	621
Sekong	0.8	41.1	65.0	11.9	8.4	0.5	1.1	62.1	58.7	1.9	5.0	173
Champasack	2.1	16.7	76.5	3.5	13.0	1.2	1.1	68.1	21.2	15.5	0.7	687
Attapeu	0.0	0.0	92.7	6.3	4.2	0.4	0.0	39.7	62.5	11.1	0.7	149
Residence												
Urban	2.7	12.2	84.4	7.9	16.6	3.5	4.2	44.2	48.5	16.3	3.2	1,793
Rural	3.2	20.8	77.6	6.8	13.5	5.0	3.4	43.1	35.8	14.4	2.8	6,138
..Rural with road	2.8	20.1	78.7	6.8	13.3	4.9	3.4	42.7	36.5	14.1	2.9	5,432
..Rural without road	5.9	26.5	69.1	6.4	15.4	5.8	3.3	46.0	31.0	16.1	2.7	705

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table CH.8: Knowledge of the two danger signs of pneumonia

Percentage of mothers and caretakers of children age 0-59 months by symptoms that would cause them to take the child immediately to a health facility, and percentage of mothers who recognize fast and difficult breathing as signs for seeking care immediately, Lao PDR 2011-12

	Percentage of mothers/caretakers of children age 0-59 months who think that a child should be taken immediately to a health facility if the child:										Mothers/caretakers who recognize the two danger signs of pneumonia	Number of mothers/caretakers of children age 0-59 months
	Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficult breathing	Has blood in stool	Has diarrhoea	Has a cough	Is drinking poorly	Has other symptoms		
Mother's education												
None	3.0	26.6	73.4	6.4	12.2	6.0	3.2	42.0	29.8	13.6	2.2	2,219
Primary	2.8	18.0	80.4	7.1	14.3	4.8	3.7	45.1	40.2	14.3	3.0	3,342
Lower secondary	3.4	13.6	82.4	6.8	13.9	2.8	3.1	42.1	44.0	17.0	3.0	1,286
Upper secondary	2.5	11.4	82.9	6.3	17.5	2.2	3.3	37.9	44.1	16.8	2.9	572
Post secondary non tertiary	6.7	10.5	86.0	10.6	22.5	4.8	4.6	51.8	49.4	14.5	5.3	300
Higher	3.1	15.5	79.6	11.5	17.0	5.5	7.0	40.6	46.9	16.9	5.8	212
Wealth index quintile												
Poorest	3.2	27.7	74.0	7.7	12.9	6.3	3.8	44.9	31.4	12.7	3.3	2,025
Second	3.1	22.3	78.0	5.7	13.1	5.6	3.3	44.4	36.8	14.2	2.4	1,657
Middle	3.6	16.8	80.5	7.6	13.7	4.8	3.7	42.4	38.9	15.9	3.1	1,488
Fourth	2.3	12.5	82.0	6.0	15.3	2.5	2.5	44.9	43.2	15.7	3.0	1,385
Richest	3.1	10.6	83.7	8.1	17.1	3.1	4.4	39.3	47.0	16.5	2.7	1,375
Ethno-linguistic group of household head												
Lao-Tai	2.4	13.7	81.3	6.4	14.3	3.4	3.1	42.6	40.2	16.7	2.3	4,674
Mon-Khmer	3.9	23.6	76.0	8.9	13.6	5.8	4.7	42.3	36.8	12.8	4.4	2,148
Hmong-Mien	3.3	28.0	79.3	6.3	12.3	5.1	2.6	51.4	41.2	10.0	3.0	817
Chinese-Tibetan	8.5	43.5	64.9	4.3	27.1	15.5	5.0	42.6	20.3	13.4	2.7	255
Other, Missing, DK	(0.0)	(26.2)	(82.6)	(11.3)	(6.4)	(9.2)	(10.3)	(30.4)	(29.8)	(15.4)	(0.0)	38
Total	3.1	18.9	79.1	7.0	14.2	4.7	3.6	43.4	38.7	14.8	2.9	7,931

Note: Figures in parentheses are based on 25-49 unweighted cases.

Solid Fuel Use

More than 3 billion people around the world rely on solid fuels (biomass and coal) for their basic energy needs, including cooking and heating. This leads to high levels of indoor smoke, which contains a complex mix of health-damaging pollutants. The main problem with the use of solid fuels is their incomplete combustion, which produces toxic elements including carbon monoxide, poly-aromatic hydrocarbons, and sulphur dioxide (SO_2). Use of solid fuels increases the risk of incurring acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer and possibly tuberculosis or asthma, and may contribute to the low birth weight of babies born to pregnant women exposed to smoke. The primary indicator for monitoring use of solid fuels is the proportion of the population using solid fuels as the primary source of domestic energy for cooking, as shown in Table CH.9.

Table CH.9: Solid fuel use

Percent distribution of household members according to type of cooking fuel used by the household, and percentage of household members living in households using solid fuels for cooking, Lao PDR 2011-12

	Percentage of household members in households using:													
					Solid fuels									
	Electricity	Liquefied Petroleum Gas (LPG)	Natural Gas	Biogas	Coal, lignite	Char-coal	Wood	Straw, shrubs, grass	Other fuel	Missing	No food cooked in the household	Total	Solid fuels for cooking[1]	Number of household members
Region														
North	0.5	0.4	0.1	0.1	0.2	1.7	96.9	0.0	0.0	0.1	0.0	100.0	98.8	31,310
Central	3.0	2.7	0.3	0.1	0.6	27.2	66.1	0.0	0.0	0.0	0.0	100.0	93.9	46,919
South	0.2	0.4	0.0	0.1	0.3	34.0	65.1	0.0	0.0	0.0	0.0	100.0	99.3	19,192
Province														
Vientiane Capital	10.1	8.0	0.9	0.3	1.4	51.8	27.4	0.0	0.0	0.1	0.0	100.0	80.6	11,694
Phongsaly	0.3	0.3	0.0	0.0	0.0	0.1	99.1	0.1	0.0	0.1	0.0	100.0	99.3	3,122
Luangnamtha	0.3	0.0	0.1	0.0	0.2	0.4	98.8	0.3	0.0	0.0	0.0	100.0	99.6	2,707
Oudomxay	0.1	0.1	0.0	0.0	0.0	0.5	99.3	0.0	0.0	0.0	0.0	100.0	99.8	5,181
Bokeo	0.4	2.0	0.0	0.5	0.1	0.6	96.4	0.0	0.0	0.0	0.0	100.0	97.2	2,749
Luangprabang	1.0	0.7	0.4	0.0	0.2	0.7	96.8	0.0	0.0	0.1	0.1	100.0	97.7	6,576
Huaphanh	0.6	0.1	0.0	0.0	0.0	0.1	98.9	0.0	0.0	0.4	0.0	100.0	99.0	5,163
Xayabury	0.4	0.3	0.0	0.1	0.5	7.4	91.2	0.0	0.1	0.0	0.0	100.0	99.1	5,813
Xiengkhuang	1.7	0.5	0.0	0.0	0.0	0.2	97.6	0.0	0.0	0.0	0.0	100.0	97.8	4,198
Vientiane	1.0	2.2	0.1	0.0	0.2	6.7	89.7	0.2	0.0	0.0	0.0	100.0	96.7	7,079
Borikhamxay	0.4	1.1	0.6	0.1	0.0	14.7	83.2	0.0	0.0	0.0	0.0	100.0	97.8	3,864
Khammuane	0.4	0.4	0.0	0.1	1.1	16.9	81.0	0.0	0.0	0.0	0.0	100.0	99.1	5,129
Savannakhet	0.3	0.6	0.0	0.0	0.2	32.1	66.7	0.0	0.0	0.1	0.0	100.0	99.1	14,954
Saravane	0.1	0.2	0.0	0.0	0.1	17.9	81.7	0.0	0.0	0.0	0.0	100.0	99.7	6,760
Sekong	0.0	0.1	0.0	0.0	0.0	11.3	88.6	0.0	0.0	0.0	0.0	100.0	99.9	1,806
Champasack	0.2	0.6	0.0	0.1	0.5	55.8	42.7	0.0	0.0	0.0	0.0	100.0	99.1	8,877
Attapeu	0.6	0.5	0.0	0.0	0.1	8.5	90.2	0.0	0.0	0.0	0.0	100.0	98.9	1,749
Residence														
Urban	5.6	5.2	0.6	0.3	0.8	40.1	47.3	0.0	0.0	0.0	0.1	100.0	88.2	24,845
Rural	0.3	0.2	0.0	0.0	0.3	13.6	85.5	0.0	0.0	0.0	0.0	100.0	99.4	72,576
..Rural with road	0.3	0.3	0.0	0.0	0.3	13.8	85.3	0.0	0.0	0.1	0.0	100.0	99.3	64,866
..Rural without road	0.0	0.0	0.0	0.0	0.2	12.2	87.6	0.0	0.0	0.0	0.0	100.0	100.0	7,710

[1] MICS indicator 3.11

Table CH.9: Solid fuel use

Percent distribution of household members according to type of cooking fuel used by the household, and percentage of household members living in households using solid fuels for cooking, Lao PDR 2011-12

	Percentage of household members in households using:													
					Solid fuels									
	Electricity	Liquefied Petroleum Gas (LPG)	Natural Gas	Biogas	Coal, lignite	Char-coal	Wood	Straw, shrubs, grass	Other fuel	Missing	No food cooked in the household	Total	Solid fuels for cooking[1]	Number of household members
Education of household head														
None	0.3	0.2	0.0	0.0	0.2	11.4	87.7	0.1	0.0	0.0	0.0	100.0	99.4	20,763
Primary	0.7	0.5	0.0	0.0	0.3	17.5	80.8	0.0	0.0	0.0	0.0	100.0	98.6	45,854
Lower secondary	1.4	1.3	0.3	0.1	0.6	22.5	73.8	0.0	0.0	0.1	0.0	100.0	96.9	14,280
Upper secondary	5.0	4.9	0.4	0.0	0.7	35.6	53.2	0.0	0.0	0.1	0.0	100.0	89.5	5,241
Post secondary non tertiary	3.0	3.8	0.4	0.4	0.5	37.0	54.7	0.0	0.0	0.1	0.1	100.0	92.2	6,740
Higher	11.9	10.7	1.1	0.3	1.1	40.7	34.1	0.0	0.0	0.0	0.1	100.0	75.9	4,387
DK/Missing	16.1	6.8	0.0	0.0	0.0	35.6	41.4	0.0	0.0	0.0	0.0	100.0	77.0	156
Wealth index quintile														
Poorest	0.0	0.0	0.0	0.0	0.1	0.5	99.3	0.1	0.0	0.0	0.0	100.0	100.0	19,489
Second	0.0	0.0	0.0	0.0	0.1	4.7	95.1	0.0	0.0	0.1	0.0	100.0	99.9	19,480
Middle	0.0	0.0	0.0	0.0	0.1	12.0	87.7	0.0	0.0	0.1	0.0	100.0	99.9	19,483
Fourth	0.5	0.0	0.0	0.0	0.6	31.9	66.8	0.0	0.0	0.0	0.0	100.0	99.3	19,480
Richest	7.5	7.5	0.8	0.4	1.1	52.6	29.9	0.0	0.0	0.1	0.1	100.0	83.6	19,489
Ethno-linguistic group of household head														
Lao-Tai	2.4	2.3	0.2	0.1	0.6	30.9	63.3	0.0	0.0	0.1	0.0	100.0	94.9	61,459
Mon-Khmer	0.1	0.0	0.0	0.0	0.0	2.5	97.2	0.1	0.0	0.0	0.0	100.0	99.8	23,629
Hmong-Mien	0.6	0.2	0.1	0.0	0.0	0.7	98.3	0.1	0.0	0.0	0.0	100.0	99.1	8,682
Chinese-Tibetan	0.5	0.2	0.0	0.0	0.2	0.4	98.7	0.0	0.0	0.0	0.0	100.0	99.3	3,111
Other, Missing, DK	4.9	8.2	0.0	0.0	0.6	24.6	61.1	0.0	0.0	0.0	0.6	100.0	86.3	541
Total	1.6	1.5	0.2	0.1	0.4	20.3	75.8	0.0	0.0	0.0	0.0	100.0	96.5	97,421

[1] MICS indicator 3.11

The vast majority of households in Lao PDR (97 per cent) use solid fuels for cooking. Use of solid fuels is 97 per cent or higher in every province of the country, with the exception of Vientiane Capital, where 19 per cent of households use gas or electricity for cooking. Solid fuel is essentially the only source of cooking fuel across rural areas (99 per cent of rural households), and while lower in urban areas, remains the main source for urban households (88 per cent). Use of gas and electricity is essentially seen only among the richest households. The predominant fuels for cooking purposes are wood and charcoal.

To assess whether household members are exposed to air pollution from the burning of solid fuels, LSIS asked where the household cooking is usually done; the farther away from the general living area, the fewer the pollutants inhaled by household members. Solid fuel use by place of cooking is depicted in Table CH.10.

Eighty-one per cent of household members in Lao PDR live where cooking is done inside the house. While this percentage is fairly consistent across background characteristics, what varies is whether the cooking is done in a separate room designated as an area for cooking, or elsewhere in the household living area. As education and wealth quintile increase, the percentage of household members living where the cooking is done in a separate room designated as a kitchen steadily increases.

Table CH.10: Solid fuel use by place of cooking

Percent distribution of household members in households using solid fuels by place of cooking, Lao PDR 2011-12

	Place of cooking:							
	In a separate room used as kitchen	Elsewhere in the house	In a separate building	Outdoors	At another place	Missing	Total	Number of household members in households using solid fuels for cooking
Region								
North	42.8	41.6	14.4	0.8	0.0	0.4	100.0	30,940
Central	52.5	24.1	18.2	4.6	0.5	0.2	100.0	44,051
South	60.2	27.1	7.4	4.3	1.0	0.1	100.0	19,066
Province								
Vientiane Capital	59.7	21.4	11.5	6.7	0.2	0.5	100.0	9,422
Phongsaly	21.8	61.4	16.4	0.2	0.0	0.3	100.0	3,100
Luangnamtha	41.1	54.2	4.5	0.2	0.0	0.0	100.0	2,695
Oudomxay	41.7	54.0	4.1	0.1	0.0	0.1	100.0	5,172
Bokeo	38.4	32.4	27.1	1.9	0.0	0.1	100.0	2,672
Luangprabang	55.0	35.0	7.3	1.7	0.1	1.0	100.0	6,426
Huaphanh	26.6	40.8	32.2	0.2	0.0	0.1	100.0	5,111
Xayabury	58.6	26.3	13.4	0.8	0.0	0.9	100.0	5,763
Xiengkhuang	17.9	40.0	40.9	1.2	0.0	0.0	100.0	4,106
Vientiane	44.0	28.6	21.9	5.4	0.0	0.0	100.0	6,848
Borikhamxay	46.5	20.1	31.0	2.3	0.1	0.0	100.0	3,781
Khammuane	68.7	9.1	14.9	6.8	0.5	0.1	100.0	5,080
Savannakhet	57.5	25.4	12.2	3.7	1.0	0.1	100.0	14,813
Saravane	70.7	19.0	5.6	3.8	0.7	0.1	100.0	6,740
Sekong	41.8	35.9	13.2	8.9	0.3	0.0	100.0	1,803
Champasack	57.6	31.2	6.9	2.9	1.4	0.0	100.0	8,793
Attapeu	51.2	28.9	10.6	8.8	0.4	0.0	100.0	1,730
Residence								
Urban	62.8	18.2	14.3	4.2	0.2	0.1	100.0	21,918
Rural	47.2	34.2	14.9	3.0	0.5	0.3	100.0	72,138
..Rural with road	48.3	32.1	15.7	3.1	0.5	0.3	100.0	64,429
..Rural without road	38.3	51.3	7.6	2.2	0.4	0.1	100.0	7,710
Education of household head								
None	44.1	41.1	11.6	2.6	0.4	0.2	100.0	20,637
Primary	50.2	30.9	15.3	3.1	0.4	0.2	100.0	45,228
Lower secondary	53.3	24.6	17.1	4.2	0.6	0.2	100.0	13,834
Upper secondary	56.1	22.7	15.1	5.6	0.1	0.4	100.0	4,691
Post secondary non tertiary	60.9	19.3	16.1	3.2	0.3	0.2	100.0	6,217
Higher	65.7	15.7	13.8	4.2	0.5	0.0	100.0	3,330
DK/Missing	65.5	18.2	16.2	0.0	0.0	0.0	100.0	120
Wealth index quintile								
Poorest	28.3	62.9	6.1	1.9	0.6	0.1	100.0	19,484
Second	48.2	32.7	15.7	2.8	0.2	0.4	100.0	19,467
Middle	55.5	20.5	19.4	3.7	0.7	0.2	100.0	19,463
Fourth	59.7	17.9	17.6	4.1	0.5	0.3	100.0	19,352
Richest	65.0	15.7	15.1	4.0	0.0	0.1	100.0	16,290
Ethno-linguistic group of household head								
Lao-Tai	58.2	21.4	15.9	3.8	0.5	0.2	100.0	58,308
Mon-Khmer	46.0	39.7	10.7	2.9	0.5	0.3	100.0	23,591
Hmong-Mien	23.0	56.8	18.5	1.4	0.1	0.3	100.0	8,602
Chinese-Tibetan	24.8	60.3	14.7	0.1	0.0	0.1	100.0	3,089
Other, Missing, DK	67.7	15.5	6.7	10.0	0.0	0.0	100.0	467
Total	50.9	30.5	14.7	3.3	0.4	0.2	100.0	94,057

Malaria

Malaria is not only a cause of death of children age under five in Lao PDR, but also contributes to anaemia in children and school absenteeism. Preventive measures can dramatically reduce malaria mortality rates among children. Death rates associated with malaria (all ages) were estimated to be 14 and 0.4 per 100,000 population in the years 1995 and 2006, respectively (Government of Lao PDR and The United Nations, 2008).

In areas where malaria is common, WHO recommends Indoor Residual Spraying, the use of insecticide treated bed-nets and prompt treatment of confirmed cases with recommended anti-malarial drugs. International recommendations also 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. Children recovering from malaria should also be given extra liquids and food, and younger babies and infants should continue breastfeeding.

Insecticide-treated mosquito nets (ITNs), if used properly, are very effective in offering protection against mosquitoes and other insects. The use of ITNs is one of the main health interventions applied to reduce malaria transmission and it is promoted by the Lao Ministry of Health (MoH). The MoH estimated an average of 2.7 people per ITN in malaria risk areas in the fiscal year 2009-2010. The MoH also estimated that 84 per cent of the population in malaria risk areas was protected by ITNs (MoH, 2010). The LSIS questionnaire included questions on the availability of ITNs at the household level and use of bed nets by household members.

Table CH.11: Household availability of insecticide treated nets

Percentage of households with at least one mosquito net, percentage of households with at least one long-lasting treated net, and percentage of households with at least one insecticide treated net (ITN), Lao PDR 2011-12

	Percentage of households with at least one mosquito net	Percentage of households with at least one long-lasting treated net	Percentage of households with at least one ITN[1]	Number of households
Region				
North	93.1	51.0	58.3	6,065
Central	93.5	28.4	41.0	9,247
South	98.2	41.1	60.1	3,531
Province				
Vientiane Capital	83.2	18.5	25.0	2,497
Phongsaly	72.7	50.6	51.0	578
Luangnamtha	94.1	40.2	45.5	544
Oudomxay	94.7	86.3	86.3	913
Bokeo	95.6	46.4	51.9	520
Luangprabang	92.1	61.3	69.9	1,371
Huaphanh	97.8	25.2	38.7	869
Xayabury	97.7	39.1	50.6	1,269
Xiengkhuang	96.8	5.1	27.9	762
Vientiane	97.1	21.3	32.8	1,447
Borikhamxay	97.4	45.9	67.0	804
Khammuane	97.2	39.1	51.8	1,078
Savannakhet	97.4	38.8	52.1	2,659
Saravane	98.4	47.2	73.1	1,123
Sekong	98.0	73.4	76.5	283
Champasack	98.3	24.4	44.8	1,789
Attapeu	97.4	83.0	84.3	336
Residence				
Urban	89.1	27.2	37.6	5,177
Rural	96.2	42.2	54.9	13,666
..Rural with road	96.8	40.9	53.9	12,285
..Rural without road	91.1	54.2	63.8	1,380
Education of household head				
None	92.1	42.2	52.6	3,833
Primary	96.8	42.0	54.6	8,542
Lower secondary	96.5	33.4	48.2	2,925
Upper secondary	90.4	25.0	35.3	1,147
Post secondary non tertiary	93.3	32.4	44.9	1,413
Higher	78.4	25.0	32.8	958
DK/Missing	*	*	*	25
Wealth index quintile				
Poorest	90.0	51.0	58.2	3,585
Second	97.3	46.8	57.7	3,533
Middle	99.5	40.4	55.9	3,743
Fourth	99.6	32.1	48.3	3,962
Richest	85.0	22.7	32.9	4,019
Ethno-linguistic group of household head				
Lao-Tai	95.2	32.5	46.8	12,721
Mon-Khmer	94.6	56.9	65.4	4,140
Hmong-Mien	92.8	32.7	39.5	1,287
Chinese-Tibetan	75.2	40.0	41.8	579
Other, Missing, DK	86.5	29.6	34.1	117
Total	94.2	38.1	50.2	18,843

[1] **MICS indicator 3.12**

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

LSIS results indicate that 50 per cent of households have at least one ITN and 94 per cent of households have at least one mosquito net (Table CH.11). The availability of at least one mosquito net per household is above 90 per cent in all provinces except in Vientiane Capital and Phongsaly (83 and 73 per cent, respectively). The percentage of households with at least one mosquito net falls below 90 per cent among groups including households headed by someone with higher education (78 per cent), the richest wealth quintile households (85 per cent), and Chinese-Tibetan headed households (75 per cent).

Six in 10 households in the Northern and Southern regions have at least one ITN, compared with only 4 in 10 households in the Central region. Household possession of ITNs varies greatly across provinces. Fewer than half of households (ranging from 25 to 46 per cent) have an ITN in Vientiane Capital, Xiengkhuang, Vientiane, Huaphanh, Champasak and Luangnamtha provinces. The percentage is 70 per cent or greater in Luangprabang, Saravane, Sekong, Attapeu and Oudomxay provinces, while the percentage in the remaining provinces varies between 50 per cent and 67 per cent. The percentage of households owning an ITN is lower among the highest educated, wealthiest and urban households.

Table CH.12: Children sleeping under mosquito nets

Percentage of children age 0-59 months who slept under a mosquito net during the previous night, by type of net, Lao PDR 2011-12

	Percentage of children age 0-59 who stayed in the household the previous night	Number of children age 0-59 months	Percentage of children who:		Number of children age 0-59 months who slept in the household the previous night	Percentage of children who slept under an ITN living in households with at least one ITN	Number of children age 0-59 living in households with at least one ITN
			Slept under any mosquito net[1]	Slept under an insecticide treated net[2]			
Sex							
Male	94.6	5,593	87.1	43.5	5,293	83.0	2,775
Female	94.9	5,474	87.6	43.0	5,198	82.2	2,718
Region							
North	97.1	3,502	83.8	50.2	3,401	88.2	1,936
Central	93.1	5,154	86.0	32.8	4,799	74.4	2,114
South	95.0	2,411	95.6	54.8	2,291	87.0	1,443
Province							
Vientiane Capital	97.6	1,058	73.3	20.7	1,032	77.6	275
Phongsaly	99.0	368	48.7	33.5	364	76.8	159
Luangnamtha	99.8	280	90.5	38.6	279	90.3	119
Oudomxay	97.3	676	86.6	80.0	657	92.8	567
Bokeo	96.0	335	85.9	40.0	322	83.7	154
Luangprabang	98.7	752	83.5	57.3	741	90.7	469
Huaphanh	92.5	606	90.4	27.8	561	73.5	212
Xayabury	98.1	486	93.9	50.9	476	94.7	256
Xiengkhuang	91.8	540	85.6	20.3	496	65.5	154
Vientiane	95.5	767	93.5	18.4	732	56.5	239
Borikhamxay	98.3	402	94.2	62.3	395	95.5	258
Khammuane	97.9	603	91.7	42.3	591	74.9	333
Savannakhet	87.0	1,784	86.7	40.4	1,553	73.3	855
Saravane	99.7	923	95.4	63.7	921	89.0	658
Sekong	97.3	269	90.7	70.1	261	85.0	215
Champasack	89.5	1,003	96.7	36.9	898	84.1	394
Attapeu	97.7	216	97.5	73.5	211	88.6	175
Residence							
Urban	96.9	2,319	81.3	31.0	2,248	78.0	892
Rural	94.2	8,748	89.0	46.6	8,243	83.5	4,600
..Rural with road	94.3	7,661	90.8	46.1	7,226	84.6	3,939
..Rural without road	93.6	1,086	76.5	49.9	1,017	76.9	661

[1] MICS indicator 3.14,

[2] MICS indicator 3.15; MDG indicator 6.7

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

Table CH.12: Children sleeping under mosquito nets

Percentage of children age 0-59 months who slept under a mosquito net during the previous night, by type of net, Lao PDR 2011-12

	Percentage of children age 0-59 who stayed in the household the previous night	Number of children age 0-59 months	Percentage of children who:		Number of children age 0-59 months who slept in the household the previous night	Percentage of children who slept under an ITN living in households with at least one ITN	Number of children age 0-59 living in households with at least one ITN
			Slept under any mosquito net[1]	Slept under an insecticide treated net[2]			
Age							
0-11 months	95.5	2,307	87.1	41.6	2,203	81.6	1,125
12-23 months	94.8	2,141	87.0	44.3	2,030	84.5	1,063
24-35 months	94.2	2,193	87.7	43.6	2,065	81.3	1,108
36-47 months	94.7	2,302	88.0	43.7	2,180	84.1	1,133
48-59 months	94.7	2,124	87.0	43.0	2,012	81.4	1,063
Mother's education							
None	94.1	3,580	82.9	46.2	3,369	81.8	1,902
Primary	94.3	4,556	92.5	48.2	4,295	85.4	2,424
Lower secondary	96.4	1,613	91.2	35.4	1,555	80.7	683
Upper secondary	96.1	695	79.5	28.3	668	77.5	244
Post secondary non tertiary	98.2	368	82.8	30.8	362	73.6	151
Higher	95.1	255	61.3	23.9	242	66.1	88
Wealth index quintile							
Poorest	93.7	3,233	80.7	49.7	3,029	83.7	1,796
Second	95.4	2,346	91.7	49.0	2,238	86.3	1,270
Middle	94.1	2,019	96.8	47.6	1,899	85.0	1,064
Fourth	94.9	1,807	96.4	38.3	1,715	81.3	808
Richest	96.8	1,663	73.1	23.3	1,609	67.7	554
Ethno-linguistic group of household head							
Lao-Tai	94.9	6,030	90.3	38.4	5,722	80.2	2,741
Mon-Khmer	94.9	3,189	87.0	58.4	3,027	86.5	2,044
Hmong-Mien	93.1	1,439	82.8	33.2	1,339	80.9	550
Chinese-Tibetan	98.3	357	59.8	29.4	351	76.5	135
Other, Missing, DK	97.4	52	86.7	44.5	51	*	23
Total	94.8	11,067	87.4	43.2	10,490	82.6	5,492

[1] MICS indicator 3.14,

[2] MICS indicator 3.15; MDG indicator 6.7

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

Data presented in Table CH. 12 indicate that 87 per cent of children under the age of five slept under a mosquito net the night prior to the survey and 43 per cent slept under an ITN. These findings are similar to levels measured in the 2006 MICS (87 per cent and 41 per cent, respectively). Among children living in households that have an ITN, 83 per cent slept under an ITN the night prior to the survey. There are no gender or age disparities in ITN use among children age under five. Patterns in the use of ITNs across background characteristics shown in Table CH.12 are generally the same as the patterns observed for household possession of an ITN.

Table CH.13: Pregnant women sleeping under mosquito nets

Percentage of pregnant women who slept under a mosquito net during the previous night, by type of net, Lao PDR 2011-12

	Percentage of pregnant wome who stayed in the household the previous night	Number of pregnant women	Percentage of pregnant women who:		Number of pregnant women who slept in the household the previous night	Percentage of pregnant women who slept under an ITN, living in households with at least one ITN	Number of pregnant women living in households with at least one ITN
			Slept under any mosquito net	Slept under an insecticide treated net[1]			
Region							
North	98.5	339	88.5	48.1	334	88.2	182
Central	95.1	547	89.3	32.7	521	73.0	233
South	96.6	274	96.0	57.7	264	85.9	177
Province							
Vientiane Capital	100.0	126	75.5	16.5	126	*	29
Phongsaly	100.0	35	64.8	39.7	35	(82.4)	17
Luangnamtha	100.0	30	86.0	46.9	30	(92.4)	15
Oudomxay	98.3	47	93.1	82.9	46	(94.3)	40
Bokeo	96.5	30	92.5	48.5	29	(89.0)	16
Luangprabang	100.0	80	82.7	51.5	80	(84.2)	49
Huaphanh	94.7	64	95.7	24.7	61	*	18
Xayabury	100.0	53	100.0	45.9	53	(89.1)	27
Xiengkhuang	88.8	42	(87.2)	(18.8)	37	*	12
Vientiane	97.0	84	97.7	26.3	82	(62.9)	34
Borikhamxay	(100.0)	35	(92.3)	(57.5)	35	*	20
Khammuane	96.9	48	97.0	48.5	47	(80.3)	28
Savannakhet	91.4	212	92.7	40.2	193	70.9	110
Saravane	100.0	109	93.4	64.4	109	85.7	82
Sekong	99.4	27	90.7	65.7	27	82.5	21
Champasack	91.9	112	100.0	42.3	103	(86.2)	50
Attapeu	100.0	26	97.1	82.5	26	88.7	24
Residence							
Urban	98.0	239	81.2	32.6	234	81.1	94
Rural	96.0	921	93.2	46.0	884	81.6	499
..Rural with road	95.7	817	94.5	46.2	781	83.1	434
..Rural without road	99.0	104	83.4	44.6	103	71.5	64

[1] **MICS indicator 3.19**

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

Table CH.13: Pregnant women sleeping under mosquito nets

Percentage of pregnant women who slept under a mosquito net during the previous night, by type of net, Lao PDR 2011-12

	Percentage of pregnant wome who stayed in the household the previous night	Number of pregnant women	Percentage of pregnant women who:		Number of pregnant women who slept in the household the previous night	Percentage of pregnant women who slept under an ITN, living in households with at least one ITN	Number of pregnant women living in households with at least one ITN
			Slept under any mosquito net	Slept under an insecticide treated net[1]			
Age							
15-19	96.0	228	89.8	42.1	219	78.2	118
20-24	95.4	343	91.8	45.2	327	87.5	169
25-29	97.5	289	90.9	41.9	282	78.1	151
30-34	96.0	187	88.3	43.2	179	79.5	97
35-39	97.8	84	93.3	43.2	82	(83.2)	43
40-44	*	24	*	*	24	*	11
45-49	*	5	*	*	5	*	2
Education							
None	96.0	303	89.0	49.7	291	86.6	167
Primary	96.7	481	93.5	49.1	465	81.6	279
Lower secondary	93.1	181	93.4	31.8	169	83.3	65
Upper secondary	100.0	90	87.1	30.1	90	(68.2)	40
Post secondary non tertiary	99.1	58	83.2	30.6	58	(71.4)	25
Higher	(100.0)	46	(78.2)	(25.8)	46	*	17
Wealth index quintile							
Poorest	98.1	278	89.4	54.5	273	89.4	166
Second	96.9	243	89.7	48.1	236	84.2	134
Middle	95.1	205	97.9	49.1	195	81.6	117
Fourth	93.9	244	98.1	37.3	229	75.3	113
Richest	98.1	189	76.9	21.6	186	65.6	61
Ethno-linguistic group of household head							
Lao-Tai	96.1	684	92.1	37.1	657	75.0	325
Mon-Khmer	97.7	307	91.2	60.6	300	89.8	202
Hmong-Mien	94.7	123	90.7	31.1	116	(86.6)	42
Chinese-Tibetan	96.8	34	60.8	42.7	33	(88.7)	16
Other, Missing, DK	*	13	*	*	13	*	7
Total	96.4	1,160	90.7	43.2	1,118	81.5	593

[1] **MICS indicator 3.19**

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

Table CH.13 presents shows that 91 per cent of pregnant women slept under a mosquito net during the night prior to the survey, and 43 per cent of pregnant women slept under an ITN. Patterns in the use of ITNs by pregnant women across background characteristics are very similar to the patterns observed for household possession of ITNs and use of ITNs by children age under five. There is a great deal of variability across provinces, and the lowest usage is among the highest educated and highest wealth quintile.

Questions on the prevalence and treatment of fever were asked of mothers and caretakers for all children under the age of five. Fourteen per cent of children under five were ill with fever in the two weeks prior to the survey (Table CH.14). The prevalence of fever is highest among children age 12-23 months (18 per cent) and ranges across the provinces from 4 per cent in Champasack to 23 per cent in Khammuane.

Table CH.14: Anti-malarial treatment of children with anti-malarial drugs

Percentage of children age 0-59 months who had fever in the last two weeks who received anti-malarial drugs, Lao PDR 2011-12

			Children with a fever in the last two weeks who were treated with:																
			Anti-malarials:								Other medications:								
	Had a fever in last two weeks	Number of children age 0-59 months	SP/ Fansidar	Chloroquine	Amodia-quine	Quinine	Coartem (Combination with artemisinin)	Artesunate	Other anti-malarial	Any anti-malarial drug[1]	Antibiotic pill or syrup	Antibiotic injection	Paracet-amol/ Panadol/ Acetamin-ophen	Aspirin	Ibuprofen	Other	Missing/ DK	Percentage who took an anti-malarial drug same or next day[2]	Number of children with fever in last two weeks
Sex																			
Male	14.7	5,593	0.6	0.6	0.2	0.3	0.0	0.0	0.3	1.4	22.3	5.0	64.7	2.0	0.9	13.8	1.3	0.5	821
Female	13.6	5,474	0.7	0.9	0.7	0.0	0.3	0.0	1.3	2.4	20.5	4.3	65.9	1.4	0.6	11.1	0.8	1.8	746
Region																			
North	16.9	3,502	0.6	0.7	0.5	0.2	0.0	0.0	0.8	1.9	19.3	6.6	70.5	1.9	0.4	10.2	1.7	1.3	590
Central	16.2	5,154	0.7	0.8	0.4	0.2	0.2	0.0	0.7	1.8	22.2	3.7	61.2	1.9	1.2	15.1	0.8	1.0	834
South	5.9	2,411	0.5	0.2	0.0	0.0	0.6	0.0	0.8	2.1	26.1	2.4	67.6	0.2	0.0	7.3	0.0	1.5	143
Province																			
Vientiane Capital	22.2	1,058	0.9	1.9	1.6	0.0	0.0	0.0	1.9	2.5	34.1	3.5	61.9	0.5	1.4	12.4	2.0	2.5	234
Phongsaly	15.0	368	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	9.2	0.0	54.4	0.0	0.0	36.9	3.5	1.0	55
Luangnamtha	5.1	280	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	14
Oudomxay	21.5	676	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6	5.0	62.0	0.6	0.0	5.2	0.0	0.0	145
Bokeo	20.4	335	0.8	0.8	0.8	0.0	0.0	0.0	0.0	1.6	14.9	0.0	61.7	2.4	0.0	8.1	0.8	0.0	68
Luangprabang	16.2	752	1.9	1.0	1.9	0.0	0.0	0.0	3.9	5.8	19.4	19.6	83.9	2.7	1.9	12.8	1.9	4.9	122
Huaphanh	20.4	606	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.7	11.8	1.6	75.7	0.0	0.0	6.7	3.2	0.7	124
Xayabury	12.7	486	0.0	1.9	0.0	1.9	0.0	0.0	0.0	1.9	42.5	9.4	82.4	8.7	0.0	1.7	1.9	0.0	62
Xiengkhuang	11.7	540	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	1.3	82.2	0.0	0.0	31.0	0.0	0.0	63
Vientiane	11.5	767	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.4	20.3	1.6	49.3	1.6	5.5	8.5	1.4	0.0	88
Borikhamxay	5.1	402	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(41.6)	(12.4)	(67.0)	(4.1)	(8.2)	(16.6)	(0.0)	(0.0)	20
Khammuane	23.0	603	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.5	8.6	58.6	0.7	0.0	20.0	0.7	0.0	139
Savannakhet	16.2	1,784	1.3	0.7	0.0	0.6	0.6	0.0	0.0	2.6	13.4	2.2	60.5	3.9	0.0	13.3	0.0	0.8	288
Saravane	4.1	923	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(37.6)	(6.5)	(66.8)	(0.0)	(0.0)	(6.0)	(0.0)	(0.0)	38
Sekong	12.5	269	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	31.9	0.0	63.6	0.0	0.0	6.4	0.0	0.0	34
Champasack	4.2	1,003	(1.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(2.8)	(4.4)	(24.2)	(0.0)	(57.0)	(0.0)	(0.0)	(13.2)	(0.0)	(4.4)	43
Attapeu	13.3	216	0.0	0.0	0.0	0.0	2.9	0.0	0.0	2.9	7.0	3.2	89.4	1.2	0.0	1.2	0.0	1.0	29
Residence																			
Urban	15.8	2,319	0.5	0.0	0.4	0.5	0.5	0.0	0.7	2.0	29.6	4.8	62.8	2.7	1.5	16.6	1.1	1.0	366
Rural	13.7	8,748	0.7	0.9	0.4	0.1	0.1	0.0	0.8	1.8	19.0	4.6	66.0	1.4	0.6	11.3	1.1	1.2	1,201
..Rural with road	13.5	7,661	0.6	0.9	0.4	0.1	0.1	0.0	0.9	1.7	20.9	5.2	68.0	1.6	0.6	11.1	0.8	1.2	1,032
..Rural without road	15.6	1,086	1.1	1.2	0.7	0.0	0.0	0.0	0.0	2.3	7.3	1.2	54.4	0.6	0.0	12.6	2.4	1.1	169

[1] MICS indicator 3.18; MDG indicator 6.8

[2] MICS indicator 3.17

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

Table CH.14: Anti-malarial treatment of children with anti-malarial drugs

Percentage of children age 0-59 months who had fever in the last two weeks who received anti-malarial drugs, Lao PDR 2011-12

			Children with a fever in the last two weeks who were treated with:																
			Anti-malarials:								Other medications:								
	Had a fever in last two weeks	Number of children age 0-59 months	SP/ Fansidar	Chloroquine	Amodia-quine	Quinine	Coartem (Combination with artemisinin)	Artesunate	Other anti-malarial	Any anti-malarial drug[1]	Antibiotic pill or syrup	Antibiotic injection	Paracet-amol/ Panadol/ Acetamin-ophen	Aspirin	Ibuprofen	Other	Missing/ DK	Percentage who took an anti-malarial drug same or next day[2]	Number of children with fever in last two weeks
Age																			
0-11 months	13.3	2,307	0.6	0.0	0.8	0.0	0.0	0.0	0.0	1.0	17.5	1.6	58.4	3.0	0.7	10.8	0.6	1.0	308
12-23 months	18.1	2,141	0.9	0.0	0.4	0.4	0.0	0.0	0.0	0.9	23.8	2.9	66.8	1.4	1.4	12.7	0.9	0.3	388
24-35 months	14.2	2,193	0.7	0.7	0.0	0.0	0.7	0.0	1.1	1.8	22.1	7.1	67.6	1.9	0.6	11.0	1.3	1.1	310
36-47 months	14.3	2,302	0.0	2.2	0.7	0.3	0.1	0.0	2.1	3.4	20.5	5.3	62.1	1.3	0.8	15.8	1.5	1.5	328
48-59 months	11.0	2,124	1.2	0.7	0.0	0.0	0.0	0.0	0.5	2.5	23.3	7.5	73.3	1.1	0.0	11.9	1.1	2.3	233
Mother's education																			
None	13.6	3,580	0.8	0.8	0.4	0.0	0.1	0.0	0.0	1.7	13.3	3.4	64.1	2.0	0.5	9.0	1.4	0.9	486
Primary	14.7	4,556	0.1	0.4	0.2	0.2	0.3	0.0	0.9	1.8	22.3	6.6	66.8	1.6	0.5	11.5	1.0	1.2	670
Lower secondary	13.0	1,613	2.7	1.0	0.6	0.8	0.0	0.0	1.6	3.2	28.7	3.6	63.3	0.9	0.5	22.9	0.4	1.9	210
Upper secondary	15.7	695	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9	0.8	60.6	3.8	3.8	10.2	2.7	0.0	109
Post secondary non tertiary	11.9	368	(0.0)	(5.2)	(5.2)	(0.0)	(0.0)	(0.0)	(5.2)	(5.2)	(32.7)	(0.0)	(66.2)	(0.8)	(0.0)	(14.8)	(0.0)	(5.2)	44
Higher	18.5	255	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(46.9)	(8.7)	(74.2)	(0.0)	(2.4)	(21.3)	(0.0)	(0.0)	47
Wealth index quintile																			
Poorest	14.5	3,233	0.7	0.1	0.3	0.0	0.2	0.0	0.0	1.0	13.2	4.2	64.2	1.4	0.0	6.3	0.8	0.8	469
Second	13.0	2,346	0.6	0.4	0.6	0.0	0.0	0.0	0.8	1.7	17.3	6.5	68.9	1.4	0.4	14.3	0.5	1.0	305
Middle	12.8	2,019	1.1	2.3	0.0	0.4	0.0	0.0	1.8	3.4	23.3	4.6	70.2	1.9	0.8	14.0	1.7	2.2	259
Fourth	13.9	1,807	0.3	0.5	0.0	0.0	0.7	0.0	1.0	1.9	26.8	5.8	66.0	2.2	1.3	18.4	1.6	0.7	251
Richest	17.0	1,663	0.6	0.8	1.3	0.6	0.0	0.0	0.8	1.9	33.2	2.6	58.0	2.1	2.0	14.4	1.0	1.3	283
Ethno-linguistic group of household head																			
Lao-Tai	13.5	6,030	0.3	0.4	0.5	0.3	0.2	0.0	0.9	1.7	27.4	3.9	66.1	2.0	1.2	15.7	1.0	0.8	816
Mon-Khmer	16.0	3,189	1.1	0.8	0.6	0.0	0.2	0.0	0.5	2.3	15.7	7.4	63.7	1.5	0.2	6.8	0.7	1.5	511
Hmong-Mien	13.0	1,439	1.2	1.6	0.0	0.0	0.0	0.0	1.2	1.6	14.1	1.8	71.3	1.6	0.7	11.8	1.6	1.6	186
Chinese-Tibetan	13.3	357	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.2	6.5	0.0	46.6	0.0	0.0	23.8	2.5	1.2	48
Other, Missing, DK	12.1	52	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6
Total	14.2	11,067	0.7	0.7	0.4	0.2	0.2	0.0	0.7	1.9	21.5	4.7	65.3	1.7	0.8	12.5	1.1	1.2	1,567

[1] **MICS indicator 3.18; MDG indicator 6.8**

[2] **MICS indicator 3.17**

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

Mothers were asked to report what medicines were given to a child with fever, including medicines given at home and medicines given or prescribed at a health facility. Only 2 per cent of children with fever in the two weeks prior to the survey were treated with an anti-malarial drug, and only 1 per cent received an anti-malarial drug either on the same day or the day after the onset of symptoms.

The anti-malarial drugs include chloroquine, amodiaquine, quinine, Fansidar or sulfadoxine-pyrimethamine (SP), artimisinin combination drugs (Coartem), and artesunate. The first-line medication for treatment of malaria in Lao PDR is Coartem and artesunate. One per cent of children with fever were given chloroquine and 1 per cent were given SP/Fansidar. Less than 1 per cent received any other type of anti-malarial. Two-thirds of children with fever (65 per cent) were given acetaminophen, Paracetemol or Panadol. One in four children with fever were given an antibiotic.

Table CH.15: Malaria diagnostics usage

Percentage of children age 0-59 months who had a fever in the last two weeks and who had a finger or heel stick for malaria testing, Lao PDR 2011-12

	Had a finger or heel stick[1]	Number of children age 0-59 months with fever in the last two weeks
Sex		
Male	9.0	821
Female	9.2	746
Region		
North	7.3	590
Central	10.0	834
South	11.4	143
Province		
Vientiane Capital	12.6	234
Phongsaly	4.7	55
Luangnamtha	*	14
Oudomxay	5.0	145
Bokeo	6.4	68
Luangprabang	11.3	122
Huaphanh	3.7	124
Xayabury	16.3	62
Xiengkhuang	1.9	63
Vientiane	5.8	88
Borikhamxay	(4.1)	20
Khammuane	5.2	139
Savannakhet	13.6	288
Saravane	(0.0)	38
Sekong	8.7	34
Champasack	(23.3)	43
Attapeu	11.8	29
Residence		
Urban	12.3	366
Rural	8.1	1,201
..Rural with road	8.5	1,032
..Rural without road	6.1	169

	Had a finger or heel stick[1]	Number of children age 0-59 months with fever in the last two weeks
Age		
0-11 months	5.7	308
12-23 months	8.8	388
24-35 months	7.6	310
36-47 months	9.5	328
48-59 months	15.7	233
Mother's education		
None	7.9	486
Primary	9.6	670
Lower secondary	6.4	210
Upper secondary	14.8	109
Post secondary non	(2.3)	44
Higher	(19.6)	47
Wealth index quintile		
Poorest	7.2	469
Second	9.7	305
Middle	8.0	259
Fourth	11.0	251
Richest	11.1	283
Ethno-linguistic group of household head		
Lao-Tai	11.5	816
Mon-Khmer	7.8	511
Hmong-Mien	2.0	186
Chinese-Tibetan	6.6	48
Other, Missing, DK	*	6
Total	9.1	1,567

[1] **MICS indicator 3.16**

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

Table CH.15 presents the percentage of children age under five who had a fever in the two weeks prior to the survey and who had a finger or heel stick to test for malaria. Nine percent of children with a fever had a finger or heel stick (12 per cent in urban areas and 8 per cent in rural areas). Boys and girls with fever are tested in similar proportions. The percentage of children who had a finger or heel stick to test for malaria is higher than the national average in Luangprabang, Attapeu, Vientiane Capital, Savannakhet, Xayabury and Champasack provinces. A higher percentage of four year-old children (16 per cent) are tested for malaria than younger children (ranging from 6 per cent to 10 per cent). Children in Hmong-Mien headed households have the lowest prevalence malaria testing (2 per cent).

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X. Nutrition

Nutritional Status

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

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

There is a reference distribution of height and weight for children age under five in a well-nourished population. Under-nourishment in a population can be gauged by comparing children to a reference population. The reference population used in this report is based on the WHO growth standards.[1] Each of the three nutritional status indicators can be expressed in standard deviation units ('z-scores') from the median of the reference population (the nutritional status indicators were also calculated based on the formerly used 1977 NCHS/CDC/WHO reference population, and are shown in Table NU.A1 at the end of this chapter).

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

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

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

In the LSIS, the weights and heights of all children under 5 years of age were measured using anthropometric equipment recommended by international standards for household-based surveys. Findings in this section are based on the results of these measurements.

Table NU.1 shows the percentages of children classified into each of the above described categories, based on the anthropometric measurements taken during field work. The table also includes the mean z-scores for each of the three anthropometric indicators, and the percentage of children who are overweight.

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

Table NU.1: Nutritional status of children

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Lao PDR 2011-12

	Weight for age				Height for age				Weight for height				
	Underweight				Stunted				Wasted		Overweight		
	Percent below - 2 SD[1]	- 3 SD[2]	Mean Z-Score (SD)	Number of children under age 5	Percent below - 2 SD[3]	- 3 SD[4]	Mean Z-Score (SD)	Number of children under age 5	Percent below - 2 SD[5]	- 3 SD[6]	Percent above + 2 SD	Mean Z-Score (SD)	Number of children under age 5
Sex													
Male	26.7	6.9	-1.3	5,473	45.7	19.9	-1.8	5,359	6.4	1.3	2.0	-0.4	5,394
Female	26.4	7.5	-1.3	5,341	42.6	17.6	-1.7	5,259	5.4	1.5	2.1	-0.4	5,277
Region													
North	26.2	7.4	-1.3	3,452	51.4	22.5	-2.0	3,387	5.3	1.7	2.6	-0.2	3,415
Central	23.1	5.9	-1.2	5,023	38.1	15.5	-1.6	4,934	5.4	1.2	2.2	-0.4	4,941
South	34.7	9.7	-1.5	2,339	46.6	20.3	-1.9	2,297	7.9	1.3	0.9	-0.7	2,315
Province													
Vientiane Capital	16.3	2.2	-0.8	1,003	19.3	3.6	-0.9	980	7.2	0.9	2.2	-0.4	982
Phongsaly	34.1	15.6	-1.6	359	61.1	36.6	-2.5	340	5.1	1.8	4.3	-0.1	349
Luangnamtha	40.4	16.9	-1.7	280	53.2	29.2	-1.9	268	21.2	9.2	5.0	-0.7	273
Oudomxay	28.7	7.0	-1.4	667	54.9	28.0	-2.1	660	4.6	1.3	2.7	-0.3	666
Bokeo	23.7	4.3	-1.3	327	46.0	18.7	-1.8	325	4.7	1.6	1.6	-0.3	325
Luangprabang	19.8	4.7	-1.2	742	45.6	15.6	-1.8	739	3.1	0.6	1.4	-0.2	738
Huaphanh	23.5	4.6	-1.4	597	61.1	23.7	-2.3	590	1.9	0.1	1.7	0.0	591
Xayabury	23.2	5.8	-1.2	481	39.0	12.8	-1.6	466	5.5	1.9	3.7	-0.2	473
Xiengkhuang	19.9	4.0	-1.1	529	52.9	21.7	-2.0	520	2.0	0.7	3.1	0.1	523
Vientiane	18.9	3.4	-1.1	744	42.6	18.9	-1.8	738	4.6	1.2	4.3	-0.2	729
Borikhamxay	19.8	4.3	-1.1	395	40.8	16.1	-1.6	391	6.2	1.5	2.9	-0.3	385
Khammuane	29.4	7.3	-1.4	599	40.8	14.2	-1.6	595	7.1	1.3	0.7	-0.7	600
Savannakhet	28.2	9.6	-1.4	1,752	40.8	19.1	-1.7	1,710	5.0	1.5	1.3	-0.5	1,722
Saravane	41.2	13.8	-1.7	906	54.4	26.9	-2.1	882	8.6	1.6	1.3	-0.7	887
Sekong	46.0	14.9	-1.9	258	62.7	36.8	-2.5	252	7.3	1.1	1.7	-0.5	257
Champasack	26.3	4.7	-1.3	970	36.7	11.5	-1.5	960	6.8	0.9	0.4	-0.6	966
Attapeu	32.0	8.5	-1.5	204	39.7	12.7	-1.6	203	10.6	1.9	0.8	-0.8	205
Residence													
Urban	16.1	2.9	-0.9	2,263	27.4	8.3	-1.2	2,213	5.4	1.4	2.3	-0.3	2,214
Rural	29.3	8.3	-1.4	8,551	48.6	21.5	-1.9	8,405	6.1	1.4	2.0	-0.4	8,457
..Rural with road	29.0	7.9	-1.4	7,491	47.8	20.5	-1.9	7,364	6.1	1.4	2.0	-0.4	7,400
..Rural without road	31.6	11.3	-1.6	1,061	53.8	28.4	-2.1	1,042	5.7	1.3	2.2	-0.4	1,057

[1] MICS indicator 2.1a and MDG indicator 1.8

[2] MICS indicator 2.1b

[3] MICS indicator 2.2a, [4] MICS indicator 2.2b

[5] MICS indicator 2.3a, [6] MICS indicator 2.3b

Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used 1977 NCHS/CDC/WHO Reference.

Note: For Luang Namtha, the figures of Weight-for-Age, Height-for-Age and Weight-for-Height, including wasting and overweight, should be interpreted with caution due to extreme heaping of values for height and weight

Table NU.1: Nutritional status of children

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Lao PDR 2011-12

	Weight for age				Height for age				Weight for height				
	Underweight				Stunted				Wasted		Overweight		
	Percent below		Mean Z-Score (SD)	Number of children under age 5	Percent below		Mean Z-Score (SD)	Number of children under age 5	Percent below		Percent above	Mean Z-Score (SD)	Number of children under age 5
	- 2 SD[1]	- 3 SD[2]			- 2 SD[3]	- 3 SD[4]			- 2 SD[5]	- 3 SD[6]	+ 2 SD		
Age													
0-5 months	12.7	5.4	-0.6	1,146	20.0	8.8	-0.8	1,116	6.4	2.2	7.3	0.1	1,093
6-11 months	18.1	3.9	-1.0	1,109	23.0	7.6	-1.1	1,089	8.0	1.7	1.8	-0.5	1,106
12-23 months	25.5	7.2	-1.3	2,091	44.0	18.5	-1.8	2,044	6.8	1.7	1.6	-0.5	2,076
24-35 months	30.5	10.1	-1.5	2,139	50.8	22.7	-2.0	2,086	7.4	1.9	1.5	-0.4	2,104
36-47 months	30.3	7.1	-1.5	2,256	52.0	23.4	-2.1	2,228	4.4	0.9	1.4	-0.4	2,235
48-59 months	31.7	7.1	-1.6	2,073	53.5	21.4	-2.1	2,056	3.9	0.5	1.1	-0.4	2,058
Mother's education													
None	35.0	12.0	-1.6	3,492	57.9	29.9	-2.2	3,413	5.8	1.6	2.2	-0.4	3,462
Primary	26.2	6.3	-1.3	4,467	43.2	17.7	-1.8	4,390	5.9	1.1	1.9	-0.4	4,410
Lower secondary	20.3	3.4	-1.1	1,575	34.0	8.6	-1.4	1,554	6.7	1.8	1.8	-0.4	1,542
Upper secondary	12.8	2.1	-0.9	675	23.1	3.9	-1.1	667	5.1	0.9	1.7	-0.3	667
Post secondary non tertiary	17.5	1.8	-1.0	363	28.7	8.2	-1.2	359	6.2	1.9	3.3	-0.4	357
Higher	4.2	0.0	-0.6	243	15.0	2.3	-0.8	236	4.8	0.8	3.2	-0.3	233
Wealth index quintile													
Poorest	36.5	12.0	-1.7	3,173	60.6	31.8	-2.3	3,111	6.4	1.3	2.0	-0.4	3,144
Second	29.6	9.0	-1.4	2,309	50.2	21.7	-1.9	2,253	6.4	1.6	2.5	-0.4	2,280
Middle	25.2	5.3	-1.3	1,971	41.9	14.3	-1.7	1,945	5.8	1.6	1.7	-0.4	1,950
Fourth	19.4	3.5	-1.1	1,758	31.7	10.1	-1.4	1,732	5.2	1.5	2.0	-0.4	1,730
Richest	12.1	1.6	-0.8	1,604	19.7	3.9	-1.0	1,577	5.1	1.0	2.1	-0.3	1,568
Ethno-linguistic group of household head													
Lao-Tai	21.5	4.5	-1.1	5,890	33.4	10.2	-1.4	5,804	6.1	1.3	1.5	-0.5	5,798
Mon-Khmer	36.7	11.6	-1.6	3,127	55.5	28.8	-2.2	3,055	6.5	1.4	1.9	-0.5	3,102
Hmong-Mien	21.3	5.5	-1.2	1,396	60.5	28.0	-2.2	1,376	2.2	0.9	4.3	0.1	1,380
Chinese-Tibetan	42.8	20.4	-1.8	351	60.9	37.6	-2.4	333	13.1	6.3	3.3	-0.4	341
Other, Missing, DK	24.4	2.0	-1.3	51	45.2	15.0	-1.6	50	3.9	0.0	4.9	-0.4	51
Total	26.6	7.2	-1.3	10,814	44.2	18.8	-1.8	10,618	5.9	1.4	2.0	-0.4	10,671

[1] MICS indicator 2.1a and MDG indicator 1.8

[2] MICS indicator 2.1b

[3] MICS indicator 2.2a, [4] MICS indicator 2.2b

[5] MICS indicator 2.3a, [6] MICS indicator 2.3b

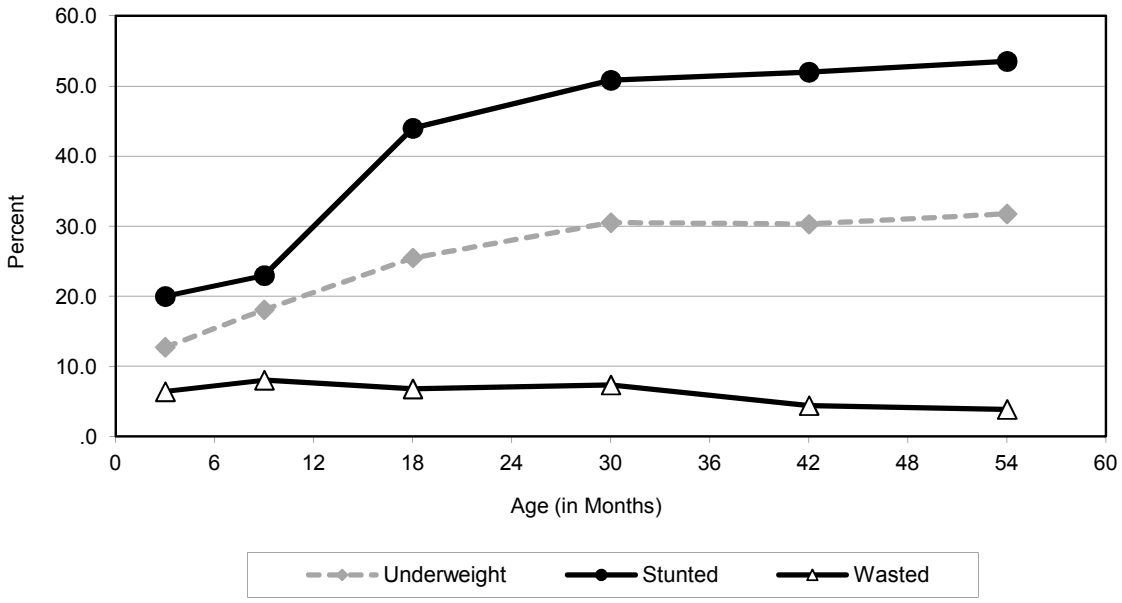
Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used 1977 NCHS/CDC/WHO Reference.

Note: For Luang Namtha, the figures of Weight-for-Age, Height-for-Age and Weight-for-Height, including wasting and overweight, should be interpreted with caution due to extreme heaping of values for height and weight

Children whose full birth date (month and year) were not obtained, and children whose measurements were outside a plausible range, are excluded from Table NU.1. Children were also excluded from one or more of the anthropometric indicators when their weight and/or height have not been measured, whichever is applicable. For example, children who have been weighed but not measured are included in underweight calculations, but not in the calculations for stunting and wasting. The percentages of children according to age and reasons for exclusion are shown in data quality tables DQ.6 and DQ.7. Incompleteness of date reporting is a reason for being excluded from analysis for only a trivial number of cases (0.1 per cent). In total, 97 per cent of children had both their weights and heights measured (Table DQ.7). Whether due to incomplete dates of birth, implausible measurements, or missing weight and/or height data, 2 per cent of children were excluded from calculations of the weight-for-age indicator, 4 per cent were excluded from the height-for-age indicator, and 4 per cent were excluded from the weight-for-height indicator.

One in four children in Lao PDR under the age of five years is moderately underweight (27 per cent) and 7 per cent are severely underweight (Table NU.1). Almost one half of children (44 per cent) are moderately stunted (too short for their age) and 19 per cent are severely stunted. Six per cent of children are moderately wasted (too thin for their height), and 1 per cent are severely wasted.

Figure NU.1: Percentage of children under age 5 who are underweight, stunted and wasted, Lao PDR 2011-12



The highest rates of underweight (35 per cent) and wasting (8 per cent) is found among children in the Southern region. Children in the Northern and Southern regions exhibit a higher prevalence of stunting (51 per cent and 47 per cent, respectively) than children in the Central region (38 per cent). Occurrence of underweight children in urban and rural areas is also notably different (16 per cent and 29 per cent, respectively). High proportions of children are severely underweight in Phongsaly (16 per cent), Luangnamtha (17 per cent), Saravane (14 per cent) and Sekong (15 per cent) – all double the national prevalence of severe underweight. High proportions (more than one in four children) are severely stunted in Phongsaly (37 per cent), Luangnamtha (29 per cent), Oudomxay (28 per cent), Saravane (27 per cent) and Sekong (37 per cent). The prevalence of wasting is especially high in Luangnamtha, where one in five children are either moderately or severely wasted.

The percentage of children who are underweight and stunted increases dramatically and steadily with the decreasing education level of the mother; as many as 35 per cent of children whose mothers have no education are underweight and 58 per cent are stunted. Similarly, as many as 37 per cent of children from the poorest quintile are underweight and 61 per cent are stunted.

Equal proportions of boys and girls are underweight, stunted and wasted. The proportion of underweight and stunted children in Chinese-Tibetan headed households is much higher than the national average (20 per cent severely underweight and 38 per cent severely stunted).

The age pattern of malnutrition shows an increasing prevalence of underweight and stunted children, especially among those age 6-35 months (Figure NU.1). The percentage of children who are underweight and stunted tends to level out after 36 months of age. This age pattern for malnutrition might be related to low levels of knowledge of appropriate young child feeding practices. With increasing age, many children cease to be breastfed, and with the introduction of complementary foods, may be exposed to contaminants from water, food and the environment.

Breastfeeding and Infant and Young Child Feeding

Breast milk contains the perfect combination of proteins, carbohydrates and fats to enhance infant growth and brain development. It also contains antibodies to protect against infection, and thus can help reduce death from common childhood illnesses, including diarrhoea and pneumonia. It is free from contaminants, contains enough water to be sufficient in the hottest climates, costs nothing, and results in infants being less prone to diabetes, heart disease, eczema, asthma and allergic disorders.

WHO and UNICEF recommend the following infant feeding practices:

- Exclusive breastfeeding for the first six months
- Continued breastfeeding for two years or more
- Safe, appropriate and adequate complementary foods beginning at 6 months
- Frequency of complementary feeding: twice per day for 6-8 month olds; three times per day for 9-11 month olds

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

The indicators related to recommended child feeding practices are as follows:

- Ever breastfed
- Early initiation of breastfeeding (within 1 hour of birth)
- Exclusive breastfeeding (< 6 months)
- Predominant breastfeeding (< 6 months)
- Continued breastfeeding (at 1 year and at 2 years)
- Duration of breastfeeding
- Age-appropriate breastfeeding (0-23 months)
- Introduction of solid, semi-solid or soft foods (6-8 months)
- Minimum meal frequency (6-23 months)
- Milk feeding frequency for non-breastfeeding children (6-23 months)
- Bottle feeding (0-23 months)

Table NU.2: Initial breastfeeding

Percentage of last-born children in the 2 years preceding the survey who were ever breastfed, percentage who were breastfed within one hour of birth and within one day of birth, and percentage who received a prelacteal feed, Lao PDR 2011-12

	Percentage who were ever breastfed[1]	Percentage who were first breastfed:		Percentage who received a prelacteal feed	Number of last-born children in the two years preceding the survey
		Within one hour of birth[2]	Within one day of birth		
Region					
North	95.8	42.8	80.1	13.8	1,377
Central	96.0	36.1	65.7	43.9	1,989
South	94.6	39.7	66.6	40.6	940
Province					
Vientiane Capital	95.2	45.9	76.8	37.7	415
Phongsaly	96.9	60.4	86.1	14.1	148
Luangnamtha	96.1	35.3	88.5	13.3	99
Oudomxay	96.1	22.2	56.9	16.0	266
Bokeo	96.1	41.0	79.4	22.7	141
Luangprabang	95.4	44.9	81.0	19.8	280
Huaphanh	93.0	36.4	84.3	8.7	237
Xayabury	97.9	66.4	95.9	3.0	205
Xiengkhuang	95.9	58.9	78.0	7.3	200
Vientiane	98.1	51.3	87.7	24.7	295
Borikhamxay	97.4	23.8	91.0	48.5	162
Khammuane	94.0	30.0	48.3	69.5	233
Savannakhet	96.0	21.9	45.8	56.8	683
Saravane	95.2	54.5	74.3	23.9	361
Sekong	96.3	44.0	70.2	12.8	99
Champasack	92.8	23.3	57.9	58.4	397
Attapeu	98.6	48.7	69.8	61.4	83
Residence					
Urban	94.6	46.7	77.0	33.5	957
Rural	95.9	36.9	68.6	33.6	3,349
..Rural with road	96.0	37.7	69.5	32.5	2,928
..Rural without road	95.4	30.8	62.3	41.4	421
Months since last birth					
0-11 months	96.4	39.4	69.4	34.2	2,170
12-23 months	96.9	39.3	73.1	33.7	2,004
Assistance at delivery					
Skilled attendant	96.3	48.1	78.6	32.8	1,789
Traditional birth attendant	97.3	32.2	61.3	54.2	513
Other	97.6	33.9	67.6	30.0	1,795
No one/Missing	68.9	22.9	48.7	20.9	209
Place of delivery					
Public sector health facility	96.2	48.7	78.9	31.3	1,578
Private sector health facility	(100.0)	(48.9)	(77.0)	(49.2)	37
Home	97.3	33.9	67.1	36.1	2,518
Other/Missing	66.1	23.7	42.3	14.0	173
Mother's education					
None	96.2	31.1	63.2	33.6	1,248
Primary	95.3	37.8	69.7	34.8	1,763
Lower secondary	96.4	46.1	79.4	30.6	693
Upper secondary	92.4	49.0	75.1	35.2	334
Post secondary non tertiary	97.6	50.9	83.0	25.7	146
Higher	96.7	56.6	78.2	37.2	122
Wealth index quintile					
Poorest	95.7	32.0	64.9	29.7	1,178
Second	97.0	35.0	65.8	35.3	927
Middle	95.0	39.1	71.9	32.0	810
Fourth	95.6	46.3	77.5	37.2	707
Richest	94.4	49.1	77.5	36.1	684
Ethno-linguistic group of household head					
Lao-Tai	94.7	41.6	71.0	39.5	2,401
Mon-Khmer	96.6	33.7	63.4	32.7	1,213
Hmong-Mien	97.1	34.2	78.6	14.7	530
Chinese-Tibetan	96.6	54.6	88.3	9.3	140
Other, Missing, DK	*	*	*	*	21
Total	95.6	39.1	70.5	33.6	4,306

[1] **MICS indicator 2.4**

[2] **MICS indicator 2.5**

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

Table NU.2 shows the percentage of children born in the two years preceding the survey who were ever breastfed, and the percentage who were first breastfed within one hour or within one day of birth. Early initiation of breastfeeding is a very important step in the management of lactation and the establishment of a physical and emotional relationship between the baby and the mother. Thirty-nine per cent of babies in Lao PDR are breastfed for the first time within one hour of birth, while 71 per cent start breastfeeding within one day of birth. These figures do not meet the recommendations for breastfeeding outlined above. The percentage of babies who breastfeed within one day of birth is especially low in Khammuane (48 per cent) and Savannakhet (46 per cent). About one half of babies delivered in a health facility are breastfed within the first hour of birth, compared to only one third of babies delivered at home. Only 3 in 10 babies born to a mother with no education or to mothers in the lowest wealth quintile are breastfed within the first hour of birth. The highest prevalence (55 per cent) of breastfeeding within the first hour of birth is found among children born to Chinese-Tibetan-headed households.

Table NU.2 also presents the percentage of children born in the two years preceding the survey who received a prelacteal feed. A 'prelacteal feed' is any liquid feeding other than breast milk that is given to a baby before breastfeeding is established. WHO and UNICEF discourage the practice of prelacteal feeding as it may discourage the practice of breastfeeding. Women responding to the LSIS were asked whether their baby was given anything to drink other than breast milk within the first three days of being born. One third of babies are given a prelacteal feed. The practice is especially common in some provinces in central and southern Lao PDR, including Khammuane, Savannakhet, Champasack and Attapeu (over 50 per cent), but far less common in the North (14 per cent). The practice of providing prelacteal feeds does not vary across the educational or wealth status of the mother. Mothers who delivered with the assistance of a traditional birth attendant and mothers who delivered in a private sector health facility more commonly reported their babies receiving prelacteal feeds (54 and 49 per cent) than other mothers.

Figure NU.2: Percentage of mothers who started breastfeeding within one hour and within one day of birth, Lao PDR 2012

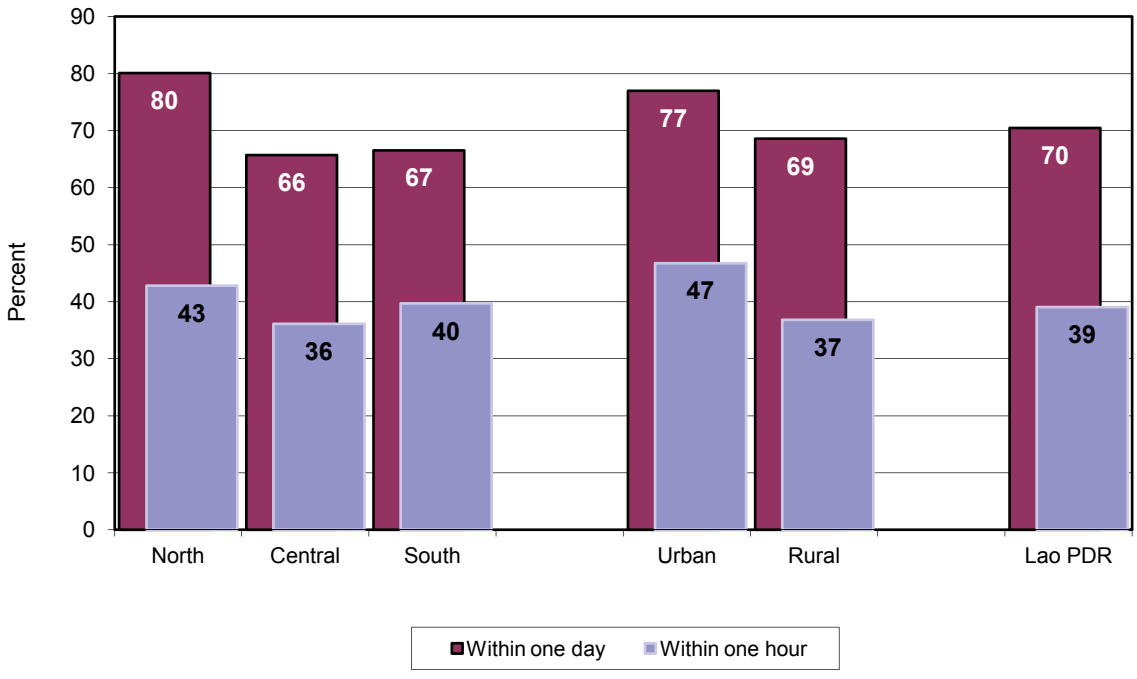


Table NU.3 presents the breastfeeding status of children age under two years, showing rates of exclusive and predominant breastfeeding during the first six months of life, and continued breastfeeding at 12-15 and 20-23 months. Breastfeeding status is based on reports given by mothers and caretakers of children's consumption of food and fluids during the previous day (both day and night). *Exclusive breastfeeding* refers to infants who receive only breast milk and no other fluids or food (babies who receive ORS, vitamins, mineral supplements or medicine are still considered to be exclusively breastfed if they receive no liquid or food other than breast milk). *Predominant breastfeeding* refers to infants who receive breast milk as the predominant source of nourishment. Babies who receive certain fluids (water, water-based drinks, fruit juice, ritual fluids, ORS, drops, vitamins, minerals and medicines) in addition to breast milk are still considered to be predominantly breastfed if they do not receive anything else (such as non-human milk and food-based fluids).

Table NU.3: Breastfeeding

Percentage of living children according to breastfeeding status at selected age groups, Lao PDR 2011-12

	Children age 0-5 months			Children age 12-15 months		Children age 20-23 months	
	Percent exclusively breastfed[1]	Percent predominantly breastfed[2]	Number of children	Percent breastfed (Continued breastfeeding at 1 year)[3]	Number of children	Percent breastfed (Continued breastfeeding at 2 years)[4]	Number of children
Sex							
Male	38.8	66.7	574	73.5	381	43.0	336
Female	42.0	69.8	608	72.4	377	37.0	333
Region							
North	60.5	83.7	355	78.6	259	41.3	200
Central	32.9	65.7	557	67.1	341	34.2	316
South	29.7	53.4	270	76.5	159	50.3	152
Province							
Vientiane Capital	30.5	53.7	119	(58.9)	52	(15.6)	67
Phongsaly	59.7	80.9	38	(70.6)	27	(45.1)	23
Luangnamtha	(73.8)	(89.3)	25	(74.5)	21	(52.2)	16
Oudomxay	61.7	88.7	79	89.0	60	(51.1)	36
Bokeo	41.8	63.7	35	81.9	27	(54.0)	20
Luangprabang	(45.0)	(85.9)	56	(70.6)	45	(47.7)	41
Huaphanh	77.2	82.7	62	(82.2)	44	(35.4)	31
Xayabury	61.7	87.4	59	(72.3)	35	(13.1)	33
Xiengkhuang	73.8	87.8	59	(82.2)	33	(28.9)	31
Vientiane	56.0	83.4	76	58.2	65	(32.2)	48
Borikhamxay	45.0	76.7	45	(60.8)	30	(21.7)	29
Khammuane	13.4	47.0	58	77.2	45	(54.9)	33
Savannakhet	16.5	62.4	201	69.2	116	45.2	108
Saravane	28.0	53.3	102	74.5	57	69.1	66
Sekong	62.3	78.4	27	89.2	24	(58.2)	13
Champasack	20.1	44.4	111	(69.7)	63	(27.0)	63
Attapeu	42.5	65.1	29	(91.7)	16	(61.1)	10
Residence							
Urban	38.2	66.7	239	58.5	169	20.8	161
Rural	41.0	68.7	943	77.2	589	46.1	507
..Rural with road	42.4	68.2	839	77.1	526	44.6	450
..Rural without road	30.1	73.1	104	77.8	63	57.7	57
Mother's education							
None	45.1	75.0	346	85.9	229	58.6	204
Primary	35.0	61.7	459	72.2	312	43.2	260
Lower secondary	44.4	72.4	212	66.1	115	19.8	99
Upper secondary	38.4	60.3	83	58.2	58	11.6	62
Post secondary non tertiary	(40.6)	(75.6)	40	(57.5)	31	*	22
Higher	(45.6)	(73.9)	41	*	13	*	20
Wealth index quintile							
Poorest	46.6	77.1	287	88.3	197	62.0	182
Second	39.7	67.0	273	84.0	165	45.5	124
Middle	41.8	66.5	239	69.4	146	39.3	140
Fourth	36.8	68.3	199	59.3	146	26.0	104
Richest	34.1	58.8	184	51.1	105	13.6	118
Ethno-linguistic group of household head							
Lao-Tai	33.0	61.0	653	61.8	411	27.2	377
Mon-Khmer	38.5	72.4	325	87.0	212	59.3	184
Hmong-Mien	68.0	85.2	166	88.6	105	48.8	78
Chinese-Tibetan	63.1	84.9	34	(74.9)	25	(75.0)	21
Other, Missing, DK	*	*	3	*	4	*	9
Total	40.4	68.3	1,182	73.0	758	40.0	668

[1] **MICS indicator 2.6**

[2] **MICS indicator 2.9**

[3] **MICS indicator 2.7**

[4] **MICS indicator 2.8**

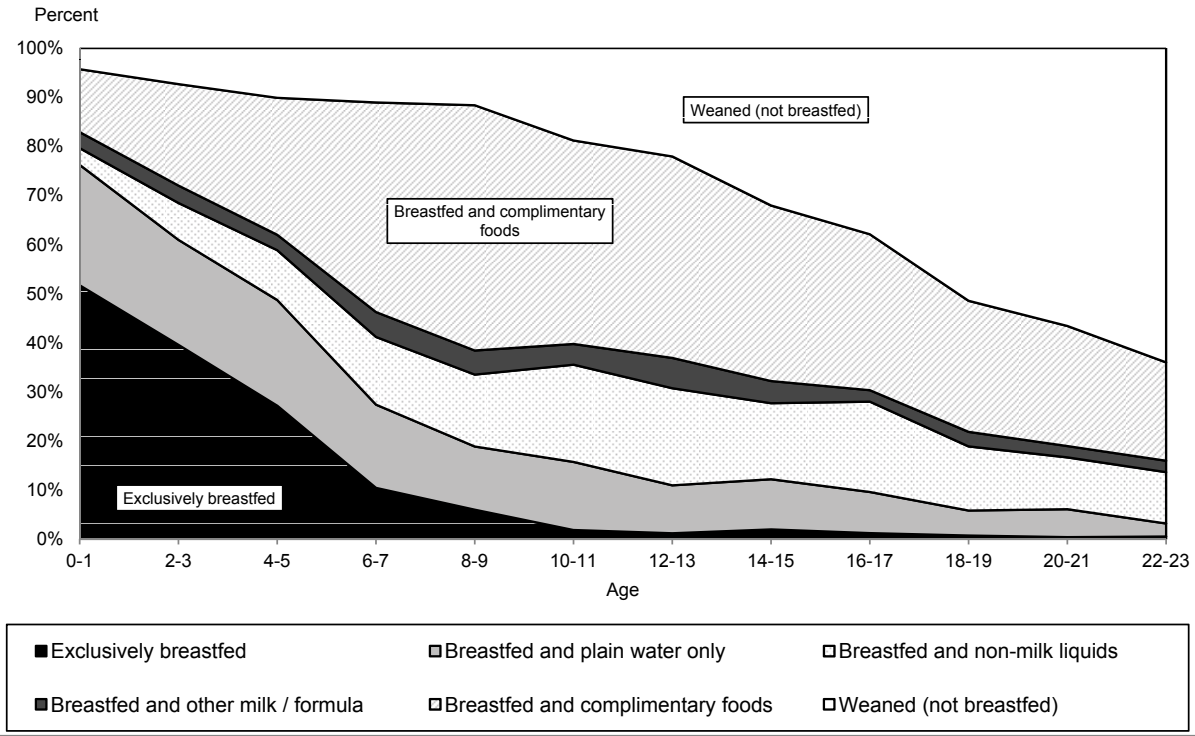
Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

Forty per cent of children age less than six months are exclusively breastfed. While this level is considerably lower than recommended, it indicates wider practice of exclusive breastfeeding than in the recent past, when the 2006 MICS found that only 26 per cent of infants age 0-5 months were exclusively breastfed. The percentage of infants being exclusively breastfed is twice as high in the Northern (61 per cent) as in the Central and Southern regions. The percentage varies greatly by province, from a low of 13 per cent in Khammuane to a high of 77 per cent in Huaphanh.

Nationally, nearly 7 in 10 infants (68 per cent) are being predominantly breastfed. At 12-15 months, 73 per cent of children are still being breastfed and at 20-23 months, 40 per cent are still breastfed. The prevalence of exclusive breastfeeding does not vary greatly by urban and rural residence or by mother's education or wealth quintile.

Figure NU.3 illustrates infant feeding patterns by the age of child in months. Even at the earliest ages, the majority of children are receiving liquid or food other than breast milk. By the end of the sixth month, the percentage of children exclusively breastfed is about 10 per cent. The figure shows food and liquid other than breast milk being introduced far too early, which is harmful to infants' health.

Figure NU.3: Infant feeding patterns by age, Lao PDR 2011-12



The median duration of exclusive breastfeeding is only 2.7 months (Table NU.4). The median duration of children receiving any breastfeeding is 20 months, and the median falls with rising education of the mother and rising wealth quintile. The median duration for children to be predominantly breastfed is 9 months.

Table NU.4: Duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children age 0-35 months, Lao PDR 2011-12

	Median duration (in months) of			
	Any breastfeeding[1]	Exclusive breastfeeding	Predominant breastfeeding	Number of children age 0-35 months
Sex				
Male	18.7	0.7	5.1	3,324
Female	18.9	1.4	4.9	3,317
Region				
North	20.4	3.6	7.2	2,084
Central	16.9	0.7	4.3	3,099
South	20.0	0.6	3.3	1,458
Province				
Vientiane Capital	14.4	0.7	2.8	639
Phongsaly	20.7	3.7	5.7	216
Luangnamtha	18.2	4.6	6.6	166
Oudomxay	22.0	3.5	19.2	419
Bokeo	22.5	1.1	5.3	204
Luangprabang	21.5	0.7	5.8	423
Huaphanh	20.0	5.0	11.5	353
Xayabury	17.1	3.9	6.7	303
Xiengkhuang	18.4	4.2	7.6	315
Vientiane	15.1	3.4	5.3	455
Borikhamxay	14.4	2.0	4.6	246
Khammuane	20.6	0.5	2.1	378
Savannakhet	20.4	0.5	5.1	1,068
Saravane	27.3	0.6	4.5	558
Sekong	23.4	3.7	7.6	151
Champasack	16.0	0.5	2.0	626
Attapeu	22.5	1.9	11.3	123
Residence				
Urban	15.1	0.8	4.1	1,434
Rural	20.5	1.1	5.3	5,207
..Rural with road	20.2	1.3	5.2	4,569
..Rural without road	21.8	0.6	7.2	638
Mother's education				
None	23.4	2.0	8.2	2,020
Primary	19.3	0.7	4.1	2,729
Lower secondary	15.9	0.7	4.9	1,018
Upper secondary	14.7	1.6	3.5	475
Post secondary non tertiary	14.4	0.6	5.8	221
Higher	10.9	2.0	4.0	179
Wealth index quintile				
Poorest	23.5	2.1	8.2	1,869
Second	21.0	0.7	5.8	1,398
Middle	17.3	1.0	4.6	1,234
Fourth	14.8	0.7	4.5	1,118
Richest	13.8	0.7	3.2	1,022
Ethno-linguistic group of household head				
Lao-Tai	15.5	0.7	3.7	3,687
Mon-Khmer	22.8	0.7	6.6	1,864
Hmong-Mien	21.8	4.3	8.0	845
Chinese-Tibetan	26.5	3.9	6.5	217
Median	18.8	1.0	5.0	6,641
Mean for all children (0-35 months)	19.5	2.7	9.3	6,641

[1] **MICS indicator 2.10**

The percentage of children under 24 months being breastfed in an age-appropriate manner is shown in Table NU.5. The criteria for determining whether or not a child is receiving age-appropriate breastfeeding varies according to the age of the child. For infants age 0-5 months, exclusive breastfeeding is considered to be age-appropriate feeding. Infants age 6-23 months are considered to be appropriately breastfed if they are receiving breast milk and solid, semi-solid or soft food. Forty per cent of children age 0-5 months are being exclusively breastfed, and 35 per cent of children age 6-23 months are breastfeeding and receiving solid, semi-solid or soft foods. As a result of these feeding patterns, only 37 per cent of children age 0-23 months are being breastfed age-appropriately.

Table NU.5: Age-appropriate breastfeeding

Percentage of children age 0-23 months who were appropriately breastfed during the previous day, Lao PDR 2011-12

	Children age 0-5 months		Children age 6-23 months		Children age 0-23 months	
	Percent exclusively breastfed[1]	Number of children	Percent currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Percent appropriately breastfed[2]	Number of children
Sex						
Male	38.8	574	33.6	1,673	34.9	2,246
Female	42.0	608	37.2	1,594	38.6	2,202
Region						
North	60.5	355	35.0	1,041	41.4	1,396
Central	32.9	557	34.9	1,521	34.3	2,078
South	29.7	270	37.1	705	35.1	974
Province						
Vientiane Capital	30.5	119	23.0	305	25.1	424
Phongsaly	59.7	38	38.7	106	44.3	144
Luangnamtha	(73.8)	25	46.4	73	53.4	99
Oudomxay	61.7	79	25.2	205	35.4	284
Bokeo	41.8	35	43.8	110	43.3	145
Luangprabang	(45.0)	56	44.0	222	44.2	278
Huaphanh	77.2	62	27.3	174	40.4	236
Xayabury	61.7	59	29.1	151	38.3	210
Xiengkhuang	73.8	59	30.5	156	42.3	215
Vientiane	56.0	76	47.6	246	49.6	322
Borikhamxay	45.0	45	42.6	126	43.2	171
Khammuane	13.4	58	57.9	191	47.5	249
Savannakhet	16.5	201	26.5	496	23.6	697
Saravane	28.0	102	48.6	263	42.9	365
Sekong	62.3	27	27.1	74	36.5	101
Champasack	20.1	111	31.5	314	28.5	425
Attapeu	42.5	29	27.3	54	32.6	83
Residence						
Urban	38.2	239	26.7	776	29.4	1,015
Rural	41.0	943	38.1	2,491	38.9	3,434
..Rural with road	42.4	839	38.8	2,182	39.8	3,021
..Rural without road	30.1	104	33.1	309	32.3	413
Mother's education						
None	45.1	346	38.3	960	40.1	1,306
Primary	35.0	459	36.4	1,350	36.0	1,809
Lower secondary	44.4	212	35.0	496	37.8	708
Upper secondary	38.4	83	29.8	259	31.9	342
Post secondary non tertiary	(40.6)	40	22.4	113	27.2	153
Higher	(45.6)	41	24.4	88	31.1	129
Wealth index quintile						
Poorest	46.6	287	38.7	895	40.6	1,182
Second	39.7	273	41.3	665	40.8	938
Middle	41.8	239	36.9	606	38.3	845
Fourth	36.8	199	29.0	570	31.1	769
Richest	34.1	184	27.5	531	29.2	715
Ethno-linguistic group of household head						
Lao-Tai	33.0	653	31.7	1,847	32.0	2,500
Mon-Khmer	38.5	325	40.0	890	39.6	1,215
Hmong-Mien	68.0	166	39.4	408	47.6	574
Chinese-Tibetan	63.1	34	47.2	100	51.2	134
Other, Missing, DK	*	3	*	21	(38.8)	25
Total	40.4	1,182	35.4	3,266	36.7	4,448

[1] **MICS indicator 2.6**

[2] **MICS indicator 2.14**

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

Continued breastfeeding beyond six months of age should be accompanied by the consumption of nutritionally adequate, safe and appropriate complementary foods that help meet nutritional requirements when breast milk is no longer sufficient. Solid, semi-solid, or soft foods should be introduced at 6-8 months. Overall, 52 per cent of infants age 6-8 are receiving solid, semi-solid, or soft food (Table NU.6). Fifty per cent of breastfeeding infants are receiving solid, semi-solid, or soft food, while 72 per cent of infants who are not breastfeeding are receiving such food. The findings indicate that recommended feeding practices are not being followed. Some infants age 6-8 months are being introduced to complementary food too late, and some are stopping breastfeeding too early. With half of all 6-8 month-old infants not being fed age-appropriately, all communities could benefit from infant and young child feeding (IYCF) interventions. IYCF training should include demonstrations of food preparation targeted at health staff and caregivers in the community.

Table NU.6: Introduction of solid, semi-solid or soft foods

Percentage of infants age 6-8 months who received solid, semi-solid or soft foods during the previous day, Lao PDR 2011-12

	Currently breastfeeding		Currently not breastfeeding		All	
	Percent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Percent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Percent receiving solid, semi-solid or soft foods[1]	Number of children age 6-8 months
Sex						
Male	46.1	269	(70.6)	34	48.9	303
Female	54.2	204	(72.9)	31	56.6	235
Region						
North	41.2	161	*	13	44.0	174
Central	55.7	198	(71.4)	37	58.2	235
South	50.9	115	*	14	52.6	129
Residence						
Urban	45.9	77	(70.2)	34	53.3	111
Rural	50.3	396	(73.4)	31	52.0	427
..Rural with road	52.8	344	*	24	53.7	367
..Rural without road	34.2	53	*	7	41.6	59
Total	49.6	473	71.7	65	52.3	538

[1] **MICS indicator 2.12**

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

Minimum standards for the number of times a child should receive solid, semi-solid or soft food vary depending on the child's age and whether or not the child is still breastfeeding. Currently, breastfeeding children age 6-8 months are considered as meeting the minimum meal frequency standard if, in addition to breast milk, they also receive solid, semi-solid, or soft food two or more times a day. Currently, breastfeeding children age 9-23 months are considered to meet the minimum mean frequency if, in addition to breast milk, they also receive solid, semi-solid, or soft food three or more times per day. Non-breastfeeding children age 6-23 months are considered to meet the minimum meal frequency if they receive solid, semi-solid, or soft food or milk feeds at least four times per day. Table NU.7 presents the percentage of children age 6-23 months who received solid, semi-solid, or soft food (or milk feeds among those not breastfeeding) the minimum number of times or more during the day or night preceding the interview, according to breastfeeding status. Forty-three per cent of children age 6-23 months are receiving at least the minimum number of feedings per day. The same proportion of girls and boys (43 per cent) achieve the minimum meal frequency. The proportion achieving minimum meal frequency is drastically low (below 15 per cent) in Oudomxay, Huaphanh and Sekong.

The percentage of children reaching minimum meal frequency is greater among those not breastfeeding (56 per cent) than among those who are currently breastfeeding (37 per cent).

Table NU.7: Minimum meal frequency

Percentage of children age 6-23 months who received solid, semi-solid, or soft foods (and milk feeds for non-breastfeeding children) the minimum number of times or more during the previous day, according to breastfeeding status, Lao PDR 2011-12

	Currently breastfeeding		Currently not breastfeeding			All	
	Percent receiving solid, semi-solid and soft foods the minimum number of times	Number of children age 6-23 months	Percent receiving at least 2 milk feeds[1]	Percent receiving solid, semi-solid and soft foods or milk feeds 4 times or more	Number of children age 6-23 months	Percent with minimum meal frequency[2]	Number of children age 6-23 months
Sex							
Male	36.5	1,127	50.5	56.8	546	43.1	1,673
Female	36.7	1,061	51.9	54.9	533	42.8	1,594
Age							
6-8 months	43.9	473	91.7	85.3	65	48.9	538
9-11 months	33.0	498	82.7	80.7	89	40.2	587
12-17 months	32.5	776	56.5	60.0	341	40.9	1,117
18-23 months	39.9	440	38.7	46.5	584	43.6	1,024
Region							
North	28.3	773	32.8	39.0	268	31.1	1,041
Central	39.2	932	59.8	61.7	589	47.9	1,521
South	44.7	483	50.3	61.0	222	49.8	705
Province							
Vientiane Capital	28.0	142	84.4	75.3	164	53.4	305
Phongsaly	40.0	79	(18.0)	(38.1)	27	39.5	106
Luangnamtha	48.7	51	(39.2)	(44.5)	22	47.4	73
Oudomxay	8.9	171	(14.8)	(9.5)	34	9.0	205
Bokeo	35.4	84	(40.6)	(56.9)	26	40.4	110
Luangprabang	46.0	163	38.6	48.6	59	46.7	222
Huaphanh	10.9	128	16.1	17.5	45	12.6	174
Xayabury	29.7	96	52.1	54.0	56	38.7	151
Xiengkhuang	29.8	105	22.2	44.3	51	34.5	156
Vientiane	55.2	145	55.6	68.5	101	60.6	246
Borikhamxay	62.3	61	45.8	64.4	65	63.4	126
Khammuane	62.6	136	61.2	61.0	54	62.1	191
Savannakhet	26.5	342	54.3	47.6	154	33.0	496
Saravane	53.7	201	28.8	45.6	61	51.8	263
Sekong	9.4	59	(33.7)	(21.1)	15	11.7	74
Champasack	49.9	179	61.6	74.0	135	60.3	314
Attapeu	29.4	43	(55.1)	(41.0)	11	31.9	54
Residence							
Urban	34.7	381	76.0	70.4	395	52.9	776
Rural	37.0	1,806	36.8	47.5	685	39.9	2,491
..Rural with road	38.0	1,564	36.8	48.2	618	40.9	2,182
..Rural without road	30.5	242	37.3	40.6	66	32.6	309
Mother's education							
None	32.4	774	31.0	34.9	186	32.9	960
Primary	37.9	917	42.5	52.8	433	42.7	1,350
Lower secondary	44.2	289	56.9	56.8	207	49.5	496
Upper secondary	35.9	122	72.5	76.2	138	57.3	259
Post secondary non tertiary	(27.0)	50	68.3	71.3	63	51.6	113
Higher	(47.5)	35	(95.2)	(80.4)	52	67.1	88
Wealth index quintile							
Poorest	31.1	752	11.4	22.8	143	29.8	895
Second	39.3	510	23.6	32.4	155	37.7	665
Middle	38.5	393	40.8	47.5	213	41.7	606
Fourth	41.7	296	59.1	66.8	275	53.8	570
Richest	38.2	237	85.3	80.3	293	61.5	531
Ethno-linguistic group of household head							
Lao-Tai	41.3	1,034	60.9	63.4	813	51.0	1,847
Mon-Khmer	33.3	735	17.6	27.9	155	32.4	890
Hmong-Mien	28.3	326	21.5	35.7	82	29.8	408
Chinese-Tibetan	39.8	81	(23.9)	(41.8)	19	40.2	100
Other, Missing, DK	*	11	*	*	10	*	21
Total	36.6	2,187	51.2	55.9	1,079	43.0	3,266

[1] **MICS indicator 2.15**

[2] **MICS indicator 2.13**

Among currently breastfeeding children age 6-8 months, minimum meal frequency is defined as children who also received solid, semi-solid or soft foods 2 times or more. Among currently breastfeeding children age 9-23 months, receipt of solid, semi-solid or soft foods at least 3 times constitutes minimum meal frequency. For non-breastfeeding children age 6-23 months, minimum meal frequency is defined as children receiving solid, semi-solid or soft foods, and milk feeds, at least 4 times during the previous day.

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

Minimum meal frequency among non-breastfed children is more common among urban children (70 per cent) than among rural children (48 per cent). The workload of rural women is substantial, including rice cultivation and the gathering of forest products, firewood and water. During the heaviest work seasons, women may be away from the home for up to 10 hours at a time. At such times, multiple feeding of complementary foods would be virtually impossible without the cooperation of other household members. In rural areas, women traditionally raise the children, so increasing male responsibility in the care and feeding of infants and young children may be an appropriate way to distribute the heavy workload carried by many rural women. The percentage of non-breastfed children achieving minimum mean frequency declines steadily and sharply by the education level and wealth quintile of the mother. As few as 23 per cent of the poorest children who are not being breastfed are able to receive the minimum number of daily feedings. The percentage of 6-23 month-olds achieving minimal meal frequency is lower among the Mon-Khmer (32 per cent) and Hmong-Mien (30 per cent) than among the Chinese-Tibetan (40 per cent) and Lao-Tai (51 per cent).

The practice of bottle-feeding is of concern due to possible contamination from unsafe water and potential lack of hygiene in preparation. Table NU.8 shows that bottle-feeding is still prevalent in Lao PDR. One in 10 children under 6 months of age is fed using a bottle with a teat. The proportion increases with age, resulting in nearly 2 in 10 children (18 per cent) age 0-23 months being fed using a bottle with a teat. The highest prevalence of bottle-feeding is seen among children of mothers with the highest levels of education and in the highest wealth quintiles, where nearly half of children are using a bottle with a teat. The use of a bottle declines steadily with decreasing education and decreasing wealth quintile. Appropriate, relevant information should be directed towards informing women who may be unaware of the dangers affiliated with the incorrect use of a bottle with a teat.

Table NU.8: Bottle feeding

Percentage of children age 0-23 months who were fed with a bottle with a teat during the previous day, Lao PDR 2011-12

	Percentage of children age 0-23 months fed with a bottle with a teat[1]	Number of children age 0-23 months
Sex		
Male	17.4	2,246
Female	17.5	2,202
Age		
0-5 months	11.3	1,182
6-11 months	23.6	1,125
12-23 months	17.6	2,141
Region		
North	10.7	1,396
Central	21.4	2,078
South	18.7	974
Province		
Vientiane Capital	48.9	424
Phongsaly	5.3	144
Luangnamtha	9.7	99
Oudomxay	2.3	284
Bokeo	14.4	145
Luangprabang	18.0	278
Huaphanh	4.7	236
Xayabury	20.6	210
Xiengkhuang	5.0	215
Vientiane	26.9	322
Borikhamxay	13.1	171
Khammuane	13.8	249
Savannakhet	12.0	697
Saravane	9.6	365
Sekong	7.0	101
Champasack	31.0	425
Attapeu	10.4	83
Residence		
Urban	33.9	1,015
Rural	12.6	3,434
..Rural with road	12.9	3,021
..Rural without road	10.4	413
Mother's education		
None	5.4	1,306
Primary	15.6	1,809
Lower secondary	24.7	708
Upper secondary	37.3	342
Post secondary non tertiary	38.2	153
Higher	47.7	129
Wealth index quintile		
Poorest	4.5	1,182
Second	7.7	938
Middle	15.7	845
Fourth	25.2	769
Richest	45.5	715
Ethno-linguistic group of household head		
Lao-Tai	26.3	2,500
Mon-Khmer	6.0	1,215
Hmong-Mien	5.7	574
Chinese-Tibetan	5.0	134
Other, Missing, DK	(25.4)	25
Total	17.5	4,448

[1] **MICS indicator 2.11**

Note: Figures in parentheses are based on 25-49 unweighted cases.

Salt Iodization

Iodine Deficiency Disorders (IDDs) 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 in pregnant women. Iodine deficiency is most commonly and visibly associated with goitre. IDD takes its greatest toll in impaired mental growth and development, contributing in turn to poor school performance, reduced intellectual ability and impaired work performance. The international goal[2] was to achieve sustainable elimination of iodine deficiency by 2005. The relevant indicator is the percentage of households consuming adequately iodized salt ($\geq$15 parts per million). However, the LSIS did not categorize test result by parts per million, but rather determined the presence or absence of a colour change in a test kit, indicating whether the salt was iodized or not.

The Lao government established an IDD control programme using increased iodine intake through Universal Salt Iodisation (USI) as its main strategy. In 1995, the Prime Minister issued a decree number 42 requiring that all salt, locally produced or sold on the market, be iodized.

[2] The recommendation is based on the declaration at the UN General Assembly Special Session in 2002 that set the goal of sustainable elimination of IDD by 2005 (Sustainable Elimination of Iodine Deficiency , UNICEF, 2008)

Table NU.9: Iodized salt consumption

Percent distribution of households by consumption of iodized salt, Lao PDR 2011-12

	Percentage of households in which salt was tested	Number of households	Percent of households with Salt test result			Total	Number of households in which salt was tested or with no salt
			No salt	Not iodized	Iodized		
Region							
North	99.2	6,065	0.2	17.4	82.4	100.0	6,028
Central	97.9	9,247	1.2	19.1	79.7	100.0	9,167
South	95.8	3,531	2.8	23.1	74.1	100.0	3,479
Province							
Vientiane Capital	97.5	2,497	1.3	9.5	89.2	100.0	2,467
Phongsaly	98.6	578	0.0	8.7	91.3	100.0	570
Luangnamtha	99.7	544	0.1	0.7	99.2	100.0	543
Oudomxay	99.8	913	0.0	5.4	94.6	100.0	912
Bokeo	98.6	520	1.3	11.5	87.2	100.0	519
Luangprabang	98.7	1,371	0.2	4.6	95.2	100.0	1,356
Huaphanh	99.7	869	0.0	78.1	21.9	100.0	867
Xayabury	99.3	1,269	0.1	11.6	88.3	100.0	1,261
Xiengkhuang	99.0	762	0.6	52.8	46.6	100.0	759
Vientiane	98.4	1,447	0.5	23.2	76.3	100.0	1,431
Borikhamxay	99.5	804	0.5	6.2	93.4	100.0	803
Khammuane	98.0	1,078	1.9	22.1	76.0	100.0	1,076
Savannakhet	97.3	2,659	1.7	19.0	79.4	100.0	2,631
Saravane	96.6	1,123	3.0	13.9	83.1	100.0	1,118
Sekong	97.3	283	2.4	25.7	72.0	100.0	282
Champasack	94.8	1,789	3.0	29.5	67.5	100.0	1,749
Attapeu	97.6	336	0.9	18.0	81.0	100.0	331
Residence							
Urban	98.1	5,177	1.0	12.4	86.6	100.0	5,133
Rural	97.9	13,666	1.2	21.9	76.9	100.0	13,541
..Rural with road	98.0	12,285	1.2	22.2	76.6	100.0	12,187
..Rural without road	96.5	1,380	1.7	19.3	79.0	100.0	1,354
Wealth index quintile							
Poorest	98.0	3,585	1.5	22.3	76.2	100.0	3,566
Second	97.7	3,533	1.4	22.9	75.7	100.0	3,501
Middle	98.1	3,743	1.0	21.1	77.9	100.0	3,712
Fourth	97.9	3,962	1.2	18.7	80.2	100.0	3,922
Richest	98.0	4,019	0.8	12.4	86.8	100.0	3,973
Ethno-linguistic group of household head							
Lao-Tai	97.8	12,721	1.4	19.0	79.7	100.0	12,606
Mon-Khmer	98.0	4,140	1.0	16.5	82.4	100.0	4,099
Hmong-Mien	99.4	1,287	0.1	38.5	61.4	100.0	1,281
Chinese-Tibetan	98.8	579	0.0	6.0	94.0	100.0	572
Other, Missing, DK	96.9	117	2.5	6.7	90.8	100.0	116
Total	97.9	18,843	1.2	19.3	79.5	100.0	18,674

Table NU.9 presents the percentage of households with using iodized salt. Nationally, interviewers tested the salt used for cooking in 98 per cent of LSIS households. The salt was tested for the presence or absence of potassium iodate by using rapid test kits. One per cent of households were reported to have no salt available. Salt was found to be iodized in 80 per cent of households. The 2006 MICS found 84 per cent of households to have iodized salt.

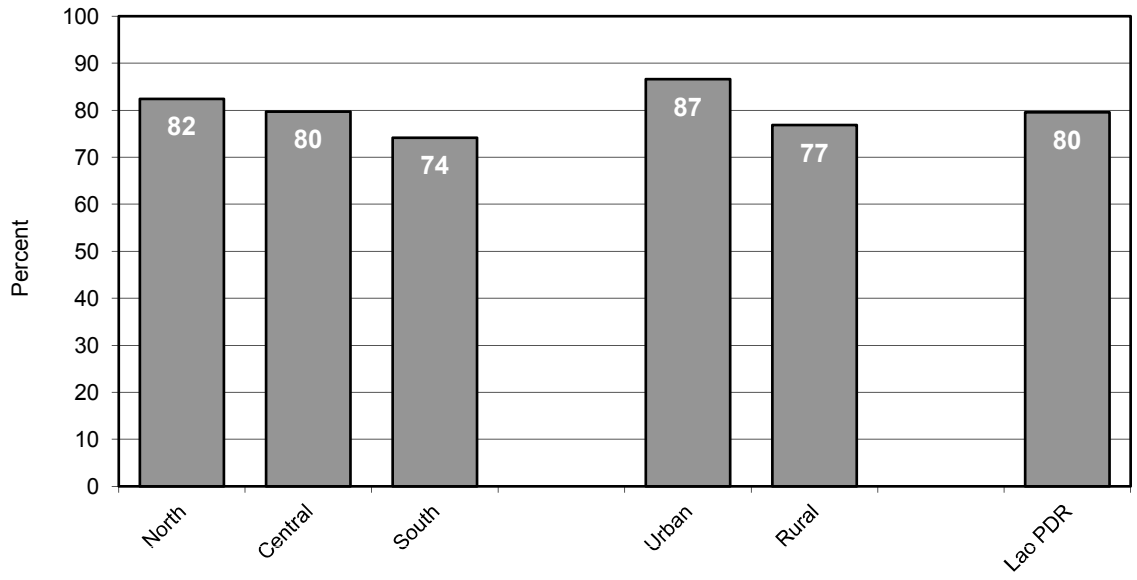
The use of iodized salt is less common in the Southern (74 per cent) than in the Central (80 per cent) and Northern (82 per cent) regions (Figure NU.4). The presence of iodized salt is drastically low among households in Huaphanh (only 22 per cent) and Xiengkhuang (47 per cent). Overall, a higher percentage of urban households have use iodized salt (87 per cent) than do rural households (77 per cent), but there is not much difference between households in rural areas with roads (77 per cent) and

households in rural areas without roads (79 per cent). The presence of iodized salt does not vary much by wealth quintile, with the exception of iodized salt being more common in the richest households (87 per cent). Only 6 in 10 Hmong-Mien-headed households were found to have iodized salt.

The goal of eliminating iodine deficiency is considered attainable when more than 90 per cent of households are using adequately iodized salt. Thus, LSIS results indicate that further work is needed to promote the use of iodized salt. Some of the obstacles to achieving universal use of iodized salt include small factories in the country that produce non-iodized salt and the importation of non-iodized salt. Note that iodized salt tends to lose its iodine content over time (Diosady et. al., 1998), so qualities of preservation of iodized salt will also be reflected in the results.

Field teams reported that test kits did not always produce uniform results. One test kit may have produced no colour change (indicating that salt is not iodized), while another of the same type of test kit (made by the same manufacturer) would produce a colour change on the same sample of salt (indicating the salt is iodized). It is unclear how variability across test kits may have affected the final results of the testing.

Figure NU.4: Percentage of households consuming iodized salt, Lao PDR 2011-12



Children's Vitamin A Supplementation

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

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

For countries with vitamin A deficiency problems, current international recommendations call for high-dose vitamin A supplementation every four to six months, targeted at all children between the ages of six to 59 months living in affected areas. Providing young children with two high-dose vitamin A capsules a year is a safe, cost-effective, efficient strategy for eliminating vitamin A deficiency and improving child survival. Giving vitamin A to new mothers who are breastfeeding also 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. In countries with vitamin A supplementation programmes, the relevant indicator is: the percentage of children 6-59 months of age receiving at least one high dose vitamin A supplement in the last six months.

Based on UNICEF/WHO guidelines, the Lao PDR Ministry of Health recommends that children age 6-11 months be given one high dose vitamin A capsule, and children age 12-59 months be given a vitamin A capsule every 6 months. In some parts of the country, vitamin A capsules are given when children (age 6-59 months) have contact with health providers for immunization. It is also recommended that mothers take a vitamin A supplement within six weeks of giving birth, due to increased vitamin A requirements during pregnancy and lactation. Normally, vitamin A campaigns are conducted twice a year.

LSIS interviewers collected data on vitamin A coverage in two ways. First, mothers and caretakers were asked to present children's vaccinations cards. If the card indicated that the child had received vitamin A, the date of the most recent vitamin A supplementation was recorded in the questionnaire. Mothers and caretakers were also asked whether the child had received a vitamin A dose within the six months prior to the survey, and were shown a sample vitamin A dose.

Table NU.10 presents the percentage of children age 6-59 months who received a vitamin A high dose within the six months prior to the survey. According to data from vaccinations cards, only 4 per cent of children received vitamin A supplementation in the 6 months prior to the survey. Fifty-nine per cent of mothers and caretakers asked reported that the children under their care had been given a high dose of vitamin A in the 6 months prior to the survey. This is much higher than the 18 per cent reported in the 2006 MICS, which also collected data on coverage from both cards and caretaker reports. However, caretakers responding to the MICS were requested to specify how long prior to the survey was the most recent dose given, while the LSIS asked whether a dose was given in the previous 6 months (yes/no question). Conversely, the 59 per cent coverage reported in the LSIS is lower than levels reported in provincial administrative records, which estimate 90 per cent coverage among children age 6-59 months.

Vitamin A supplementation coverage is lower in the Central region (51 per cent) than in the Northern and Southern (66 and 67 per cent, respectively), while urban and rural respondents reported equal coverage. The proportion of children reported to have received a vitamin A supplement is especially low in Savannakhet (32 per cent). The percentage of children receiving vitamin A supplementation rises steadily with mother's level of education. The percentage receiving a supplement in the previous six months increases from 49 per cent among children whose mothers have no education to 61 per cent of those whose mothers have primary education, and 73 per cent among children of mothers with upper secondary or higher education.

Table NU.10: Children's vitamin A supplementation

Percentage of children age 6-59 months receiving a high dose vitamin A supplement in the last 6 months, Lao PDR 2011-12

	Percentage who received Vitamin A in the last 6 months according to:		Percentage of children who received Vitamin A in the last 6 months[1]	Number of children age 6-59 months
	Vaccination card or mother's handbook	Mother's report		
Sex				
Male	3.5	58.8	59.3	5,019
Female	3.5	58.7	58.9	4,866
Region				
North	4.5	66.0	66.3	3,147
Central	3.7	50.1	50.6	4,597
South	1.5	66.8	66.9	2,141
Province				
Vientiane Capital	8.4	59.0	60.0	939
Phongsaly	0.7	48.4	48.4	330
Luangnamtha	3.5	80.5	80.9	255
Oudomxay	4.3	53.2	54.0	596
Bokeo	3.9	72.8	73.3	300
Luangprabang	2.5	74.8	75.0	696
Huaphanh	5.0	51.7	51.9	544
Xayabury	11.4	87.9	88.1	426
Xiengkhuang	1.9	52.5	52.9	481
Vientiane	5.9	63.6	64.2	691
Borikhamxay	0.7	48.1	48.1	357
Khammuane	3.0	70.0	70.5	545
Savannakhet	1.4	31.6	32.0	1,583
Saravane	2.4	81.3	81.4	821
Sekong	0.3	39.7	40.0	242
Champasack	1.2	64.3	64.3	892
Attapeu	0.9	50.2	50.4	186
Residence				
Urban	6.2	60.7	61.5	2,080
Rural	2.8	58.2	58.5	7,805
..Rural with road	3.0	59.6	59.8	6,822
..Rural without road	1.0	49.0	49.1	982
Age				
6-11 months	9.4	43.6	45.3	1,125
12-23 months	5.9	58.2	58.7	2,141
24-35 months	2.8	61.2	61.4	2,193
36-47 months	1.5	62.5	62.5	2,302
48-59 months	0.8	60.7	60.8	2,124
Mother's education				
None	1.4	48.5	48.6	3,234
Primary	3.4	60.9	61.3	4,097
Lower secondary	4.9	64.9	65.7	1,401
Upper secondary	7.3	72.7	72.9	612
Post secondary non	7.3	71.8	72.8	328
Higher	10.7	72.1	72.7	214
Wealth index quintile				
Poorest	1.5	50.5	50.6	2,946
Second	2.1	56.9	57.1	2,073
Middle	3.7	60.6	61.0	1,780
Fourth	5.5	66.2	66.9	1,608
Richest	6.8	67.5	68.2	1,479
Ethno-linguistic group of household head				
Lao-Tai	4.9	64.4	64.9	5,377
Mon-Khmer	2.0	55.5	55.7	2,863
Hmong-Mien	1.2	42.0	42.0	1,273
Chinese-Tibetan	2.0	60.7	60.9	323
Other, Missing, DK	(6.3)	(58.7)	(58.7)	49
Total	3.5	58.8	59.1	9,885

[1] **MICS indicator 2.17**

Note: Figures in parentheses are based on 25-49 unweighted cases.

Low Birth Weight

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

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

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

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

Because many infants are not weighed at birth and those who are weighed may be a biased sample of all births, the reported birth weights usually cannot be used to estimate the prevalence of low birth weight among all children. Therefore, the percentage of newborns weighing below 2,500 grams is estimated from two items in the questionnaire: the mother's assessment of the child's size at birth (i.e., very small, smaller than average, average, larger than average, very large); and the mother's recall of the child's weight or the weight as recorded on a health card if the child was weighed at birth.[3]

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

Table NU.11: Low birth weight infants

Percentage of last-born children in the 2 years preceding the survey that are estimated to have weighed below 2500 grams at birth and percentage of last-born children weighed at birth, Lao PDR 2011-12

	Percent of last-born children:		
	Below 2500 grams[1]	Weighed at birth[2]	Number of last-born children in the last 2 years
Region			
North	13.0	33.2	1,377
Central	13.9	55.8	1,989
South	19.6	28.0	940
Province			
Vientiane Capital	12.6	91.9	415
Phongsaly	6.5	18.6	148
Luangnamtha	12.5	46.2	99
Oudomxay	10.2	21.5	266
Bokeo	19.3	33.8	141
Luangprabang	19.4	38.7	280
Huaphanh	11.3	29.3	237
Xayabury	10.2	49.6	205
Xiengkhuang	18.5	37.2	200
Vientiane	9.0	64.3	295
Borikhamxay	9.9	60.5	162
Khammuane	22.0	37.8	233
Savannakhet	13.5	40.6	683
Saravane	22.8	29.7	361
Sekong	12.8	20.8	99
Champasack	18.2	30.3	397
Attapeu	20.5	17.7	83
Residence			
Urban	12.2	80.2	957
Rural	15.6	31.7	3,349
..Rural with road	15.5	34.5	2,928
..Rural without road	15.8	12.1	421
Mother's education			
None	17.3	14.4	1,248
Primary	14.6	37.9	1,763
Lower secondary	14.1	64.7	693
Upper secondary	11.3	85.8	334
Post secondary non tertiary	11.5	92.1	146
Higher	10.3	92.8	122
Wealth index quintile			
Poorest	18.2	10.7	1,178
Second	15.2	23.9	927
Middle	14.0	45.4	810
Fourth	13.0	66.3	707
Richest	11.5	94.4	684
Ethno-linguistic group of household head			
Lao-Tai	13.9	60.6	2,401
Mon-Khmer	18.1	19.1	1,213
Hmong-Mien	13.1	19.4	530
Chinese-Tibetan	7.8	18.2	140
Other, Missing, DK	*	*	21
Total	14.8	42.5	4,306

[1] **MICS indicator 2.18**

[2] **MICS indicator 2.19**

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

Forty-three per cent of babies were weighed at birth and 15 per cent of infants are estimated to weigh less than 2,500 grams at birth (Table NU.11). Twenty per cent of babies in the South have low birth weight, compared with 13 and 14 per cent in the Northern and Central regions, respectively (Figure NU.5). The higher percentage in the South may be the result of food insecurity brought on by the flooding of Typhoon Ketsana in that part of the country. However, the percentage of low birth weight does not vary much by urban and rural areas (12 and 16 per cent, respectively). The prevalence of low birth weight children decreases steadily with increases in mothers' education levels and increasing wealth quintile. Seventeen per cent of babies born to mothers with no education are of low birth weight, while 10 per cent of babies born to mothers with higher education are of low birth weight.

Figure NU.5: Percentage of infants weighing less than 2500 grams at birth, Lao PDR 2011-12

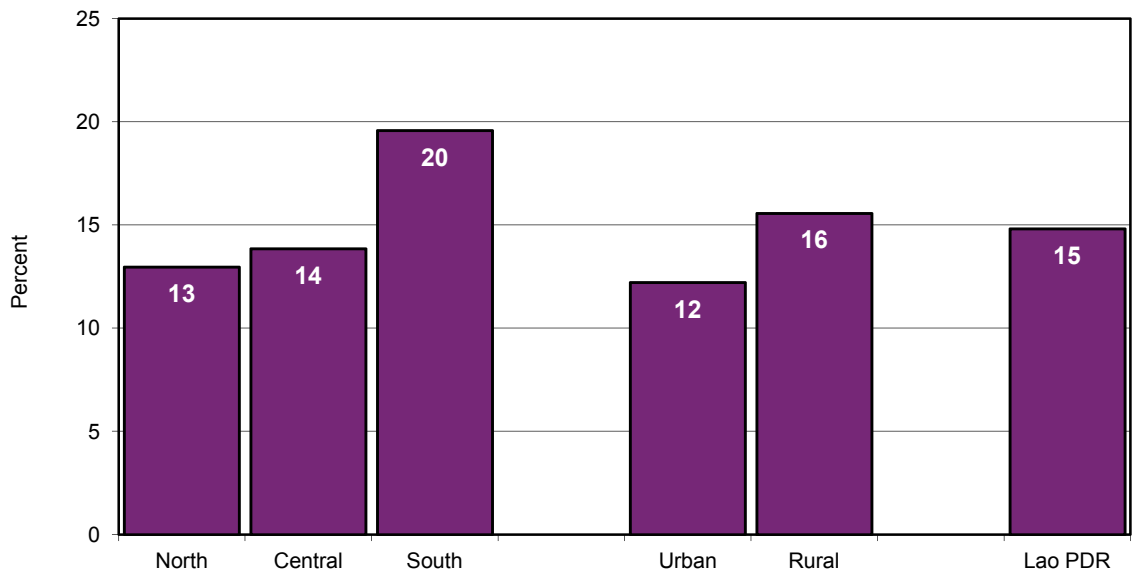


Table NU.A1: Nutritional status of children based on the former NCHS/CDC/WHO International Reference Population

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, based on the former NCHS/CDC/WHO International Reference Population, Lao PDR 2011-12

	Weight for age				Height for age				Weight for height				
	Underweight				Stunted				Wasted		Overweight		
	Percent below		Mean Z-Score (SD)	Number of children under age 5	Percent below		Mean Z-Score (SD)	Number of children under age 5	Percent below		Percent above	Mean Z-Score (SD)	Number of children under age 5
	- 2 SD	- 3 SD			- 2 SD	- 3 SD			- 2 SD	- 3 SD	+ 2 SD		
Sex													
Male	32.1	6.3	-1.4	5,481	38.6	15.3	-1.6	5,348	5.3	0.6	1.2	-0.6	5,360
Female	32.6	7.3	-1.4	5,345	37.4	14.2	-1.6	5,239	5.4	0.7	1.6	-0.6	5,216
Region													
North	32.0	7.1	-1.5	3,457	44.7	17.8	-1.8	3,380	4.5	0.8	1.6	-0.4	3,380
Central	28.9	5.5	-1.3	5,028	32.3	12.0	-1.4	4,912	5.2	0.7	1.6	-0.6	4,904
South	40.2	9.1	-1.6	2,341	40.3	16.0	-1.7	2,294	7.0	0.4	0.7	-0.8	2,292
Province													
Vientiane Capital	19.1	2.6	-0.9	1,003	14.4	2.3	-0.7	976	7.1	0.4	1.5	-0.6	978
Phongsaly	39.5	16.3	-1.7	359	54.4	31.8	-2.2	340	3.8	0.6	2.5	-0.3	346
Luangnamtha	43.7	17.3	-1.8	280	47.1	23.5	-1.8	265	19.3	3.9	2.6	-0.9	268
Oudomxay	35.0	7.0	-1.5	668	50.0	22.0	-1.9	661	3.6	0.6	1.0	-0.5	657
Bokeo	30.3	4.3	-1.4	328	41.3	14.6	-1.7	324	3.7	0.8	0.6	-0.5	324
Luangprabang	25.4	4.1	-1.3	743	38.1	12.2	-1.6	737	2.2	0.2	1.7	-0.4	734
Huaphanh	31.2	3.9	-1.5	597	52.5	17.5	-2.1	588	1.5	0.0	1.6	-0.3	582
Xayabury	27.5	4.9	-1.4	482	31.8	9.9	-1.4	465	5.8	1.2	1.9	-0.5	468
Xiengkhuang	26.9	3.4	-1.3	530	45.1	17.3	-1.8	520	1.9	0.3	1.4	-0.2	522
Vientiane	27.2	3.2	-1.3	746	37.0	14.1	-1.5	728	3.9	0.7	3.6	-0.4	730
Borikhamxay	24.4	2.8	-1.2	395	34.4	11.3	-1.4	387	5.7	0.5	1.9	-0.5	384
Khammuane	36.8	7.0	-1.6	600	35.1	11.6	-1.4	594	6.5	0.6	0.8	-0.8	592
Savannakhet	34.2	8.9	-1.5	1,754	35.2	15.4	-1.6	1,707	5.1	1.0	1.0	-0.7	1,698
Saravane	47.7	13.0	-1.8	906	48.2	20.8	-1.9	878	6.8	0.0	1.1	-0.8	880
Sekong	52.0	14.9	-1.9	258	56.2	32.0	-2.3	253	6.8	0.7	1.0	-0.7	255
Champasack	30.6	4.2	-1.4	972	30.5	8.6	-1.4	959	6.5	0.7	0.3	-0.7	954
Attapeu	37.9	7.9	-1.6	205	32.9	10.7	-1.5	204	9.9	0.5	0.1	-0.9	203
Residence													
Urban	20.5	2.8	-1.1	2,264	21.9	5.6	-1.0	2,200	5.8	0.6	1.7	-0.5	2,196
Rural	35.4	7.8	-1.5	8,563	42.2	17.1	-1.7	8,386	5.2	0.6	1.3	-0.6	8,380
..Rural with road	34.9	7.5	-1.5	7,499	41.4	16.0	-1.7	7,348	5.3	0.6	1.4	-0.6	7,342
..Rural without road	39.5	10.1	-1.7	1,064	48.0	24.8	-2.0	1,038	5.0	0.8	0.8	-0.6	1,038

Each of the indices is expressed in standard deviation units (SD) from the median of the 1977 NCHS/CDC/WHO Reference. The indices in this table are NOT comparable to indices based on the current WHO Child Growth Standards adopted in 2006.

Note: For Luang Namtha, the figures of Weight-for-Age, Height-for-Age and Weight-for-Height, including wasting and overweight, should be interpreted with caution due to extreme heaping of values for height and weight

Table NU.A1: Nutritional status of children based on the former NCHS/CDC/WHO International Reference Population

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, based on the former NCHS/CDC/WHO International Reference Population, Lao PDR 2011-12

	Weight for age				Height for age				Weight for height				
	Underweight				Stunted				Wasted		Overweight		
	Percent below		Mean Z-Score	Number of children	Percent below		Mean Z-Score	Number of children	Percent below		Percent above	Mean Z-Score	Number of children
	- 2 SD	- 3 SD	(SD)	under age 5	- 2 SD	- 3 SD	(SD)	under age 5	- 2 SD	- 3 SD	+ 2 SD	(SD)	under age 5
Age													
0-5 months	5.5	0.8	-0.1	1,150	10.8	2.1	-0.5	1,079	2.5	0.6	6.2	0.3	1,027
6-11 months	21.1	3.6	-1.2	1,113	19.4	4.8	-1.1	1,089	4.7	0.8	1.2	-0.4	1,094
12-23 months	39.1	8.7	-1.7	2,094	41.0	15.4	-1.7	2,047	8.9	0.9	1.1	-0.8	2,057
24-35 months	38.1	11.0	-1.7	2,140	38.9	16.0	-1.6	2,091	7.0	0.7	0.6	-0.7	2,108
36-47 months	35.8	6.2	-1.6	2,256	45.3	19.1	-1.9	2,228	3.9	0.5	1.0	-0.6	2,234
48-59 months	36.6	6.1	-1.7	2,073	50.2	20.0	-2.0	2,053	3.4	0.3	0.6	-0.6	2,056
Mother's education													
None	41.2	11.5	-1.7	3,496	52.2	24.7	-2.0	3,408	5.1	0.6	1.2	-0.6	3,426
Primary	32.1	6.0	-1.5	4,471	37.0	13.2	-1.6	4,375	5.1	0.6	1.2	-0.6	4,364
Lower secondary	25.8	2.8	-1.2	1,577	26.9	6.5	-1.2	1,550	6.3	0.9	1.8	-0.5	1,535
Upper secondary	17.9	2.6	-1.0	677	17.6	2.7	-0.9	664	5.3	0.5	1.7	-0.5	663
Post secondary non tertiary	23.5	1.7	-1.1	363	20.7	5.3	-1.1	355	7.8	0.4	2.9	-0.6	355
Higher	5.3	0.0	-0.7	243	9.3	0.7	-0.6	233	4.4	0.2	1.5	-0.4	233
Wealth index quintile													
Poorest	43.6	11.6	-1.8	3,176	55.4	26.6	-2.1	3,107	5.2	0.5	0.9	-0.6	3,119
Second	35.9	8.3	-1.5	2,313	43.6	16.7	-1.8	2,250	5.3	0.5	2.0	-0.5	2,246
Middle	30.5	4.6	-1.4	1,973	33.8	10.4	-1.5	1,938	5.1	1.1	1.0	-0.6	1,932
Fourth	23.8	3.4	-1.2	1,760	25.5	6.7	-1.2	1,722	5.6	0.7	1.4	-0.6	1,716
Richest	16.5	1.5	-0.9	1,605	14.6	2.6	-0.8	1,570	5.9	0.4	1.9	-0.5	1,564
Ethno-linguistic group of household head													
Lao-Tai	26.8	4.1	-1.3	5,893	27.0	7.1	-1.2	5,782	6.0	0.6	1.2	-0.6	5,752
Mon-Khmer	43.0	11.2	-1.7	3,134	50.0	24.2	-2.0	3,053	5.2	0.7	1.0	-0.6	3,063
Hmong-Mien	28.2	4.8	-1.4	1,398	53.7	21.5	-2.0	1,370	1.3	0.5	2.6	-0.1	1,371
Chinese-Tibetan	46.3	21.0	-1.8	351	54.8	33.2	-2.2	331	11.0	2.1	2.8	-0.6	338
Other, Missing, DK	34.4	2.0	-1.5	51	39.2	9.2	-1.5	50	7.0	0.0	3.1	-0.6	51
Total	32.3	6.8	-1.4	10,827	38.0	14.7	-1.6	10,586	5.4	0.6	1.4	-0.6	10,576

Each of the indices is expressed in standard deviation units (SD) from the median of the 1977 NCHS/CDC/WHO Reference. The indices in this table are NOT comparable to indices based on the current WHO Child Growth Standards adopted in 2006.

Note: For Luang Namtha, the figures of Weight-for-Age, Height-for-Age and Weight-for-Height, including wasting and overweight, should be interpreted with caution due to extreme heaping of values for height and weight

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XI. Child Mortality

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

The infant mortality rate is defined as the probability of dying before the first birthday. The under-five mortality rate is defined as the probability of dying before the fifth birthday. In the 2011-12 LSIS, infant and under-five mortality rates are calculated based on a direct estimation technique that employs a full birth history as part of the women's questionnaire. A full birth history provides the data needed to calculate direct estimates of infant and child mortality. The birth history module starts with a series of summary questions about the respondent's experience with childbearing (the number of sons and daughters living with the mother, the number who live elsewhere, and the number who have died). These questions are followed by a retrospective birth history, in which each respondent was asked to list each of her births, starting with the first. For each birth, data were obtained on gender, month and year of birth, survivorship status and current age, or, if the child is dead, age at death. Particular attention was paid to the known pitfalls and issues in collecting birth history data through careful training and fieldwork monitoring.

The early childhood mortality results presented in this report are defined as follows:

- Neonatal mortality: the probability of dying within the first month of life
- Infant mortality: the probability of dying before the first birthday
- Post-neonatal mortality: the probability of dying after the first month of life but before the first birthday, calculated as the difference between infant and neonatal mortality
- Child mortality: the probability of dying between the first and fifth birthday
- Under-five mortality: the probability of dying between birth and the fifth birthday

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

Trends in Early Childhood Mortality

Table CM.1 shows the trends in neonatal, post-neonatal, infant, child and under-five mortality rates for successive two-year periods preceding the survey, at the national level. For the most recent two-year period preceding the survey, infant mortality was 68 deaths per 1,000 live births, and under-five mortality was 79 deaths per 1,000 live births. This means that approximately 1 in every 13 children born in Lao PDR dies before reaching his or her fifth birthday.

According to age disaggregation during the two-year period immediately prior to the survey, 86 per cent of under-five deaths took place during the first year of the child's life. Half of the infant deaths occurred during the neonatal period. Among the children who died before the age of five, 40 per cent died in the first month of life.

The trend in early childhood mortality since the mid-1990s can be examined by looking at changes in the mortality rates over the successive two-year periods prior to the survey. The 2011-12 LSIS results indicate that all child mortality rates have declined over time. For example, the infant mortality rate declined from 123 deaths per 1,000 live births in the mid-1990s to 91 deaths per 1,000 live births in the mid-2000s, and continued to decline to 68 deaths per 1,000 live births in 2010-11. Similarly, the under-five mortality rate halved from around 164 deaths per 1,000 live births in the mid-1990s to 79 deaths per 1,000 live births in 2010-11.

Table CM.1: Early childhood mortality rates

Neonatal, post-neonatal, infant, child and under-five mortality rates for two year periods preceding the survey, Lao PDR 2011-12

	Neonatal mortality rate[1]	Post-neonatal mortality rate[2]	Infant mortality rate[3]	Child mortality rate[4]	Under-five mortality rate[5]
Years preceding the survey					
0-1	32	36	68	11	79
2-3	34	41	75	14	88
4-5	42	46	87	21	106
6-7	46	45	91	27	115
8-9	53	51	104	30	131
10-11	52	64	116	34	146
12-13	59	65	124	38	157
14-15	49	69	118	36	150
16-17	56	68	123	46	164
18-19	54	59	114	64	170

[1] MICS indicator 1.3

[2] MICS indicator 1.4

[3] MICS indicator 1.2; MDG indicator 4.2

[4] MICS indicator 1.5

[5] MICS indicator 1.1; MDG indicator 4.1

Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

Early Childhood Mortality Rates by Socioeconomic and Demographic Characteristics

While Table CM.1 presented mortality estimates for the country as a whole, LSIS data also allows us to estimate infant and child mortality rates among sub-populations. Differentials in early childhood mortality rates by selected socio-economic and demographic characteristics are presented in Tables CM.2 and CM.3, and Figure CM.1 for the most recent five-year period preceding the survey (2007-11). Rates are calculated for this period of time to ensure a sufficient number of cases within each category on which to base the estimates. The national rates presented in Table CM.1 can be calculated for a two-year period before the survey at the national level, but for population sub-groups, such as provinces, there are not enough cases over a two-year period on which to base the estimates, thus the period needs to be expanded to five years prior to the survey. Table CM.2 indicates that the risk of dying in early childhood is lowest in the Central region (73 deaths per 1,000 live births), while the risk of dying in the Northern and Southern regions exceeds 100 deaths per 1,000 live births.

The survey results indicate that the early childhood mortality rates for rural areas are double those for urban areas (for example, under-five mortality rates for the five years preceding the survey of 100 deaths per 1,000 live births in rural areas and 45 in urban areas).

The differentials in mortality levels are somewhat larger by province. Vientiane Capital and Vientiane province have the lowest under-five mortality rates of 32 and 37 deaths per 1,000 live births, respectively, while Phongsaly and Khammuane provinces have the highest rates, at 151 and 138 deaths per 1,000 live births, respectively.

As expected, mothers' education is inversely related to children's risk of dying. Children of mothers with no education have mortality rates more than two times higher than those of children of mothers with post-secondary or higher education (for example, under-five mortality decreases from 116 deaths per 1,000 live births for children of mothers with no education to around 40 for children of mothers with post-secondary or higher education).

A child's risk of dying generally decreases as wealth increases. Children born to mothers in the poorest wealth quintile have more than double the risk of dying than children born to mothers in the richest

quintiles. Infant mortality decreases from over 95 deaths per 1,000 live births for children born to mothers in the two poorest quintiles to 27 deaths per 1,000 live births for children born to mothers in the richest quintile.

For all types of early childhood mortality, children in Chinese-Tibetan headed households have higher rates than children of other ethno-linguistic groups. Children of Lao-Tai and Hmong-Mien headed households have the lowest rates of early childhood mortality, at roughly half the levels of Chinese-Tibetan headed households.

Table CM.2: Early childhood mortality rates by socioeconomic characteristics

Neonatal, post-neonatal, infant, child and under-five mortality rates for the five year period preceding the survey, by socioeconomic characteristics, Lao PDR 2011-12

	Neonatal mortality rate	Post-neonatal mortality rate	Infant mortality rate	Child mortality rate	Under-five mortality rate
Region					
North	48	38	86	19	104
Central	26	37	63	10	73
South	36	51	88	15	101
Province					
Vientiane Capital	15	(12)	(27)	(5)	(32)
Phongsaly	62	58	120	36	151
Luangnamtha	28	25	54	8	61
Oudomxay	58	29	87	15	100
Bokeo	42	50	92	21	110
Luangprabang	35	49	84	26	107
Huaphanh	62	38	100	20	118
Xayabury	(45)	(14)	(59)	(7)	(65)
Xiengkhuang	21	31	53	15	67
Vientiane	10	20	31	7	37
Borikhamxay	(24)	(21)	(45)	(7)	(52)
Khammuane	62	69	131	8	138
Savannakhet	28	52	81	14	94
Saravane	35	63	98	16	113
Sekong	44	27	71	24	93
Champasack	38	51	89	8	97
Attapeu	27	31	58	21	77
Residence					
Urban	22	16	39	6	45
Rural	39	46	85	16	100
..Rural with road	39	43	82	14	94
..Rural without road	39	70	108	31	136
Mother's education					
None	44	52	96	22	116
Primary	35	44	80	12	91
Lower secondary	24	24	47	7	54
Upper secondary	34	11	(45)	(3)	(48)
Post secondary non tertiary	(23)	(10)	(32)	(8)	(40)
Higher	*	*	*	*	*
Wealth index quintile					
Poorest	40	55	95	27	120
Second	47	51	98	11	109
Middle	43	34	77	8	85
Fourth	17	30	47	6	53
Richest	18	10	27	6	33
Ethno-linguistic group of household head					
Lao-Tai	32	38	70	7	76
Mon-Khmer	43	45	88	22	108
Hmong-Mien	27	31	58	18	74
Chinese-Tibetan	62	69	131	34	160

Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

Note: An asterisk indicates that a figure is based on fewer than 250 unweighted cases and has been suppressed. Figures in parentheses are based on 250-499 unweighted cases.

The demographic characteristics of both mothers and children have been found to play an important role in children's survival probability. Table CM.3 presents mortality rates by demographic characteristics (sex of child, mother's age at birth, birth order and previous birth interval). The data show some difference in infant mortality rates between male and female children, at 82 and 70 deaths per 1,000 live births for males and females, respectively. Neonatal mortality rates for male children are higher than for female children, but do not differ after the neonatal period.

Typically, the relationship between maternal age at birth and childhood mortality is 'U-shaped', being higher among children born to mothers age under 20 and over 35 than among those age 20-34. This pattern is also found in the 2011-12 LSIS, where neonatal mortality rates are highest among children born to mothers age less than 20 and over 35 at birth (53 deaths per 1,000 live births and 46 deaths per 1,000 live births, respectively).

Neonatal mortality is higher among children born first and 'high order' births (the seventh child and above) than among children born second to sixth, while fourth and higher order births suffer higher post-neonatal and child mortality. Research has shown that short birth intervals significantly reduce a child's chance of survival, and this is confirmed by the 2011-12 LSIS: children have an elevated risk of dying if they were born within two years of a preceding birth. The risk reduces to its lowest at a birth spacing of three years.

Table CM.3: Early childhood mortality rates by demographic characteristics

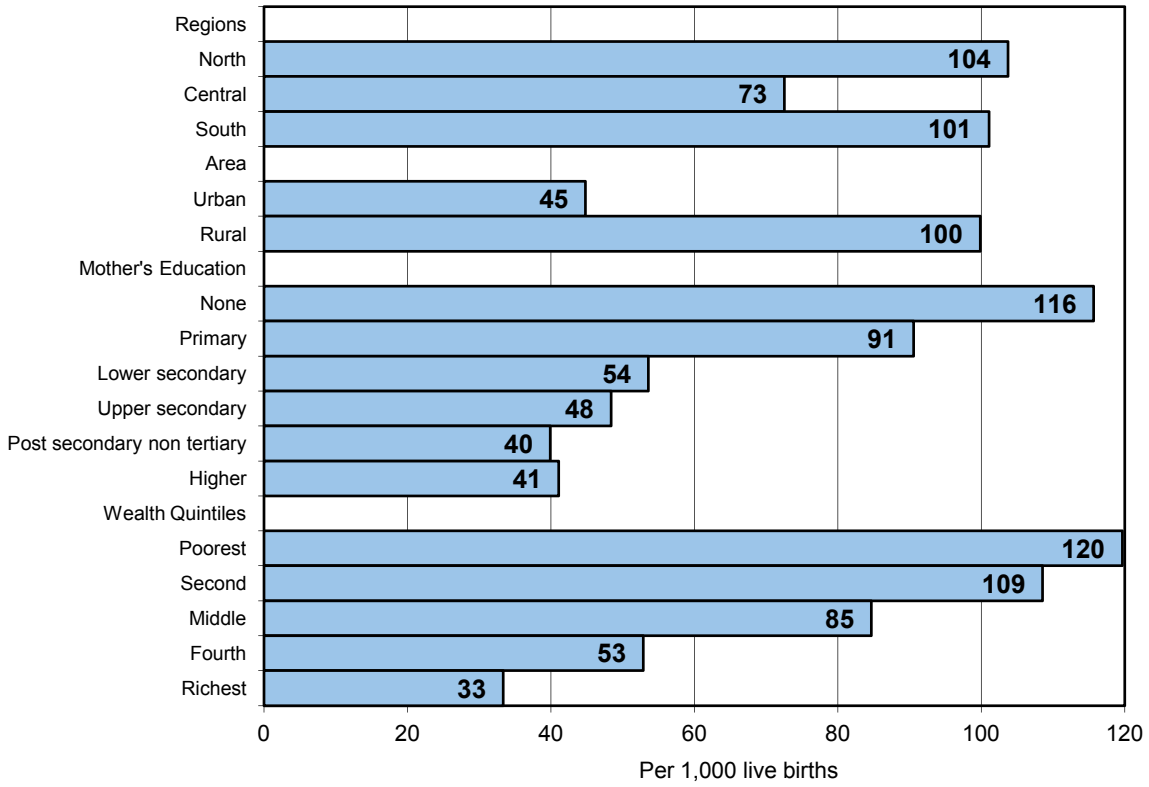
Neonatal, post-neonatal, infant, child and under-five mortality rates for the five year period preceding the survey, by demographic characteristics, Lao PDR 2011-12

	Neonatal mortality rate	Post-neonatal mortality rate	Infant mortality rate	Child mortality rate	Under-five mortality rate
Sex of child					
Male	41	41	82	14	95
Female	30	40	70	14	83
Mother's age at birth					
Less than 20	53	44	97	16	112
20-34	30	38	67	12	79
35-49	46	51	97	22	117
Birth order					
1	41	31	72	11	82
2-3	30	35	65	11	75
4-6	34	49	83	20	101
7+	44	70	114	21	132
Previous birth interval*					
< 2 years	51	49	100	17	116
2 years	27	50	76	17	92
3 years	12	22	34	12	46
4+ years	20	22	42	6	47

* Excludes first order births

Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

Figure CM.1: Under-5 mortality rates by background characteristics, Lao PDR 2011-12

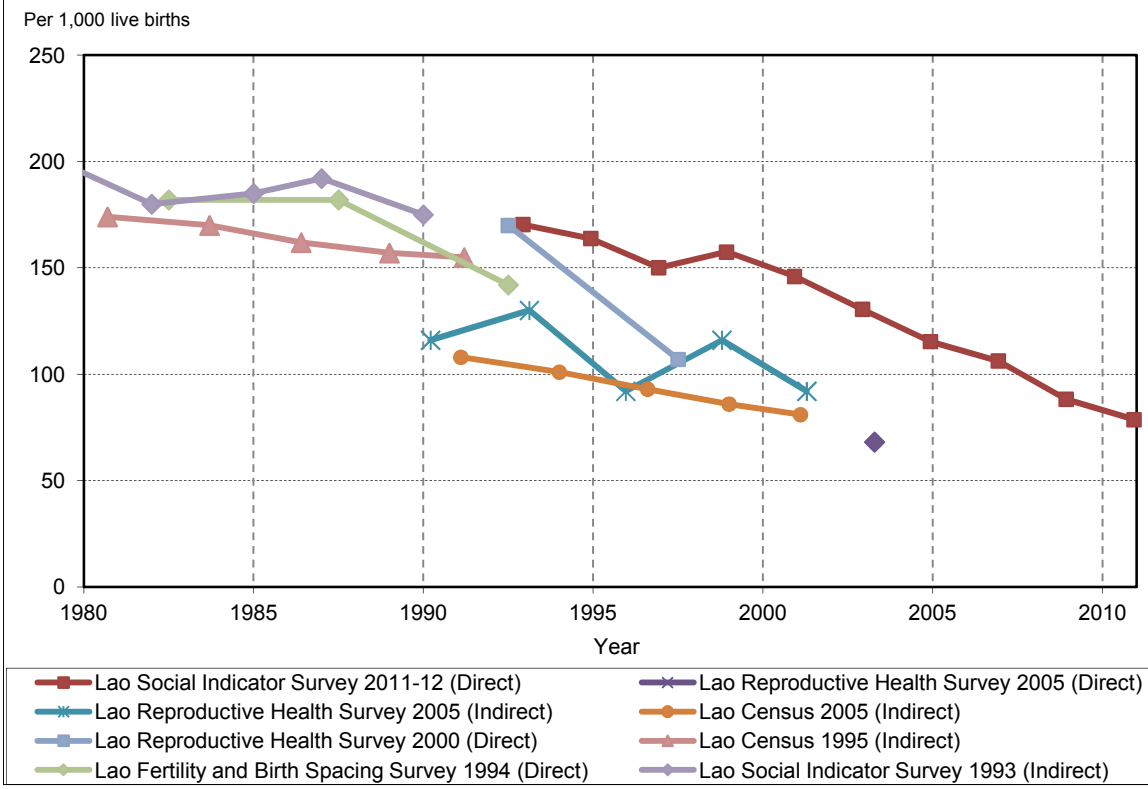


Comparison of Early Childhood Mortality Rates with Estimates from Other Sources

Figure CM.2 shows the series of under-five mortality rate estimates derived from the 2011-12 LSIS together with estimates from other sources. The LSIS estimates indicate a decline in child mortality during the last 20 years. The declining trend indicated by the survey results is in broad agreement with those estimated from earlier surveys.

The mortality trends depicted by the 2005 Lao Census and the 2005 Lao Reproductive Health Survey (LRHS) are also declining, although LSIS estimates are considerably higher. Analysis (unpublished) was undertaken of the mean number of children surviving and the mean number of dead children from the LRHS and the LSIS calculated back to the date of the LRHS (October 2005). This analysis shows the mean number of children surviving in 2005 to be similar in both surveys (ratio of LSIS : LRHS = 1.05), but 76 per cent more dead children were reported in the LSIS than in the LRHS (ratio 1.76), indicating that the under-five mortality rates from the LRHS are considerably under-estimated.

Figure CM.2: Trend in under-5 mortality rates, Lao PDR 1980-2011



Data Quality Observations

The 2011-12 LSIS is subject to the same measurement issues that exist in all household surveys. Regardless of the quality of the survey, three main factors could influence the precision of measurements:

1) Birth transference (surveyors falsely recording children's ages to reduce their workload)
2) Event omission (surveyors excluding children from the survey to reduce workload or to avoid parents experiencing painful recollection)
3) Sample design and implementation issues

Each of these issues contributes to potential under-estimation of child mortality in most household surveys (see the data quality tables [Appendix D] produced for the birth history data). The quality of birth history data is briefly addressed below.

The issue of missing data is important to all variables in the survey. Generally, data for missing cases are not imputed, with the exception of the variables in the birth history, where a bias would often be significant, as dates of events are more often missing for the least educated and the less wealthy women. It is typical that children of these women also suffer the highest mortality, and without imputation, mortality would often be under estimated. However, in the 2011-12 LSIS, imputation was only necessary for less than 2 per cent of children's birth dates and therefore had insignificant impact on the results.

The data quality tables presented in Appendix D allows the following observations (although these observations are also found in the majority of surveys, in Lao PDR and globally):

Table DQ.1: This table presents the distribution of the household population by single years of age. The larger number of 50-year-old women compared with those of age 49 years is of concern, as well as the larger number of 14-year-old girls. This 'age heaping' is common in household surveys due to the tendency of respondents to report in round numbers (at age 50) and because of the work-reducing behaviour of interviewers. The impact on quality is a deficit in the numbers of women reporting their birth histories; however these women do not tend to have recent births so their effect on mortality estimates is generally insignificant.

Table DQ.4.1: Interview completion rates for women in settings that typically carry a higher risk of mortality (rural women, less educated women, women in the poorest households) are no different from those of other women. Women in large households had slightly lower response rates than other women, but the effect of this difference would be insignificant.

Table DQ.16: While there is room for slight fluctuation, the global sex ratio (boys : girls) of children ever born is generally around 1.05. The overall sex ratio observed in the LSIS is very close to this figure and no particular bias is observed.

Table DQ.17: This table presents the distribution of births by year, the percentage with complete date information, the sex ratio at birth and calendar year ratio for each year. Interviewers performed well in obtaining complete birth dates (almost 100 per cent for living children and 94 per cent for dead children). While there is some fluctuation in the reporting of years of birth there is no significant heaping on particular years, showing no evidence of birth transference.

Table DQ.18: This table presents the distribution of the deaths before 1 month, according to age at death in days. It shows the expected pattern of more deaths in the first few days of life and minimal heaping on numbers ending in 0 or 5. The percentage of early neonatal deaths (0-6 days) is as expected, at around three quarters of neonatal deaths (0-30 days).

Table DQ.19: This table is designed to capture quality of information obtained on age at death in months. The focus is to review whether respondents and interviewers are heaping responses at the ages of one month and 12 months or one year, as these are the cut-off ages for the specific mortality rates. While there is no evidence of heaping at one month, the data do suggest some heaping in reporting of deaths at one year, and the heaping increases with older reported deaths. Interviewers were instructed to probe for the age at death in months if it was reported as one year, specifically to determine whether the death occurred before or after the child's first birthday. However, in a number of cases, deaths were recorded as occurring at one year of age without specifying the exact month of age. Analyses of other survey data have indicated that children reported to have died at "one year" will have typically died after their first birthday. Here, deaths reported at "one year" are considered as occurring after the first year of life, and the assumption does not appear to have affected infant mortality estimates.

In summary, the data appear of good quality, and there are no serious concerns about the quality of the mortality estimates.

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XII. Child Development

Early Childhood Education and Learning

The readiness of children for primary school can be improved through early childhood education programmes and pre-school attendance. Early childhood education programmes include programmes for children that have organised learning components, and that do not include baby-sitting or day-care, which typically do not include organised education and learning.

Twenty-three per cent of children age 36-59 months are attending an organised early childhood education programme (Table CD.1). Children engage in early childhood education programmes primarily in urban areas. Fifty-five per cent of children age 36-59 months attend an education programme, compared with only 15 per cent of rural children and only 6 per cent of children in rural areas without road access. Thirty per cent of children in the Central region attend early childhood education, compared with only 12 per cent of children in the Southern region. Stark differentials are seen by socioeconomic status. Seventy-three per cent of children living in the richest households attend early childhood education programmes, compared with only 5 per cent of children in the poorest households. Only 7 per cent of children whose mothers have no education attend early childhood education programmes, compared with 45 per cent of children whose mothers have a lower secondary school education. Moreover, 36 per cent of children in Lao-Tai headed households attend early childhood education programmes, compared with only 7 per cent of children in Hmong-Mien and 9 per cent of children in Mon-Khmer headed households.

Table CD.1: Early childhood education

Percentage of children age 36-59 months who are attending an organized early childhood education programme, Lao PDR 2011-12

	Percentage of children age 36-59 months currently attending early childhood education[1]	Number of children age 36-59 months
Sex		
Male	20.9	2,269
Female	25.3	2,157
Region		
North	21.0	1,418
Central	29.7	2,055
South	11.7	953
Province		
Vientiane Capital	69.6	419
Phongsaly	10.0	152
Luangnamtha	28.4	114
Oudomxay	13.4	257
Bokeo	20.3	131
Luangprabang	27.5	329
Huaphanh	21.9	253
Xayabury	24.1	182
Xiengkhuang	16.7	225
Vientiane	30.2	312
Borikhamxay	16.1	157
Khammuane	16.3	226
Savannakhet	17.3	716
Saravane	4.3	365
Sekong	15.3	118
Champasack	17.7	377
Attapeu	12.1	92
Residence		
Urban	54.7	885
Rural	15.1	3,540
..Rural with road	16.4	3,092
..Rural without road	6.0	448
Age of child		
36-47 months	16.5	2,302
48-59 months	30.1	2,124
Mother's education		
None	6.7	1,560
Primary	18.2	1,827
Lower secondary	44.5	595
Upper secondary	64.4	220
Post secondary non tertiary	72.6	147
Higher	90.9	76
Wealth index quintile		
Poorest	5.3	1,364
Second	9.4	948
Middle	19.2	785
Fourth	34.8	688
Richest	73.0	640
Ethno-linguistic group of household head		
Lao-Tai	35.9	2,343
Mon-Khmer	8.7	1,325
Hmong-Mien	7.2	594
Chinese-Tibetan	12.9	140
Other, Missing, DK	*	23
Total	23.0	4,426

[1] **MICS indicator 6.7**

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

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

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

Table CD.2 presents the percentage of children age 36-59 months who engaged with an adult household member in activities that promote learning and school readiness within the three days prior to the survey. Fifty-seven per cent of children engaged with an adult household member in four or more such activities. The average number of activities in which adults engaged with children was 3.7. Fifty-two per cent of children had engaged with their fathers in at least one activity. The average number of activities in which fathers involved themselves with 3 and 4 year-olds was 1.3. Eleven per cent of children were living in a household without their fathers.

Table CD.2: Support for learning

Percentage of children age 36-59 months with whom an adult household member engaged in activities that promote learning and school readiness during the last three days, Lao PDR 2011-12

	Percentage of children age 36-59 months		Mean number of activities			
	With whom adult household members engaged in four or more activities[1]	With whom the father engaged in one or more activities[2]	Any adult household member engaged with the child	The father engaged with the child	Percentage of children not living with their natural father	Number of children age 36-59 months
Sex						
Male	57.5	52.2	3.7	1.3	11.4	2,269
Female	57.4	50.7	3.7	1.3	11.4	2,157
Region						
North	62.4	60.0	3.9	1.6	5.8	1,418
Central	57.1	51.8	3.7	1.3	13.5	2,055
South	50.8	38.0	3.4	0.9	14.9	953
Province						
Vientiane Capital	85.3	64.3	5.0	2.1	17.1	419
Phongsaly	39.2	46.7	3.3	1.9	5.4	152
Luangnamtha	53.4	66.1	3.4	1.7	6.2	114
Oudomxay	87.1	60.3	4.9	1.5	3.1	257
Bokeo	54.0	76.2	3.7	2.2	7.5	131
Luangprabang	57.9	56.1	3.7	1.2	7.1	329
Huaphanh	44.4	44.5	3.2	1.0	6.6	253
Xayabury	91.6	84.0	5.3	2.5	5.4	182
Xiengkhuang	51.0	54.0	3.7	1.2	6.7	225
Vientiane	65.0	63.2	4.4	1.4	10.6	312
Borikhamxay	57.2	61.8	3.8	1.3	5.9	157
Khammuane	43.6	33.3	2.7	1.0	17.7	226
Savannakhet	43.3	42.5	3.0	0.8	15.3	716
Saravane	40.8	26.3	2.9	0.6	12.1	365
Sekong	54.4	45.7	3.6	1.0	6.4	118
Champasack	55.1	39.8	3.6	1.1	22.1	377
Attapeu	67.6	66.9	4.4	1.6	7.5	92
Residence						
Urban	77.5	60.4	4.7	1.8	16.0	885
Rural	52.4	49.2	3.5	1.2	10.2	3,540
..Rural with road	53.7	50.2	3.5	1.2	10.5	3,092
..Rural without road	43.8	42.8	3.1	1.1	8.0	448

[1] **MICS indicator 6.1**

[2] **MICS Indicator 6.2**

na = Not applicable

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

Table CD.2: Support for learning

Percentage of children age 36-59 months with whom an adult household member engaged in activities that promote learning and school readiness during the last three days, Lao PDR 2011-12

	Percentage of children age 36-59 months		Mean number of activities			
	With whom adult household members engaged in four or more activities[1]	With whom the father engaged in one or more activities[2]	Any adult household member engaged with the child	The father engaged with the child	Percentage of children not living with their natural father	Number of children age 36-59 months
Age of child						
36-47 months	56.0	50.5	3.7	1.3	11.9	2,302
48-59 months	59.0	52.5	3.8	1.3	10.8	2,124
Mother's education						
None	39.4	41.8	2.9	0.9	8.8	1,560
Primary	59.4	51.4	3.8	1.2	12.2	1,827
Lower secondary	74.0	60.9	4.5	1.7	12.4	595
Upper secondary	90.4	72.1	5.1	2.3	12.5	220
Post secondary non tertiary	89.2	68.6	5.3	2.2	21.5	147
Higher	92.6	86.0	5.5	3.1	12.4	76
Father's education						
None	39.3	42.9	2.8	0.9	na	668
Primary	51.2	49.4	3.5	1.2	na	1,797
Lower secondary	63.8	65.7	4.1	1.7	na	714
Upper secondary	72.9	73.1	4.5	2.1	na	320
Post secondary non tertiary	83.4	76.9	4.9	2.4	na	234
Higher	87.5	76.8	5.2	2.4	na	185
Father not in household	61.4	15.3	3.8	0.4	na	503
DK/Missing	*	*	*	*	na	5
Wealth index quintile						
Poorest	41.9	44.5	3.1	1.0	6.0	1,364
Second	47.1	49.1	3.3	1.1	7.8	948
Middle	59.5	49.6	3.7	1.2	14.6	785
Fourth	72.4	57.5	4.4	1.5	17.2	688
Richest	87.2	65.5	5.1	2.1	18.1	640
Ethno-linguistic group of household head						
Lao-Tai	67.5	53.7	4.1	1.5	16.2	2,343
Mon-Khmer	47.7	47.2	3.3	1.1	6.7	1,325
Hmong-Mien	41.8	51.4	3.2	1.0	4.2	594
Chinese-Tibetan	46.0	57.1	3.3	1.9	5.6	140
Other, Missing, DK	*	*	*	*	*	23
Total	57.4	51.5	3.7	1.3	11.4	4,426

[1] **MICS indicator 6.1**

[2] **MICS Indicator 6.2**

na = Not applicable

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

There are no gender differentials in terms of adults engaging with children; household members, including fathers, engaged in activities with boys and girls alike. A larger percentage of children in urban areas engaged with adults in learning and school readiness activities (78 per cent) than in rural areas (52 per cent). Strong differentials are observed by education level of the mother and father, and also by socio-economic status. The percentage of children who have an adult engage with them in four or more learning activities rises steadily with every increase in level of education, and the percentage more than doubles from the poorest to the richest households. Eighty-seven per cent of children living in the richest households had an adult engage with them in four or more learning related activities, as opposed to 42 per cent of those living in the poorest households. Fathers' involvement showed a similar pattern in terms of engagement in such activities.

Exposure to books in the early years not only provides the child with greater understanding of the nature of print, but may also give the child opportunities to see others reading, such as older siblings doing school work. The presence of books is also important for later school performance. Mothers and caretakers of children age under five were asked about the number of children's books or picture books they have. By stimulating the imagination, play also contributes to brain development. Mothers and caretakers were asked what items children play with, including homemade toys, toys purchased from a shop, and other household objects or objects found around the home.

In Lao PDR, only 5 per cent of children under the age of five years live in households with at least three children's books (Table CD.3). The proportion of children with 10 or more books declines to 1 per cent (seen more among the richest and highest education categories). No differentials are observed between girls and boys. A higher percentage of urban than rural children have access to three or more children's books (16 per cent and 2 per cent, respectively).

Table CD.3: Learning materials

Percentage of children under age 5 by numbers of children's books present in the household, and by playthings that child plays with, Lao PDR 2011-12

	Household has for the child:		Child plays with:				
	3 or more children's books[1]	10 or more children's books	Homemade toys	Toys from a shop/manufactured toys	Household objects/objects found outside	Two or more types of playthings[2]	Number of children under age 5
Sex							
Male	4.5	1.1	26.5	47.7	53.6	42.3	5,593
Female	5.6	1.3	22.7	45.3	53.9	39.4	5,474
Region							
North	2.9	0.5	23.3	36.2	55.8	35.8	3,502
Central	7.6	2.1	24.4	57.3	55.7	45.9	5,154
South	2.8	0.2	27.1	38.3	46.6	37.5	2,411
Province							
Vientiane Capital	24.2	8.6	16.8	80.6	45.5	45.5	1,058
Phongsaly	3.9	1.0	18.8	26.2	45.3	29.7	368
Luangnamtha	2.8	0.0	36.1	38.5	53.2	45.7	280
Oudomxay	2.4	0.5	17.6	22.4	82.0	30.4	676
Bokeo	3.0	0.6	23.3	44.7	64.1	45.0	335
Luangprabang	4.7	1.0	27.3	38.5	43.7	37.8	752
Huaphanh	1.3	0.0	26.0	28.2	64.4	37.4	606
Xayabury	1.9	0.0	17.9	62.6	31.3	31.1	486
Xiengkhuang	1.4	0.0	39.9	46.7	72.8	58.8	540
Vientiane	4.4	1.3	23.5	49.3	65.6	48.2	767
Borikhamxay	3.8	0.9	12.8	48.0	40.1	34.9	402
Khammuane	1.4	0.2	24.7	52.0	54.8	42.8	603
Savannakhet	3.9	0.1	26.9	54.1	56.0	44.8	1,784
Saravane	1.0	0.1	17.8	26.6	36.9	24.7	923
Sekong	2.5	0.3	26.7	24.7	33.8	25.6	269
Champasack	4.7	0.2	32.0	50.9	56.6	48.3	1,003
Attapeu	2.7	0.2	45.2	46.7	57.4	57.6	216
Residence							
Urban	16.4	4.9	19.2	75.8	50.7	49.1	2,319
Rural	2.0	0.2	26.1	38.7	54.5	38.7	8,748
..Rural with road	2.2	0.2	25.9	40.9	54.7	39.6	7,661
..Rural without road	0.5	0.1	27.1	23.7	53.8	32.8	1,086
Age of child							
0-23 months	1.9	0.6	12.6	34.7	34.5	24.1	4,448
24-59 months	7.1	1.5	32.8	54.4	66.7	52.2	6,619
Mother's education							
None	0.7	0.1	25.4	23.0	54.0	31.0	3,580
Primary	2.2	0.2	26.3	47.5	54.2	42.6	4,556
Lower secondary	8.1	1.5	23.0	67.8	55.3	50.2	1,613
Upper secondary	16.4	4.3	19.2	77.4	47.6	49.2	695
Post secondary non tertiary	24.6	6.0	23.2	84.0	54.6	55.0	368
Higher	39.7	16.0	12.0	85.0	47.0	47.2	255
Wealth index quintile							
Poorest	0.5	0.0	26.9	17.7	53.6	29.2	3,233
Second	1.0	0.0	27.6	35.2	52.7	36.7	2,346
Middle	1.5	0.1	26.0	52.5	56.9	46.5	2,019
Fourth	4.6	0.6	23.4	71.8	55.5	52.4	1,807
Richest	24.3	7.0	15.9	83.7	49.8	50.1	1,663
Ethno-linguistic group of household head							
Lao-Tai	8.3	2.0	23.3	65.7	53.6	47.8	6,030
Mon-Khmer	1.0	0.0	25.2	22.1	51.8	30.0	3,189
Hmong-Mien	0.6	0.1	29.4	25.3	59.7	38.0	1,439
Chinese-Tibetan	2.6	0.7	25.0	24.5	49.5	32.3	357
Other, Missing, DK	13.4	1.7	11.9	54.3	54.0	45.6	52
Total	5.0	1.2	24.6	46.5	53.7	40.9	11,067

[1] MICS indicator 6.3

[2] MICS indicator 6.4

Table CD.3 also shows that 41 per cent of children under the age of five had two or more playthings in their homes. 'Play things' refers to homemade toys (including dolls and cars), toys purchased from a store, and household objects (such as pots and bowls) and objects and materials found outside the home (such as sticks, rocks, animal shells and leaves). It is notable that 47 per cent of children play with toys that come from a store while 25 per cent play with homemade toys, and this pattern is seen in both urban and rural areas. The percentage of children who have two or more types of playthings rises with increasing wealth quintile.

Leaving children alone or only in the presence of other young children is known to increase the risk of accidents. Mothers and caretakers were asked two questions to establish whether children age 0-59 months had been left alone during the week preceding the interview, and whether children were left in the care of other children under 10 years of age.

Table CD.4 shows that 12 per cent of children age under five had been left in the care of other children age under 10. Six per cent of children under five years of age were left completely alone (under the care of no one) during the week preceding the interview. A child under five years of age left only in the care of another child or left alone is considered inadequately cared for. The LSIS 2011-2012 found that 14 per cent of children were left with inadequate care during the week preceding the survey, either by being left in the care of another child or being left alone. Interestingly, a higher percentage of rural children were either left alone (7 per cent) or left in the care of other children (14 per cent) than urban children (3 percent and 7 percent, respectively). A higher percentage of children age 24-59 months were left with inadequate care (18 per cent) than children age 0-23 months (8 per cent). Differences were observed with regard to both the education level and socio-economic status of the household. Eight per cent of children living in the richest households were left with inadequate care, compared with 20 per cent of children living in the poorest households.

Table CD.4: Inadequate care

Percentage of children under age 5 left alone or left in the care of another child younger than 10 years of age for more than one hour at least once during the past week, Lao PDR 2011-12

	Percentage of children under age 5			
	Left alone in the past week	Left in the care of another child younger than 10 years of age in the past week	Left with inadequate care in the past week[1]	Number of children under age 5
Sex				
Male	6.9	12.8	15.0	5,593
Female	5.2	11.4	13.0	5,474
Region				
North	6.1	14.3	16.4	3,502
Central	4.4	9.5	11.2	5,154
South	9.5	14.6	16.4	2,411
Province				
Vientiane Capital	7.7	9.0	12.5	1,058
Phongsaly	7.3	7.2	10.0	368
Luangnamtha	8.0	22.4	24.1	280
Oudomxay	3.4	4.5	5.3	676
Bokeo	7.9	15.6	19.5	335
Luangprabang	7.1	16.8	19.7	752
Huaphanh	6.9	25.0	26.5	606
Xayabury	4.0	10.4	12.6	486
Xiengkhuang	1.0	14.5	15.0	540
Vientiane	5.4	9.0	10.5	767
Borikhamxay	0.6	4.1	4.1	402
Khammuane	1.8	4.2	5.2	603
Savannakhet	4.8	11.4	13.3	1,784
Saravane	14.0	20.7	23.5	923
Sekong	11.8	21.4	23.7	269
Champasack	5.3	7.8	8.5	1,003
Attapeu	7.2	11.0	14.0	216
Residence				
Urban	3.0	6.6	8.0	2,319
Rural	6.9	13.6	15.6	8,748
..Rural with road	6.8	13.2	15.3	7,661
..Rural without road	6.9	16.2	17.7	1,086
Age of child				
0-23 months	2.8	6.7	7.6	4,448
24-59 months	8.2	15.8	18.3	6,619
Mother's education				
None	7.3	16.5	18.1	3,580
Primary	6.4	11.8	14.1	4,556
Lower secondary	4.1	7.6	9.3	1,613
Upper secondary	4.4	7.2	8.6	695
Post secondary non tertiary	4.4	7.5	9.1	368
Higher	2.8	3.4	4.6	255
Wealth index quintile				
Poorest	8.3	17.9	19.7	3,233
Second	6.0	14.2	15.6	2,346
Middle	5.5	8.8	10.9	2,019
Fourth	4.7	7.9	10.4	1,807
Richest	3.9	6.5	8.3	1,663
Ethno-linguistic group of household head				
Lao-Tai	4.9	8.9	10.8	6,030
Mon-Khmer	8.0	15.4	17.2	3,189
Hmong-Mien	6.0	17.9	19.4	1,439
Chinese-Tibetan	8.7	14.7	17.6	357
Other, Missing, DK	5.7	13.1	13.1	52
Total	6.0	12.1	14.0	11,067

[1] **MICS indicator 6.5**

Early Childhood Development

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

A 10-item module is used to calculate the Early Child Development Index (ECDI). The ECDI is based on benchmarks that children are expected to reach if they are progressing in their development as the majority of children in their age group develop. The primary purpose of the ECDI is to inform public policy regarding the developmental status of children in Lao PDR.

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

- Literacy-numeracy: Children are identified as being developmentally on track according to whether they can identify/name at least 10 letters of the alphabet, whether they can read at least four simple, popular words, and whether they know the names and recognize the symbols of all numbers from 1 to 10. If at least two of these capabilities are found, the child is considered developmentally on track
- Physical: If the child can pick up a small object such as a stick or a rock from the ground with two fingers, and/or the mother or caretaker does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain
- Social-emotional: Children are considered to be developmentally on track if two of the following are true: the child gets along well with other children; the child does not kick, bite or hit other children; and the child does not get distracted easily
- Learning: If the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in this domain

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

Table CD.5: Early child development index

Percentage of children age 36-59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and the early child development index score, Lao PDR 2011-12

	Percentage of children age 36-59 months who are developmentally on track for indicated domains				Early child development index score[1]	Number of children age 36-59 months
	Literacy-numeracy	Physical	Social-Emotional	Learning		
Sex						
Male	18.1	97.9	83.9	93.6	79.9	2,269
Female	21.5	98.0	86.7	93.6	82.8	2,157
Region						
North	16.7	98.1	84.7	95.4	81.5	1,418
Central	23.1	98.4	86.7	92.0	81.2	2,055
South	16.8	96.7	82.8	94.3	81.1	953
Province						
Vientiane Capital	56.4	99.3	88.1	96.7	90.2	419
Phongsaly	13.3	97.8	64.3	97.6	68.2	152
Luangnamtha	28.6	99.0	81.0	81.8	69.0	114
Oudomxay	8.0	99.6	71.6	98.9	72.2	257
Bokeo	13.3	97.0	85.5	95.6	81.7	131
Luangprabang	29.0	99.7	95.0	98.8	94.1	329
Huaphanh	5.5	96.4	93.0	93.5	86.3	253
Xayabury	20.4	95.9	92.2	93.5	84.0	182
Xiengkhuang	9.8	96.7	93.8	83.0	77.9	225
Vientiane	22.9	98.7	75.9	95.6	74.8	312
Borikhamxay	27.4	100.0	85.4	98.9	86.5	157
Khammuane	11.0	99.6	82.3	92.9	79.2	226
Savannakhet	10.9	97.5	90.2	88.6	79.3	716
Saravane	12.6	94.2	72.8	92.3	70.9	365
Sekong	12.5	97.5	84.6	87.4	79.3	118
Champasack	23.7	98.1	89.2	97.2	88.4	377
Attapeu	10.8	100.0	94.1	99.1	94.2	92
Residence						
Urban	42.4	99.4	87.1	96.5	87.8	885
Rural	14.1	97.6	84.8	92.8	79.7	3,540
..Rural with road	14.8	97.6	84.4	93.5	80.0	3,092
..Rural without road	9.2	97.2	87.4	88.1	77.1	448
Age						
36-47 months	15.1	97.3	85.1	91.9	79.3	2,302
48-59 months	24.8	98.6	85.4	95.4	83.5	2,124
Preschool attendance						
Attending preschool	53.4	99.4	87.8	98.2	91.0	1,019
Not attending preschool	9.7	97.5	84.5	92.2	78.4	3,406
Mother's education						
None	7.1	97.1	82.7	89.1	74.0	1,560
Primary	17.2	98.2	86.1	95.5	83.3	1,827
Lower secondary	33.2	98.2	86.5	95.3	86.4	595
Upper secondary	53.8	99.6	92.4	99.4	95.5	220
Post secondary non tertiary	60.8	98.4	86.4	98.2	87.6	147
Higher	57.4	100.0	85.6	99.1	89.6	76
Wealth index quintile						
Poorest	6.6	97.9	84.1	90.7	76.6	1,364
Second	8.3	96.6	84.3	90.7	77.6	948
Middle	18.1	97.8	84.7	95.2	82.1	785
Fourth	30.2	98.5	87.1	96.7	85.6	688
Richest	55.2	99.6	87.9	98.6	91.1	640
Ethno-linguistic group of household head						
Lao-Tai	30.0	98.5	86.6	96.3	85.8	2,343
Mon-Khmer	8.1	97.1	83.8	91.0	76.9	1,325
Hmong-Mien	6.0	97.3	85.7	89.2	76.0	594
Chinese-Tibetan	15.5	98.0	75.2	89.9	70.0	140
Other, Missing, DK	*	*	*	*	*	23
Total	19.7	97.9	85.3	93.6	81.3	4,426

[1] **MICS indicator 6.6**

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

The percentage of children age 36-59 months who are developmentally on track in the literacy-numeracy, physical, social-emotional and learning domains, and the ECDI score, are presented in Table CD.5. Eight in 10 children age 36-59 months are developmentally on track. The analysis of the four domains of child development shows that most children are on track in three out of the four learning domains: physical, social-emotional, and learning, but only one of every five children age three and four years is developmentally on track in literacy-numeracy. However, half of children who are attending preschool are on track in the literacy-numeracy domain, compared to only 10 per cent of children not attending preschool. Note that while most children are on track in the domains other than literacy-numeracy, only 6 in 10 children in Phongsaly are on track in the social-emotional domain, and the percentage is also lower than the national average in Oudomxay and Saravane.

XIII. Literacy and Education

Literacy among Young People

One of the World Fit for Children goals is to assure adult literacy. Adult literacy is also a Millennium Development Goal (MDG) indicator relating to both men and women. Literacy is assessed in the LSIS by assuming respondents with secondary or higher education can read, and by asking respondents with primary education or less to read a short simple statement. The percentage of 15-24 year-olds who are literate is presented in Tables ED.1.1 and ED.1.2. Sixty-nine per cent of young women and 77 per cent of young men are literate in Lao PDR. Among both women and men the highest percentage of literacy is found in the Central region at 76 per cent among young women and 79 per cent among young men, and lowest in the South at 55 per cent among young women and 70 per cent among young men. Ninety-one per cent of women and 92 per cent of men in urban areas are literate, compared with 60 per cent of women and 72 per cent of men in rural areas. Among those who stated that primary school was the highest level of schooling they attended, just 46 per cent of young women and 45 per cent of young men were actually able to read the statement shown to them. The literacy rate is positively correlated with socio-economic status, ranging from 29 per cent of women and 49 per cent of men of the poorest quintile, to 96 per cent of both women and men of the richest quintile. Some 82 per cent of women and 84 per cent of men of Lao-Tai headed households are literate, compared with only 30 per cent of women and 43 per cent of men of Chinese-Tibetan headed households.

Table ED.1.1: Literacy among young women

Percentage of women age 15-24 years who are literate, Lao PDR 2011-12

	Percentage literate[1]	Percentage not known	Number of women age 15-24 years
Region			
North	65.2	0.3	2,573
Central	76.3	0.7	3,918
South	55.3	0.4	1,541
Province			
Vientiane Capital	92.9	0.7	1,110
Phongsaly	52.7	0.3	241
Luangnamtha	57.5	0.0	237
Oudomxay	50.6	0.0	479
Bokeo	62.0	0.5	233
Luangprabang	70.3	0.5	474
Huaphanh	67.3	0.2	408
Xayabury	84.0	0.4	502
Xiengkhuang	77.5	1.1	389
Vientiane	84.1	0.6	542
Borikhamxay	78.7	0.8	322
Khammuane	68.0	0.2	378
Savannakhet	58.6	0.6	1,177
Saravane	38.6	0.8	564
Sekong	61.2	0.0	154
Champasack	65.1	0.2	682
Attapeu	67.9	0.0	141
Residence			
Urban	90.6	0.4	2,356
Rural	59.7	0.5	5,676
..Rural with road	61.5	0.6	5,153
..Rural without road	41.4	0.0	523
Education			
None	0.4	0.2	1,054
Primary	45.6	1.4	2,689
Lower secondary	100.0	0.0	1,880
Upper secondary	100.0	0.0	1,577
Post secondary non tertiary	100.0	0.0	216
Higher	100.0	0.0	617
Age			
15-19	72.3	0.4	4,415
20-24	64.3	0.5	3,617
Wealth index quintile			
Poorest	28.7	0.4	1,328
Second	48.9	0.4	1,526
Middle	71.8	0.5	1,540
Fourth	83.9	0.6	1,648
Richest	95.7	0.5	1,990
Ethno-linguistic group of household head			
Lao-Tai	81.6	0.4	5,208
Mon-Khmer	45.3	0.3	1,818
Hmong-Mien	48.6	1.4	689
Chinese-Tibetan	30.1	0.2	269
Other, Missing, DK	(62.2)	(0.0)	49
Total	68.7	0.5	8,032

[1] **MICS indicator 7.1; MDG indicator 2.3**

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table ED.1.2: Literacy among young men

Percentage of men age 15-24 years who are literate, Lao PDR 2011-12

	Percentage literate[1]	Percentage not known	Number of men age 15-24 years
Region			
North	78.7	0.5	1,133
Central	79.4	0.8	1,866
South	69.7	1.1	677
Province			
Vientiane Capital	95.2	0.6	504
Phongsaly	51.1	2.1	130
Luangnamtha	70.1	0.5	94
Oudomxay	76.4	0.0	204
Bokeo	81.5	0.0	90
Luangprabang	82.7	0.6	197
Huaphanh	86.6	0.4	198
Xayabury	89.2	0.0	219
Xiengkhuang	87.8	2.2	194
Vientiane	90.4	0.0	250
Borikhamxay	88.4	1.3	128
Khammuane	74.1	1.0	183
Savannakhet	58.8	0.7	607
Saravane	62.8	0.8	223
Sekong	76.3	0.0	62
Champasack	71.0	1.6	340
Attapeu	83.9	0.0	52
Residence			
Urban	92.0	0.7	1,039
Rural	71.7	0.8	2,637
..Rural with road	73.3	0.8	2,388
..Rural without road	55.5	0.6	249
Education			
None	0.0	0.0	187
Primary	44.7	2.3	1,163
Lower secondary	100.0	0.0	1,077
Upper secondary	100.0	0.0	874
Post secondary non tertiary	100.0	0.0	104
Higher	100.0	0.0	271
Age			
15-19	79.0	0.4	2,119
20-24	75.3	1.2	1,557
Wealth index quintile			
Poorest	48.9	0.7	567
Second	64.8	0.6	734
Middle	77.5	0.7	778
Fourth	91.0	1.1	786
Richest	95.5	0.7	812
Ethno-linguistic group of household head			
Lao-Tai	83.9	0.9	2,407
Mon-Khmer	62.8	0.4	798
Hmong-Mien	81.2	0.2	301
Chinese-Tibetan	43.1	1.5	140
Other, Missing, DK	(65.4)	(0.0)	30
Total	77.4	0.7	3,676

Note: Figures in parentheses are based on 25-49 unweighted cases.

School Readiness

It is important that children attend pre-school education in an organised learning or child education programme in order to be ready to attend school. Table ED.2 shows that 24 per cent of children in Lao PDR are attending the first grade of primary school, having also attended pre-school the previous year. The percentage of boys and girls who attended pre-school is about the same (23 and 25 per cent, respectively). Thirty-two per cent of children in the Central region attended pre-school, compared with only 21 per cent of children in the Northern and 15 per cent in the Southern regions. Fifty-one per cent of children in urban areas attended pre-school the previous year compared with 20 per cent of children living in rural areas. Children in Vientiane Capital (68 per cent), Vientiane province (47 per cent), and Xayabury province (41 per cent) attend preschool in higher proportions than anywhere else. Socio-economic status is highly correlated with school readiness – only 10 per cent of children from the poorest households attended pre-school, while 67 per cent of children living in the richest households did so. While 64 per cent of children of mothers with post-secondary, non-tertiary education attended pre-school, only 13 per cent of children whose mothers have no education attended. Thirty-five per cent of children in Lao-Tai headed households attended pre-school, compared with only 15 per cent of children in Chinese Tibetan-headed households and 13 per cent of children in Mon-Khmer and Hmong-Mien headed households.

Table ED.2: School readiness

Percentage of children attending first grade of primary school who attended pre-school the previous year, Lao PDR 2011-12

	Percentage of children attending first grade who attended preschool in previous year[1]	Number of children attending first grade of primary school
Sex		
Male	22.8	2,177
Female	24.7	2,036
Region		
North	21.4	1,446
Central	31.5	1,682
South	14.6	1,084
Province		
Vientiane Capital	67.9	228
Phongsaly	6.2	152
Luangnamtha	26.7	82
Oudomxay	25.5	320
Bokeo	25.7	122
Luangprabang	25.8	301
Huaphanh	7.5	314
Xayabury	40.7	155
Xiengkhuang	23.6	161
Vientiane	46.7	235
Borikhamxay	21.4	132
Khammuane	16.3	266
Savannakhet	23.6	661
Saravane	5.6	477
Sekong	20.8	139
Champasack	25.3	375
Attapeu	8.4	94
Residence		
Urban	50.6	556
Rural	19.6	3,657
..Rural with road	20.3	3,208
..Rural without road	14.5	449
Mother's education		
None	12.8	1,713
Primary	25.4	1,893
Lower secondary	41.9	374
Upper secondary	60.4	106
Post secondary non tertiary	63.7	90
Higher	(59.7)	34
Mother not in household	*	1
Wealth index quintile		
Poorest	10.3	1,403
Second	15.1	1,116
Middle	26.7	828
Fourth	44.1	508
Richest	66.6	358
Ethno-linguistic group of household head		
Lao-Tai	34.6	2,073
Mon-Khmer	13.4	1,464
Hmong-Mien	12.6	528
Chinese-Tibetan	14.5	126
Other, Missing, DK	*	22
Total	23.7	4,213

[1] **MICS indicator 7.2**

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

Primary and Secondary School Participation

Universal access to basic education and the achievement of primary education by the world's children is one of the most important goals of the 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 indicators for primary and secondary school attendance include:

- Net intake rate in primary education
- Primary school net attendance ratio (adjusted)
- Secondary school net attendance ratio (adjusted)
- Female-to-male education ratio (or gender parity index [GPI]) in primary and secondary school

The indicators of school progression include:

- Children reaching last grade of primary school
- Primary completion rate
- Rate of transition to secondary school

In Lao PDR, the education system currently follows a 5+4+3 formula for the primary, lower secondary and upper secondary levels (five grades in primary school, four in lower secondary school and three in upper secondary school). Children enter primary school at the age of 6, lower secondary school at age 11, and upper secondary school at age 15. There are 5 grades in primary school, 4 grades in lower secondary school and 3 grades in upper secondary school. In primary school grades are referred to as year 1 to year 5 or standard 1 to standard 5, in lower secondary school grades are referred to as year 1 to year 4, and in upper secondary school grades are referred to as year 1 to year 3. The school year typically runs from September of one year to June of the following year.

Table ED.3 shows that in Lao PDR, 64 per cent of all children of primary school entry age are entering grade 1, while the percentage of girls is slightly higher than boys (66 per cent and 62 per cent, respectively). Significant differentials exist across regions, provinces and urban-rural areas. In the Northern and Central regions, two-thirds of 6-year-old children are entering primary school, while in the South, only 53 per cent are entering at the correct age. Children's initiation to primary school is higher in urban areas (81 per cent) than in rural areas (60 per cent). A strong positive correlation with both mother's education and socio-economic status is observed. Among children age 6 whose mothers have no education, only half are entering the first grade, while nearly 90 per cent of 6-year-olds of the highest educated mothers enter primary school. The percentage entering primary school also rises dramatically by wealth quintile, from 48 per cent among children in the poorest households, to 83 per cent in the richest. Seventy-four per cent of 6-year-old children in Lao-Tai headed households are entering primary school, compared to only 42 per cent of children in Chinese-Tibetan headed households.

Table ED.3: Primary school entry

Percentage of children of primary school entry age entering grade 1 (net intake rate), Lao PDR 2011-12

	Percentage of children of primary school entry age entering grade 1[1]	Number of children of primary school entry age
Sex		
Male	61.5	1,158
Female	66.1	1,213
Region		
North	67.1	850
Central	66.9	1,003
South	52.7	517
Province		
Vientiane Capital	84.6	188
Phongsaly	51.8	84
Luangnamtha	58.5	72
Oudomxay	62.5	160
Bokeo	61.5	76
Luangprabang	67.5	190
Huaphanh	72.1	133
Xayabury	84.3	134
Xiengkhuang	67.9	108
Vientiane	73.3	158
Borikhamxay	82.9	90
Khammuane	62.7	134
Savannakhet	50.6	326
Saravane	46.7	202
Sekong	66.4	58
Champasack	54.8	214
Attapeu	51.9	43
Residence		
Urban	81.2	418
Rural	60.1	1,952
..Rural with road	62.4	1,691
..Rural without road	45.7	261
Mother's education		
None	48.8	900
Primary	68.7	1,038
Lower secondary	82.0	265
Upper secondary	83.7	83
Post secondary non tertiary	(87.6)	45
Higher	(88.5)	40
Wealth index quintile		
Poorest	48.2	728
Second	57.3	552
Middle	73.2	440
Fourth	78.5	365
Richest	83.2	286
Ethno-linguistic group of household head		
Lao-Tai	74.2	1,225
Mon-Khmer	52.7	761
Hmong-Mien	57.3	295
Chinese-Tibetan	41.7	80
Other, Missing, DK	*	10
Total	63.9	2,371

[1] **MICS indicator 7.3**

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

The primary school net attendance ratio is the percentage of children of primary school age (6 to 10 years) who are attending primary school. The *adjusted* primary school net attendance ratio (shown in Table ED.4) is the percentage of children of primary school age who are attending primary or secondary school. The majority of children of primary school age are attending school (85 per cent). However, 15 per cent of primary school-age children are out of school when they are expected to be participating. In urban areas, 95 per cent of children attend school while in rural areas attendance is only 83 per cent. A positive correlation exists with regard to mother's education and the socio-economic status of households. While 95 per cent of children of mothers with lower secondary school education are attending school, only 74 per cent of children of mothers with no education are attending. In the richest households, the proportion is 97 per cent, and 71 per cent among children living in the poorest households. Nationally, boys and girls of primary school age attend school in equal proportion, but among the poorest households, the percentage of girls who attend school (68 per cent) is slightly lower than the percentage of boys (74 per cent). Ninety-two per cent of children of primary school age in Lao-Tai headed households attend school, but the proportion is lower among children living in other ethno-linguistic households.

Table ED.4: Primary school attendance

Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio), Lao PDR 2011-12

	Male		Female		Total	
	Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted)[1]	Number of children
Region						
North	88.4	2,064	85.5	2,101	87.0	4,165
Central	86.0	2,639	86.7	2,726	86.4	5,365
South	78.4	1,337	79.3	1,327	78.8	2,664
Province						
Vientiane Capital	94.6	481	97.9	476	96.2	957
Phongsaly	80.5	224	76.3	198	78.5	422
Luangnamtha	84.0	175	84.3	153	84.1	328
Oudomxay	88.0	370	80.7	395	84.2	765
Bokeo	86.5	184	81.1	182	83.8	366
Luangprabang	88.4	440	87.8	468	88.1	908
Huaphanh	93.0	376	87.6	365	90.3	741
Xayabury	93.3	294	94.2	340	93.8	634
Xiengkhuang	92.0	267	89.2	293	90.5	559
Vientiane	93.0	405	92.0	421	92.5	826
Borikhamxay	95.9	235	94.8	218	95.3	452
Khammuane	84.2	372	85.2	350	84.7	722
Savannakhet	74.4	880	77.0	968	75.7	1,849
Saravane	73.4	501	75.1	505	74.2	1,006
Sekong	85.3	142	85.2	136	85.3	278
Champasack	81.2	572	82.1	569	81.6	1,142
Attapeu	77.8	122	76.5	116	77.1	238
Residence						
Urban	94.4	1,119	95.4	1,151	94.9	2,270
Rural	83.1	4,921	82.3	5,002	82.7	9,923
..Rural with road	84.5	4,322	84.2	4,396	84.4	8,717
..Rural without road	72.3	599	68.2	606	70.2	1,205
Age at beginning of school year						
6	63.6	1,158	69.8	1,213	66.8	2,371
7	85.2	1,205	82.7	1,243	83.9	2,449
8	90.1	1,269	89.9	1,319	90.0	2,588
9	93.2	1,194	90.6	1,101	92.0	2,295
10	92.5	1,213	90.4	1,277	91.5	2,490
Mother's education						
None	75.9	2,301	72.6	2,247	74.2	4,548
Primary	88.5	2,601	89.8	2,727	89.1	5,328
Lower secondary	96.1	692	94.1	706	95.1	1,398
Upper secondary	94.4	215	98.7	222	96.6	437
Post secondary non tertiary	99.6	153	99.8	175	99.7	328
Higher	98.7	77	97.9	76	98.3	154
DK/Missing	*	1	*	0	*	1
Wealth index quintile						
Poorest	73.8	1,625	67.8	1,657	70.8	3,282
Second	81.1	1,453	83.0	1,442	82.0	2,895
Middle	91.0	1,216	92.0	1,270	91.5	2,486
Fourth	93.9	974	95.4	999	94.6	1,973
Richest	96.5	771	98.0	785	97.3	1,556
Ethno-linguistic group of household head						
Lao-Tai	91.1	3,218	92.5	3,371	91.8	6,589
Mon-Khmer	75.8	1,860	74.2	1,824	75.0	3,684
Hmong-Mien	86.2	712	79.6	736	82.8	1,449
Chinese-Tibetan	75.9	229	69.9	196	73.1	424
Other, Missing, DK	*	21	(70.2)	26	(69.2)	47
Total	85.2	6,040	84.7	6,153	84.9	12,193

[1] **MICS indicator 7.4; MDG indicator 2.1**

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

The secondary school net attendance ratio is the percentage of children of secondary school age (11 to 17 years) who are attending secondary school. The *adjusted* secondary school net attendance ratio (shown in Table ED.5) is the percentage of children of secondary school age who are attending secondary school or higher. Table ED.5 also presents the percentage of children of secondary school age who are attending primary school.

Only about half (45 per cent) of children of secondary school age are attending secondary school. Of the remaining half, 25 per cent are attending primary school, while 30 per cent are not attending school at all.

Thirty per cent of children of secondary school age in the North and South are attending primary school, compared to 20 per cent of children in the Central region. In rural areas, 29 per cent of children of secondary school age are attending primary school, compared to only 11 per cent of children in urban areas. Two thirds of children age 11 are still attending primary school. While the percentage of secondary school-aged children attending primary school declines steadily with the increasing education of the mother, as many as 37 per cent of children of mothers who have no education are attending primary school. The decline in the proportion of secondary school-aged children attending primary school according to increasing wealth quintile is dramatic, dropping from a high of 43 per cent among those from the poorest quintile (6 per cent). Some 18 per cent of secondary school-aged children of Lao-Tai headed households are attending primary school, compared with more than 30 per cent of children in Mon-Khmer, Hmong-Mien and Chinese-Tibetan headed households.

Table ED.5: Secondary school attendance

Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio) and percentage of children attending primary school, Lao PDR 2011-12

	Male			Female			Total		
	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children
Region									
North	46.1	32.2	2,612	40.5	26.7	2,611	43.3	29.5	5,223
Central	49.1	22.8	3,773	52.2	17.5	3,804	50.7	20.1	7,577
South	32.8	34.4	1,737	33.0	24.2	1,589	32.9	29.5	3,326
Province									
Vientiane Capital	76.8	9.7	662	76.1	8.6	852	76.4	9.1	1,514
Phongsaly	35.8	37.7	285	32.4	30.3	234	34.3	34.4	519
Luangnamtha	44.2	33.8	231	40.4	26.4	238	42.3	30.0	469
Oudomxay	38.4	40.4	455	32.8	30.5	480	35.5	35.3	936
Bokeo	44.8	33.0	194	37.3	27.4	233	40.7	29.9	427
Luangprabang	46.9	31.4	481	37.6	31.0	507	42.1	31.2	988
Huaphanh	53.3	32.5	557	48.3	28.8	475	51.0	30.8	1,032
Xayabury	53.1	18.7	409	50.1	13.5	443	51.5	16.0	852
Xiengkhuang	60.0	24.8	410	57.0	17.7	421	58.5	21.2	831
Vientiane	61.1	19.6	601	57.6	17.0	539	59.5	18.4	1,140
Borikhamxay	55.6	18.7	334	50.1	16.9	321	52.9	17.8	655
Khammuane	38.6	28.6	489	37.4	26.1	400	38.0	27.5	888
Savannakhet	28.0	29.4	1,278	37.5	21.0	1,271	32.8	25.2	2,550
Saravane	24.7	41.4	584	19.7	29.4	544	22.3	35.6	1,128
Sekong	36.6	49.8	163	36.1	40.4	162	36.4	45.1	325
Champasack	37.3	26.0	831	42.5	14.9	727	39.7	20.8	1,558
Attapeu	35.5	36.7	159	31.7	32.9	156	33.6	34.8	315
Residence									
Urban	70.3	13.4	1,804	74.3	9.6	1,958	72.4	11.4	3,762
Rural	37.3	32.6	6,318	35.0	25.8	6,046	36.2	29.3	12,365
..Rural with road	39.4	31.5	5,653	37.1	25.1	5,394	38.3	28.4	11,047
..Rural without road	19.7	41.9	665	17.2	31.5	653	18.5	36.7	1,318
Age at beginning of school year									
11	21.9	69.9	1,393	27.2	61.2	1,297	24.5	65.7	2,690
12	36.6	48.9	1,241	42.4	40.5	1,271	39.5	44.6	2,512
13	47.6	32.0	1,207	52.1	20.1	1,256	49.9	25.9	2,463
14	55.2	16.9	1,196	53.7	10.7	1,222	54.4	13.7	2,418
15	57.6	7.9	1,082	53.4	3.8	982	55.6	5.9	2,064
16	52.9	3.8	1,028	45.9	1.3	982	49.5	2.6	2,010
17	47.9	0.8	975	39.5	0.6	994	43.7	0.7	1,969

[1] **MICS indicator 7.5**

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

Table ED.5: Secondary school attendance

Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio) and percentage of children attending primary school, Lao PDR 2011-12

	Male			Female			Total		
	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children
Mother's education									
None	26.2	41.2	2,685	22.3	32.7	2,610	24.3	37.0	5,294
Primary	44.4	29.8	3,474	46.2	24.7	3,150	45.2	27.4	6,624
Lower secondary	73.7	12.8	830	79.4	8.1	821	76.5	10.4	1,652
Upper secondary	85.4	8.6	245	84.6	8.3	283	85.0	8.5	528
Post secondary non tertiary	78.8	6.3	282	89.2	5.3	297	84.1	5.8	579
Higher	96.4	3.6	79	92.7	3.7	120	94.2	3.6	198
Mother not in household	53.9	3.0	367	37.7	0.7	593	43.9	1.6	961
Cannot be determined	40.2	0.6	158	31.6	0.0	129	36.3	0.3	287
DK/Missing	*	*	1	*	*	1	*	*	3
Wealth index quintile									
Poorest	13.6	48.9	1,548	8.9	35.9	1,506	11.3	42.5	3,054
Second	29.2	36.4	1,805	26.0	32.5	1,733	27.6	34.5	3,538
Middle	44.6	27.9	1,864	45.4	22.1	1,730	45.0	25.1	3,594
Fourth	63.0	16.4	1,689	63.6	11.8	1,582	63.3	14.2	3,270
Richest	81.9	7.3	1,217	82.1	5.1	1,453	82.0	6.1	2,670
Ethno-linguistic group of household head									
Lao-Tai	54.2	20.1	4,849	58.2	15.0	4,856	56.2	17.6	9,704
Mon-Khmer	27.6	40.9	2,132	21.5	33.8	2,004	24.6	37.5	4,136
Hmong-Mien	38.8	39.0	796	28.3	30.7	835	33.4	34.7	1,631
Chinese-Tibetan	28.1	42.1	283	25.7	26.7	275	26.9	34.5	559
Other, Missing, DK	37.2	38.7	62	(14.4)	(35.1)	34	29.1	37.4	96
Total	44.7	28.3	8,122	44.6	21.8	8,004	44.6	25.1	16,126

[1] **MICS indicator 7.5**

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

The percentage of children entering first grade who eventually reach the last grade of primary school is presented in Table ED.6. Of all children starting grade one, the vast majority of them (95 per cent) will reach the last grade. Notice that this figure includes children that repeat grades but do eventually reach the last grade. Ninety-five per cent of both girls and boys who entered grade one reach grade five. In the Northern and Central regions, 98 per cent and 96 per cent of children in grade one reach grade five (including repetition), compared with 87 per cent in the South. Only 4 per cent more urban than rural children are likely to reach grade five. All children of mothers with upper secondary school or higher education reach grade five if they started grade one, compared with 94 per cent of children of mothers with no education. Ninety-two per cent of children of households belonging to the middle quintile reach grade five if they enter grade one, compared with all children of the households belonging to the richest quintile. Once they enter grade one, 99 per cent of children in Chinese-Tibetan headed households reach grade five, compared with only 93 per cent of children in Mon-Khmer headed households.

Table ED.6: Children reaching last grade of primary school

Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school), Lao PDR 2011-12

	Percent attending grade 1 last school year who are in grade 2 this school year	Percent attending grade 2 last school year who are attending grade 3 this school year	Percent attending grade 3 last school year who are attending grade 4 this school year	Percent attending grade 4 last school year who are attending grade 5 this school year	Percent who reach grade 5 of those who enter grade 1[1]
Sex					
Male	98.6	99.3	99.0	98.0	95.0
Female	98.8	99.6	98.1	98.4	94.9
Region					
North	99.8	99.8	99.6	98.4	97.6
Central	98.1	99.4	99.7	98.8	96.1
South	97.8	98.7	94.2	96.1	87.4
Province					
Vientiane Capital	99.3	100.0	100.0	98.3	97.6
Phongsaly	100.0	100.0	100.0	100.0	100.0
Luangnamtha	99.2	100.0	100.0	99.5	98.7
Oudomxay	99.6	100.0	100.0	98.6	98.3
Bokeo	100.0	100.0	100.0	98.0	98.0
Luangprabang	99.6	99.5	99.1	98.5	96.7
Huaphanh	100.0	99.5	98.6	98.4	96.5
Xayabury	100.0	100.0	100.0	97.1	97.1
Xiengkhuang	100.0	99.3	99.3	98.7	97.3
Vientiane	98.7	100.0	99.4	99.7	97.8
Borikhamxay	99.3	100.0	100.0	100.0	99.3
Khammuane	97.7	98.8	100.0	98.5	95.0
Savannakhet	96.7	98.9	99.5	98.2	93.4
Saravane	95.9	98.6	93.0	93.1	81.9
Sekong	99.4	98.4	98.7	96.9	93.5
Champasack	98.6	98.7	93.0	96.9	87.7
Attapeu	100.0	99.2	99.4	100.0	98.7
Residence					
Urban	98.9	99.9	99.7	99.2	97.8
Rural	98.6	99.3	98.3	97.9	94.2
..Rural with road	98.5	99.4	98.3	98.2	94.5
..Rural without road	99.3	98.5	98.0	95.5	91.6
Mother's education					
None	97.7	98.8	98.9	98.0	93.6
Primary	99.2	99.6	98.5	98.1	95.5
Lower secondary	100.0	100.0	97.0	99.5	96.5
Upper secondary	100.0	100.0	100.0	100.0	100.0
Post secondary non	100.0	100.0	100.0	100.0	100.0
Higher	(100.0)	*	*	(100.0)	*
Mother not in household	*	*	*	*	*
Wealth index quintile					
Poorest	98.6	99.1	98.4	96.6	93.0
Second	98.3	99.1	97.9	98.8	94.3
Middle	97.9	99.2	97.4	97.5	92.3
Fourth	99.6	100.0	100.0	98.4	98.0
Richest	99.5	100.0	100.0	100.0	99.5
Ethno-linguistic group of household head					
Lao-Tai	99.2	99.7	98.6	98.3	95.9
Mon-Khmer	97.7	98.6	98.3	97.9	92.7
Hmong-Mien	99.3	99.7	98.3	98.2	95.5
Chinese-Tibetan	99.7	100.0	100.0	99.4	99.0
Other, Missing, DK	*	*	*	*	*
Total	98.7	99.4	98.6	98.2	94.9

[1] **MICS indicator 7.6; MDG indicator 2.2**

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

However, if it is assumed that children repeating grades do not progress to the next grade, the 'survival rate' – or percentage of children entering first grade of primary school who eventually reach the last grade of primary school – will change, as shown in Table ED.6A. In accordance with this assumption, the 'survival rate' in Lao PDR is 65 per cent, meaning that 65 per cent of both girls and boys who entered grade one reach grade five. In the Northern and Central regions, 76 per cent and 67 per cent of children in grade one reach grade five, respectively, compared with 49 per cent in the South. Children in urban areas are more likely to reach grade five than children in rural areas (78 per cent and 63 per cent, respectively).

The survival rate of primary school children is also positively correlated with the education level of mothers. More than 75 per cent of children of mothers with at least lower secondary school or higher education reach grade five if they started grade one, compared with 60 per cent of children of mothers with no education. Similarly, more than 75 per cent of children of households belonging to the fourth and richest quintile reach grade five, if they enter grade one. Once they enter grade one, 87 per cent of children in Chinese-Tibetan headed households reach grade five, compared with only 67 per cent of children in Lao-Tai headed households.

Table ED.6A: Children reaching last grade of primary school

Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school, assuming repeaters do not progress to the next grade), Lao PDR 2011-12

	Percent attending grade 1 last school year who are in grade 2 this school year	Percent attending grade 2 last school year who are attending grade 3 this school year	Percent attending grade 3 last school year who are attending grade 4 this school year	Percent attending grade 4 last school year who are attending grade 5 this school year	Percent who reach grade 5 of those who enter grade 1
Sex					
Male	72.8	95.6	96.7	96.7	65.1
Female	74.0	96.1	95.2	96.6	65.4
Region					
North	83.0	96.5	97.6	97.5	76.2
Central	74.8	95.5	96.7	97.0	67.0
South	59.4	95.4	91.5	93.8	48.6
Province					
Vientiane Capital	93.4	99.1	98.1	98.3	89.4
Phongsaly	92.0	96.8	96.3	99.2	85.1
Luangnamtha	93.2	95.0	98.6	99.5	86.9
Oudomxay	91.2	100.0	99.2	96.6	87.4
Bokeo	87.5	97.7	98.7	98.0	82.6
Luangprabang	89.9	96.7	97.6	98.5	83.5
Huaphanh	59.5	93.2	94.6	97.0	50.8
Xayabury	92.0	95.5	98.5	95.7	82.8
Xiengkhuang	84.4	96.3	98.0	98.1	78.2
Vientiane	90.2	97.2	96.9	99.0	84.1
Borikhamxay	85.3	94.8	97.8	96.9	76.6
Khammuane	64.5	89.3	93.3	93.2	50.0
Savannakhet	63.5	95.2	96.4	96.1	55.9
Saravane	45.8	96.6	87.0	89.9	34.6
Sekong	55.6	90.3	95.4	93.3	44.7
Champasack	79.0	95.8	92.5	95.0	66.5
Attapeu	73.4	96.4	98.1	99.3	68.9
Residence					
Urban	84.9	96.3	97.9	98.0	78.4
Rural	71.3	95.8	95.5	96.3	62.8
..Rural with road	71.3	96.0	95.4	96.7	63.1
..Rural without road	71.9	93.6	96.5	92.1	59.8
Mother's education					
None	68.4	94.6	95.6	96.9	59.9
Primary	74.2	96.5	96.4	96.4	66.6
Lower secondary	85.8	96.6	94.4	98.8	77.3
Upper secondary	84.5	94.3	97.8	98.3	76.6
Post secondary non tertiary	85.9	100.0	97.8	94.6	79.4
Higher	(92.1)	(97.4)	*	(100.0)	*
Mother not in household	*	*	*	*	*
Wealth index quintile					
Poorest	67.8	95.3	96.1	94.0	58.4
Second	69.9	95.3	94.1	98.1	61.5
Middle	72.4	95.8	94.6	95.4	62.6
Fourth	85.2	96.5	98.1	97.4	78.6
Richest	87.9	97.4	98.9	98.5	83.4
Ethno-linguistic group of household head					
Lao-Tai	74.6	95.9	96.5	97.0	67.0
Mon-Khmer	68.1	95.5	94.7	95.4	58.8
Hmong-Mien	78.6	96.2	95.8	97.7	70.8
Chinese-Tibetan	92.9	96.7	98.2	98.5	86.8
Other, Missing, DK	*	*	*	*	*
Total	73.4	95.9	96.0	96.7	65.3

Assumes repeaters do NOT progress to the next grade

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

The primary school completion rate and the transition rate to secondary education are presented in Table ED.7. The primary school completion rate is the ratio of the total number of students, regardless of age, entering the last grade of primary school for the first time, to the number of children of the primary graduation age at the beginning of the current (or most recent) school year. The primary school completion rate for all of Lao PDR is 94 per cent. The rate varies considerably across provinces from as high as 129 per cent in Luangnamtha and as low as 59 per cent in Saravane.

The completion rate among boys (101 per cent) is 12 points higher than that among girls (88 per cent). Children in the South have a lower completion rate (72 per cent) compared with children in the Northern and Central region (99 per cent). Children of mothers who have no education have a lower completion rate (81 per cent) than other children. The primary school completion rate is especially low among children in the poorest quintile (64 per cent). While the primary completion rate is over 100 per cent among the children of Lao-Tai and Hmong-Mien household heads, it is only 73 per cent and 77 per cent among the Chinese-Tibetan and Mon-Khmer households. Ninety-one per cent of children who successfully completed the last grade of primary school went on to attend the first grade of secondary school. The transition rate to secondary school is above 90 per cent for most but not all background characteristics shown in Table ED.7. Children in the North, in rural areas without roads, from the lowest wealth quintiles, and in Mon-Khmer headed households have lower than average transition rates to secondary school.

Table ED.7: Primary school completion and transition to secondary school

Primary school completion rates and transition rate to secondary school, Lao PDR 2011-12

	Primary school completion rate[1]	Number of children of primary school completion age	Transition rate to secondary school[2]	Number of children who were in the last grade of primary school the previous year
Sex				
Male	100.5	1,213	91.1	1,008
Female	88.2	1,277	90.7	959
Region				
North	102.6	833	88.3	689
Central	98.8	1,121	93.0	956
South	71.5	536	90.3	323
Province				
Vientiane Capital	110.8	203	95.7	212
Phongsaly	86.1	84	100.0	50
Luangnamtha	129.3	62	84.3	49
Oudomxay	81.0	158	97.6	111
Bokeo	87.7	67	94.3	48
Luangprabang	112.7	182	82.7	137
Huaphanh	119.0	138	89.8	174
Xayabury	102.9	142	78.1	120
Xiengkhuang	111.0	123	97.6	143
Vientiane	114.5	169	94.0	182
Borikhamxay	112.4	96	97.3	92
Khammuane	84.4	151	83.9	94
Savannakhet	83.8	379	88.9	233
Saravane	58.6	191	91.7	75
Sekong	95.2	49	89.9	44
Champasack	73.6	248	88.2	169
Attapeu	87.6	49	97.9	34
Residence				
Urban	107.8	473	94.9	520
Rural	91.0	2,017	89.5	1,447
..Rural with road	93.8	1,783	90.5	1,325
..Rural without road	69.2	233	78.1	122
Mother's education				
None	80.8	898	88.3	520
Primary	100.2	1,095	89.8	873
Lower secondary	102.1	308	95.6	324
Upper secondary	103.7	84	100.0	95
Post secondary non tertiary	92.4	78	94.9	84
Higher	(101.1)	26	(100.0)	30
Mother not in household	*	0	(91.2)	19
Wealth index quintile				
Poorest	64.2	605	82.8	202
Second	92.3	590	86.8	413
Middle	109.1	525	90.5	526
Fourth	111.3	435	95.6	451
Richest	106.0	335	94.5	375
Ethno-linguistic group of household head				
Lao-Tai	102.7	1,370	92.4	1,267
Mon-Khmer	77.3	757	85.5	423
Hmong-Mien	105.4	267	92.7	228
Chinese-Tibetan	72.5	88	92.2	42
Other, Missing, DK	*	9	*	8
Total	94.2	2,490	90.9	1,967

[1] **MICS indicator 7.7**

[2] **MICS indicator 7.8**

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

The ratio of girls to boys attending primary and secondary education is provided in Table ED.8. This ratio is better known as the Gender Parity Index (GPI) and is obtained from adjusted net attendance ratios. The GPI for primary school is close to 1.00, indicating no difference in the attendance of girls and boys across most of the background characteristics in the table. The GPI is also 1.00 for secondary school, indicating no gender disparity between boys and girls, although there are disparities in some sub-groups of the population. Across the provinces, the GPI is lowest in Luangprabang (0.80) and Saravane (0.80). The secondary school educational disadvantage of girls is pronounced among children living in the poorest households (0.66), and among children in Hmong-Mien headed households (0.73).

Table ED.8: Education gender parity

Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Lao PDR 2011-12

	Primary school adjusted net attendance ratio (NAR), girls	Primary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school adjusted NAR[1]	Secondary school adjusted net attendance ratio (NAR), girls	Secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school adjusted NAR[2]
Region						
North	85.5	88.4	0.97	40.5	46.1	0.88
Central	86.7	86.0	1.01	52.2	49.1	1.06
South	79.3	78.4	1.01	33.0	32.8	1.00
Province						
Vientiane Capital	97.9	94.6	1.03	76.1	76.8	0.99
Phongsaly	76.3	80.5	0.95	32.4	35.8	0.91
Luangnamtha	84.3	84.0	1.00	40.4	44.2	0.91
Oudomxay	80.7	88.0	0.92	32.8	38.4	0.85
Bokeo	81.1	86.5	0.94	37.3	44.8	0.83
Luangprabang	87.8	88.4	0.99	37.6	46.9	0.80
Huaphanh	87.6	93.0	0.94	48.3	53.3	0.91
Xayabury	94.2	93.3	1.01	50.1	53.1	0.94
Xiengkhuang	89.2	92.0	0.97	57.0	60.0	0.95
Vientiane	92.0	93.0	0.99	57.6	61.1	0.94
Borikhamxay	94.8	95.9	0.99	50.1	55.6	0.90
Khammuane	85.2	84.2	1.01	37.4	38.6	0.97
Savannakhet	77.0	74.4	1.03	37.5	28.0	1.34
Saravane	75.1	73.4	1.02	19.7	24.7	0.80
Sekong	85.2	85.3	1.00	36.1	36.6	0.99
Champasack	82.1	81.2	1.01	42.5	37.3	1.14
Attapeu	76.5	77.8	0.98	31.7	35.5	0.89
Residence						
Urban	95.4	94.4	1.01	74.3	70.3	1.06
Rural	82.3	83.1	0.99	35.0	37.3	0.94
..Rural with road	84.2	84.5	1.00	37.1	39.4	0.94
..Rural without road	68.2	72.3	0.94	17.2	19.7	0.87
Mother's education						
None	72.6	75.9	0.96	22.3	26.2	0.85
Primary	89.8	88.5	1.02	46.2	44.4	1.04
Lower secondary	94.1	96.1	0.98	79.4	73.7	1.08
Upper secondary	98.7	94.4	1.05	84.6	85.4	0.99
Post secondary non tertiary	99.8	99.6	1.00	89.2	78.8	1.13
Higher	97.9	98.7	0.99	92.7	96.4	0.96
Cannot be determined	na	na	na	37.7	53.9	0.70
Wealth index quintile						
Poorest	67.8	73.8	0.92	8.9	13.6	0.66
Second	83.0	81.1	1.02	26.0	29.2	0.89
Middle	92.0	91.0	1.01	45.4	44.6	1.02
Fourth	95.4	93.9	1.02	63.6	63.0	1.01
Richest	98.0	96.5	1.02	82.1	81.9	1.00
Ethno-linguistic group of household head						
Lao-Tai	92.5	91.1	1.02	58.2	54.2	1.07
Mon-Khmer	74.2	75.8	0.98	21.5	27.6	0.78
Hmong-Mien	79.6	86.2	0.92	28.3	38.8	0.73
Chinese-Tibetan	69.9	75.9	0.92	25.7	28.1	0.92
Other, Missing, DK	(70.2)	*	*	(14.4)	37.2	(0.39)
Total	84.7	85.2	0.99	44.6	44.7	1.00

[1] **MICS indicator 7.9; MDG indicator 3.1**

[2] **MICS indicator 7.10; MDG indicator 3.1**

na = Not applicable

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

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XIV. Child Protection

Birth Registration

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

Table CP.1: Birth registration

Percentage of children under age 5 whose birth is registered and percentage of children not registered whose mothers/caretakers know how to register birth, Lao PDR 2011-12

	Children under age 5 whose birth is registered with civil authorities					Children under age 5 whose birth is not registered	
	Has birth certificate						
	Seen	Not seen	No birth certificate	Total registered[1]	Number of children	Percent of children whose mother/caretaker knows how to register birth	Number of children without birth registration
Sex							
Male	16.7	16.4	41.2	74.3	5,593	40.5	1,437
Female	16.6	15.9	42.8	75.2	5,474	43.1	1,356
Region							
North	16.3	9.1	42.0	67.3	3,502	16.0	1,145
Central	15.9	24.1	39.0	79.0	5,154	55.6	1,082
South	18.6	9.4	48.5	76.5	2,411	67.6	566
Province							
Vientiane Capital	29.3	42.2	13.7	85.2	1,058	23.7	157
Phongsaly	2.2	3.0	39.0	44.1	368	13.6	206
Luangnamtha	28.2	15.8	53.0	96.9	280	*	9
Oudomxay	45.9	9.6	42.0	97.5	676	*	17
Bokeo	9.8	11.1	43.6	64.5	335	9.2	119
Luangprabang	7.0	15.3	54.9	77.1	752	49.1	172
Huaphanh	1.1	1.0	3.9	6.0	606	0.4	570
Xayabury	16.5	8.1	64.5	89.1	486	(74.9)	53
Xiengkhuang	16.7	6.7	57.2	80.6	540	78.2	105
Vientiane	19.6	16.8	40.8	77.3	767	76.4	174
Borikhamxay	32.5	24.2	33.8	90.6	402	(72.6)	38
Khammuane	6.1	14.4	55.6	76.1	603	26.6	144
Savannakhet	5.8	25.0	43.1	74.0	1,784	61.1	464
Saravane	35.7	8.7	38.3	82.7	923	51.7	160
Sekong	4.6	11.3	54.1	70.0	269	90.9	81
Champasack	8.6	9.4	50.7	68.7	1,003	69.6	314
Attapeu	9.6	10.0	75.3	94.8	216	(71.0)	11
Residence							
Urban	28.5	30.3	29.0	87.8	2,319	53.5	283
Rural	13.5	12.4	45.4	71.3	8,748	40.5	2,510
..Rural with road	14.5	13.0	45.2	72.8	7,661	40.0	2,087
..Rural without road	6.4	8.0	46.8	61.1	1,086	42.6	423
Age							
0-11 months	21.0	12.2	26.9	60.1	2,307	55.3	921
12-23 months	17.9	16.6	39.8	74.2	2,141	39.7	551
24-35 months	15.5	16.9	44.7	77.1	2,193	38.5	503
36-47 months	15.6	17.8	47.7	81.2	2,302	27.0	434
48-59 months	12.8	17.5	51.7	81.9	2,124	33.4	384
Mother's education							
None	11.4	8.6	45.9	66.0	3,580	35.5	1,219
Primary	13.7	14.3	47.0	75.0	4,556	46.4	1,140
Lower secondary	21.8	22.6	35.2	79.5	1,613	47.6	330
Upper secondary	33.5	29.5	27.0	90.0	695	45.9	70
Post secondary non tertiary	32.6	40.8	20.8	94.2	368	(38.9)	21
Higher	40.7	42.4	11.7	94.8	255	*	13
Wealth index quintile							
Poorest	12.9	6.0	47.0	65.9	3,233	35.0	1,103
Second	10.3	10.8	47.4	68.5	2,346	40.1	739
Middle	14.2	14.0	47.7	75.9	2,019	45.4	486
Fourth	19.3	22.9	38.7	80.9	1,807	61.3	344
Richest	32.8	38.6	21.3	92.8	1,663	44.6	120
Ethno-linguistic group of household head							
Lao-Tai	20.1	22.7	38.8	81.5	6,030	53.0	1,113
Mon-Khmer	14.1	9.9	46.8	70.8	3,189	42.8	932
Hmong-Mien	8.7	4.7	44.1	57.6	1,439	25.9	610
Chinese-Tibetan	10.1	6.7	48.1	64.9	357	11.9	125
Other, Missing, DK	38.2	16.9	20.5	75.5	52	*	13
Total	16.6	16.1	42.0	74.8	11,067	41.8	2,793

[1] **MICS indicator 8.1**

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

Mothers and caretakers of children age under five years were asked whether the children have a birth certificate. Respondents reporting that a child had a certificate were asked to show the certificate to the interviewer (all children reported to have birth certificates are considered registered). Respondents reporting that a child did not have a certificate were asked whether the child is registered with the civil authorities. Table CP.1 presents the percentage of children who are registered.

Seventy-five per cent of all children under the age of five are registered, and 33 per cent have a birth certificate. Nearly 9 in 10 children in urban areas (88 per cent) are registered, compared to only 7 in 10 rural children. At least 65 per cent of children are registered in every province, with the exception of Phongsaly and Huaphanh, where only 44 per cent and 6 per cent are registered, respectively. The highest proportions of children registered are found in Oudomxay, Luangnamtha and Attapeu (98, 97, and 95 per cent, respectively). There are no significant variations in birth registration by the sex of the child. While the percentage of children registered increases with the increasing age of the child, the percentage of children who are registered but have no birth certificate also increases with age (from 27 to 52 per cent). The percentage of children who are registered steadily increases as mothers' education and wealth increase. The percentage of children registered is highest among Lao-Tai headed households (82 per cent) and lowest among Hmong-Mien headed households (58 per cent).

Mothers and caretakers who reported a child as having no birth certificate and being unregistered with the civil authorities were asked whether they know how to register the child's birth. Table CP.1 presents the percentage of unregistered children whose mothers and caretakers know how to register a birth. This percentage varies dramatically across the country and is especially low in the Northern region, where only 16 per cent of those who have not registered know how to register a birth. The percentage is also very low among those living in Hmong-Mien and Chinese-Tibetan headed households (26 and 12 per cent, respectively).

Child Discipline

As stated in A World Fit for Children, "children must be protected against any acts of violence …" and the Millennium Declaration calls for the protection of children against abuse, exploitation and violence. Respondents to the 2011-12 LSIS household questionnaire were asked a series of questions on the ways adults in the household teach children the right behaviour or address a behaviour problem. Only one child was selected at random per household, and questions were asked about the methods used on that particular child, by any adult in the household. The child was selected at random from all children age 2-14 living in the household. Figures were then appropriately weighted to reflect all children age 2-14 in all of the households interviewed.

The percentage of children age 2-14 who experience psychological aggression or physical punishment from an adult in their household is presented in Table CP.2. The table also presents the percentage of children who are disciplined in only non-violent ways. Non-violent forms of discipline include taking away privileges, forbidding the child to do something, not allowing the child to leave the house, or explaining to the child why a particular behaviour was wrong, or distracting the child from the undesirable behaviour by providing a desirable alternative. Psychological aggression includes shouting, yelling, screaming or calling the child 'dumb', 'lazy' or a similar negative term. Physical punishment includes shouting, hitting somewhere on the body using a bare hand or an object, hitting the face, head or ears, or beating the child repeatedly and as hard as possible. Severe physical punishment includes hitting the face, head or ears, or beating the child repeatedly and as hard as possible. Psychological and physical forms of punishment or aggression are considered violent methods of discipline.

Seventy-six per cent of all Lao children age 2-14 are subject to at least one form of psychological aggression or physical punishment from an adult in their household. The percentage of children who experience violent discipline exceeds 60 per cent in all but two provinces: Attapeu (48 per cent) and Borikhamxay (35 per cent). The percentage of children who experience violent discipline remains high across all education levels and wealth quintiles – one of the few statistics that does not vary

considerably by education and wealth. While the percentage of children who experience severe physical punishment does decline with increasing education and wealth, the percentage who experience any physical punishment or psychological aggression holds steady.

Table CP.2: Child discipline

Percentage of children age 2-14 years according to method of disciplining the child, Lao PDR 2011-12

	Percentage of children age 2-14 years who experienced:							
			Physical punishment					
	Only non-violent discipline	Psychological aggression	Any	Severe	Any violent discipline method[1]	Number of children age 2-14 years	Respondent believes that a child needs to be physically punished	Respondents to the child discipline module
Sex								
Male	18.3	72.9	46.5	9.0	77.1	15,583	42.8	7,100
Female	20.3	68.9	42.0	6.2	74.3	15,786	40.6	7,213
Region								
North	15.5	77.3	39.0	8.9	79.5	10,527	37.9	4,749
Central	19.4	69.6	47.1	7.8	75.5	14,093	40.9	6,772
South	24.8	63.3	46.6	5.2	70.2	6,749	50.0	2,791
Province								
Vientiane Capital	16.8	66.1	54.6	7.4	76.6	2,655	35.0	1,582
Phongsaly	28.0	58.7	47.5	9.7	63.2	1,059	76.7	456
Luangnamtha	16.3	74.0	52.3	17.6	75.6	896	6.8	429
Oudomxay	12.3	80.4	19.0	6.1	81.5	1,912	94.2	775
Bokeo	14.6	82.7	32.0	4.9	85.1	927	21.1	398
Luangprabang	13.4	78.9	38.7	3.8	81.5	2,229	17.1	1,056
Huaphanh	14.8	82.3	57.2	21.0	84.1	1,900	33.3	714
Xayabury	14.7	76.6	32.8	1.8	78.5	1,604	20.5	921
Xiengkhuang	18.2	79.6	27.1	5.9	79.9	1,467	50.3	608
Vientiane	14.0	79.4	64.4	8.9	84.5	2,152	49.4	1,092
Borikhamxay	37.3	34.4	16.0	1.7	35.3	1,188	23.8	595
Khammuane	18.5	77.5	40.5	6.3	80.5	1,762	70.9	793
Savannakhet	19.6	70.0	51.2	10.1	77.7	4,870	31.8	2,102
Saravane	37.1	53.9	39.4	1.6	61.3	2,488	21.5	942
Sekong	13.5	74.8	63.4	16.2	85.1	707	78.8	244
Champasack	12.2	72.6	50.8	4.8	78.7	2,929	72.7	1,334
Attapeu	48.1	43.7	36.4	9.4	48.4	624	11.3	270
Residence								
Urban	20.0	66.5	47.0	6.9	74.3	6,135	35.3	3,422
Rural	19.1	71.9	43.6	7.8	76.1	25,233	43.7	10,891
..Rural with road	19.5	71.7	43.0	7.2	75.8	22,208	42.7	9,739
..Rural without road	16.1	73.4	47.6	12.2	78.2	3,025	52.1	1,152
Age								
2-4 years	22.1	61.2	48.5	7.2	68.7	6,666	39.9	3,224
5-9 years	16.3	74.6	50.0	8.8	79.6	12,055	43.0	5,216
10-14 years	20.6	72.4	36.5	6.7	75.7	12,648	41.5	5,873
Education of household head								
None	18.5	71.0	45.9	10.2	76.0	7,079	na	na
Primary	19.6	71.6	43.0	7.9	75.8	15,275	na	na
Lower secondary	17.2	73.1	44.6	5.8	77.7	4,678	na	na
Upper secondary	16.8	68.7	48.7	3.8	76.3	1,521	na	na
Post secondary non tertiary	23.1	66.0	42.0	4.5	72.1	1,764	na	na
Higher	27.0	58.4	46.5	3.9	68.3	1,019	na	na
Respondent's education								
None	na	na	na	na	na	na	45.7	2,870
Primary	na	na	na	na	na	na	43.9	6,743
Lower secondary	na	na	na	na	na	na	39.2	2,482
Upper secondary	na	na	na	na	na	na	37.5	893
Post secondary non tertiary	na	na	na	na	na	na	29.9	856
Higher	na	na	na	na	na	na	27.1	467
Wealth index quintile								
Poorest	18.7	72.8	44.8	11.0	76.7	8,249	46.9	3,017
Second	19.1	72.6	43.3	7.7	76.5	7,243	45.4	2,902
Middle	19.9	70.6	43.2	6.7	75.2	6,321	43.7	2,937
Fourth	18.4	71.5	44.6	5.8	76.2	5,294	40.0	2,898
Richest	20.9	63.5	45.9	4.5	72.5	4,262	30.9	2,559
Ethno-linguistic group of household head								
Lao-Tai	20.2	68.8	44.3	5.1	74.2	17,180	38.8	9,116
Mon-Khmer	18.9	72.6	43.7	9.9	77.4	9,217	45.7	3,515
Hmong-Mien	15.6	76.6	43.9	11.2	79.7	3,739	50.0	1,158
Chinese-Tibetan	17.6	70.7	52.3	16.2	73.8	1,095	48.0	463
Other, Missing, DK	33.6	48.1	25.9	3.4	58.5	138	43.5	61
Total	19.3	70.8	44.2	7.6	75.7	31,369	41.7	14,313

[1] **MICS indicator 8.5**

na = Not applicable

Eight per cent of children experience severe physical punishment from an adult in their household. The percentage is double the national average (16 per cent or higher) in Sekong, Luangnamtha and Huaphanh. Two in 10 children in Huaphanh experience severe physical punishment. By ethno-linguistic group, the percentage is highest among children in Chinese-Tibetan households (16 per cent).

Respondents to the child discipline module were also asked “Do you believe that in order to bring up, raise, or educate a child properly, the child needs to be physically punished?” The percentage of respondents who answered “yes” to this question is presented in Table CP.2. Four in 10 Lao adults believe physical punishment is necessary to properly raise a child. This opinion varies considerably across provinces, from a low of 7 per cent in Luangnamtha to a high of 94 per cent in Oudomxay. Over 70 per cent of adults in Phongsaly, Oudomxay, Khammuane, Sekong and Champasack hold this opinion.

Orphans

Children who are orphaned may be at increased risk of neglect or exploitation if parents are not available to assist them. Monitoring the variation in different outcomes for orphans and comparing them to their peers gives us a measure of how well communities and governments are responding to their needs. Household respondents were asked to identify whether the biological father and biological mother were alive, and whether they live in the same household, for every child age 0-17 years.

The percentages of children living with both parents, neither parent, mother only and father only are presented in Table CP.3. Eighty-four per cent of children age 0-17 years live with both parents, while 6 per cent live with neither parent. Single motherhood is not common in Lao PDR; only 7 per cent of children live with their mother but not their father. Five per cent of children have lost their mother, or father, or both mother and father as a result of death. The proportion of children who are not living with either biological parent is highest in Champasack (10 per cent).

Table CP.3: Children's living arrangements and orphanhood

Percent distribution of children age 0-17 years according to living arrangements, percentage of children age 0-17 years in households not living with a biological parent and percentage of children who have one or both parents dead, Lao PDR 2011-12

		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	Impossible to determine	Total	Not living with a biological parent[1]	One or both parents dead [2]	Number of children age 0-17 years
Sex														
Male	84.5	0.4	0.6	4.4	0.3	4.3	2.9	1.0	1.0	0.6	100.0	5.7	5.3	20,980
Female	83.4	0.4	0.5	5.6	0.5	4.1	2.9	0.8	1.1	0.7	100.0	7.0	5.3	20,859
Region														
North	87.6	0.3	0.5	3.4	0.5	2.5	2.9	0.7	1.3	0.4	100.0	4.7	5.5	13,835
Central	82.1	0.4	0.6	5.7	0.4	5.3	2.5	1.2	0.9	1.1	100.0	7.0	4.7	19,117
South	82.4	0.6	0.5	5.9	0.3	4.5	3.8	0.6	1.1	0.3	100.0	7.4	6.4	8,888
Province														
Vientiane Capital	78.1	0.5	0.6	5.9	0.1	7.4	2.4	1.7	0.8	2.6	100.0	7.1	4.4	3,703
Phongsaly	87.3	0.2	0.6	3.1	0.9	1.7	3.4	0.7	1.6	0.5	100.0	4.8	6.7	1,399
Luangnamtha	85.1	0.2	0.4	3.6	0.7	2.2	4.6	1.5	1.1	0.5	100.0	4.9	7.1	1,154
Oudomxay	89.1	0.1	0.3	3.3	0.3	2.0	2.5	0.8	1.1	0.5	100.0	4.0	4.3	2,543
Bokeo	86.3	0.4	0.5	3.3	1.1	3.2	3.4	0.5	1.2	0.1	100.0	5.4	6.6	1,213
Luangprabang	86.2	0.4	0.6	3.8	0.4	2.7	3.2	0.8	1.6	0.4	100.0	5.1	6.1	2,853
Huaphanh	88.8	0.3	0.8	3.4	0.1	2.3	2.2	0.5	1.2	0.3	100.0	4.6	4.6	2,541
Xayabury	88.4	0.2	0.4	3.3	0.5	3.2	2.6	0.3	0.9	0.3	100.0	4.4	4.6	2,131
Xiengkhuang	86.3	0.2	0.3	4.6	0.5	2.2	3.1	1.2	0.9	0.7	100.0	5.6	5.0	2,041
Vientiane	85.3	0.2	0.1	5.3	0.1	4.9	1.4	1.5	0.7	0.4	100.0	5.7	2.6	2,905
Borikhamxay	87.4	0.0	0.3	4.2	0.4	4.4	1.2	1.1	0.8	0.3	100.0	4.9	2.7	1,609
Khammuane	80.5	0.9	0.5	6.0	1.0	6.4	2.6	0.9	0.8	0.5	100.0	8.4	5.8	2,323
Savannakhet	80.8	0.3	0.9	6.4	0.4	5.1	3.1	1.0	1.0	1.0	100.0	8.0	5.7	6,536
Saravane	84.1	0.5	0.6	4.2	0.3	4.9	4.0	0.4	0.7	0.3	100.0	5.6	6.1	3,249
Sekong	85.5	0.6	0.5	2.8	0.5	2.9	4.8	0.3	1.9	0.2	100.0	4.4	8.3	933
Champasack	78.8	0.8	0.4	8.8	0.2	5.0	3.6	0.8	1.4	0.3	100.0	10.2	6.4	3,887
Attapeu	89.2	0.6	0.4	2.6	0.8	2.5	2.7	0.2	0.8	0.1	100.0	4.4	5.3	818
Residence														
Urban	80.2	0.5	0.7	6.7	0.3	5.6	2.4	1.3	0.7	1.6	100.0	8.2	4.7	8,769
Rural	85.0	0.4	0.5	4.5	0.4	3.8	3.0	0.8	1.1	0.4	100.0	5.8	5.5	33,071
..Rural with road	84.8	0.4	0.5	4.6	0.4	4.0	3.0	0.8	1.1	0.4	100.0	5.8	5.4	29,207
..Rural without road	86.4	0.3	0.5	4.4	0.8	2.6	2.9	0.6	1.3	0.3	100.0	6.0	5.7	3,863

[1] MICS indicator 9.17

[2] MICS indicator 9.18

	Living with both parents	Living with neither parent				Living with mother only		Living with father only		Impossible to determine	Total	Not living with a biological parent[1]	One or both parents dead [2]	Number of children age 0-17 years
		Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead					
Age														
0-4	88.5	0.1	0.2	3.9	0.0	5.7	0.7	0.4	0.2	0.2	100.0	4.3	1.3	10,949
5-9	86.0	0.5	0.4	4.8	0.2	3.8	2.1	1.0	0.9	0.4	100.0	5.8	4.1	12,166
10-14	82.4	0.4	0.7	4.9	0.5	3.6	4.3	1.1	1.6	0.4	100.0	6.6	7.6	12,641
15-17	74.9	0.7	1.0	7.7	1.3	3.5	5.6	1.2	1.7	2.6	100.0	10.6	10.2	6,083
Wealth index quintiles														
Poorest	86.8	0.3	0.4	2.2	0.6	3.1	3.9	0.7	1.7	0.3	100.0	3.5	7.0	10,383
Second	86.3	0.3	0.5	3.6	0.3	3.6	3.3	0.6	1.0	0.4	100.0	4.8	5.4	9,386
Middle	83.5	0.5	0.6	5.5	0.5	4.1	3.0	0.8	1.1	0.4	100.0	7.0	5.7	8,536
Fourth	82.0	0.6	0.6	7.8	0.2	4.1	1.9	1.2	0.7	1.0	100.0	9.2	3.9	7,378
Richest	78.5	0.3	0.6	7.8	0.2	7.2	1.6	1.5	0.5	1.7	100.0	8.9	3.3	6,156
Ethno-linguistic group of household head														
Lao-Tai	81.4	0.5	0.6	6.7	0.3	5.4	2.4	1.0	0.8	0.9	100.0	8.1	4.6	23,495
Mon-Khmer	86.9	0.3	0.5	2.7	0.5	3.0	3.8	0.6	1.4	0.3	100.0	4.0	6.4	11,790
Hmong-Mien	88.8	0.1	0.4	2.9	0.4	2.3	2.8	0.8	1.2	0.4	100.0	3.8	4.9	4,914
Chinese-Tibetan	85.4	0.2	0.5	2.7	0.9	1.5	5.2	1.3	1.6	0.5	100.0	4.4	8.5	1,436
Other, Missing, DK	80.8	1.3	0.0	7.9	0.5	3.5	1.9	1.9	0.5	1.8	100.0	9.6	4.2	205
Total	84.0	0.4	0.5	5.0	0.4	4.2	2.9	0.9	1.1	0.7	100.0	6.3	5.3	41,840

[1] **MICS indicator 9.17**

[2] **MICS indicator 9.18**

One of the measures developed for the assessment of the status of orphaned children relative to their peers compares the school attendance of children who have lost both parents with that of children whose parents are alive (and who live with at least one of these parents). The comparison is made among children age 10-14 years and is shown in Table CP.4.

Nationally, less than 1 per cent of children age 10-14 have lost both parents. Among children who have lost both parents, 67 per cent are currently attending school. However, 84 per cent of non-orphan children (who have not lost both parents and who live with at least one parent) are attending school. Although more than half of orphan children age 10-14 do go to school, they are disadvantaged when compared with non-orphaned children in terms of school attendance; thus, the orphan to non-orphan school attendance ratio is less than one (0.8).

Table CP.4: School attendance of orphans and non-orphans

School attendance of children age 10-14 years by orphanhood, Lao PDR 2011-12

	Percentage of children whose mother and father have died (orphans)	Percentage of children of whom both parents are alive and child is living with at least one parent (non-orphans)	Number of children age 10-14 years	Percentage of children who are orphans and are attending school[1]	Total number of orphan children age 10-14 years	Percentage of children who are non-orphans and are attending school[2]	Total number of non-orphan children age 10-14 years	Orphans to non-orphans school attendance ratio
Sex								
Male	0.4	87.5	6,275	(71.7)	27	85.7	5,492	(0.84)
Female	0.6	86.7	6,366	(63.1)	37	81.8	5,519	(0.77)
Residence								
Urban	0.4	85.2	2,596	*	11	93.2	2,212	*
Rural	0.5	87.6	10,046	64.6	53	81.4	8,799	0.79
Total	0.5	87.1	12,641	66.8	64	83.8	11,011	0.80

[1] MICS indicator 9.19; MDG indicator 6.4

[2] MICS indicator 9.20; MDG indicator 6.4

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

XV. HIV/AIDS and Sexual Behaviour

The law on HIV/AIDS Control and Prevention approved by the National Assembly in 2010 is comprised of 12 parts and 71 articles. The purpose of the law is to define effective principles, regulations, measures, management and monitoring of HIV/AIDS control and prevention in order to reduce HIV infection and AIDS and promote good health and an HIV-free environment for all Lao people, so they can contribute to the development and the protection of the country.[1]

HIV prevalence in Lao PDR is low at an estimated 0.2 per cent among adults age 15-49 in the general population. The total number of people living with HIV was estimated to be 9,000 in 2010, but this figure is expected to increase to 14,000 people in 2015.[2]

Prevalence is also low among most-at-risk populations. In surveys of female sex workers, HIV prevalence was found to be 0.9 per cent in 2000, 2 per cent in 2004, 0.4 per cent in 2008, and 0.9 per cent in 2011. Surveillance of men who have sex with men (MSM) indicated an HIV prevalence of 5.6 per cent in Vientiane Capital in 2007, and 0 per cent in Luangprabang in 2009. Among MSM who identified as transgendered, prevalence was 4.2 per cent in Vientiane Capital and Savannakhet in 2010.[3]

Based on passive report cases from 17 provinces, the cumulative numbers of people with HIV/AIDS from 1990-2011 are: 4,942 people HIV positive; 3,105 people with AIDS; and 1,290 deaths.[4]

The National Strategy and Action Plan for HIV/AIDS/STI Control and Prevention 2011-2015 is to maintain the present low level of HIV prevalence (below 1 per cent) in the general adult (age 15-49) population, and to ensure HIV prevalence among most-at-risk populations remains lower than 5%.

Knowledge about HIV Transmission and Misconceptions about HIV/AIDS

The 2001 United Nations General Assembly Special Session on HIV/AIDS (UNGASS) and the 2011 Political Declaration on HIV/AIDS adopted at the 2011 UN General Assembly High Level Meeting on AIDS[5] called on governments to reduce risk-taking behaviour and encourage responsible sexual behaviour among their populations. One of the most important prerequisites for reducing the rate of HIV infection is accurate knowledge of how HIV is transmitted and strategies for preventing transmission. Correct information is the first step towards raising awareness and giving people the tools to protect themselves from infection.

In Lao PDR, 84 per cent of women and 92 per cent of men have heard of AIDS (Tables HA.1.1 and HA.1.2). The proportion of people who have heard of AIDS is higher in urban than rural areas, and urban women and men have heard of AIDS in equal proportion; but in rural areas, 8 in 10 women have heard of AIDS, compared with 9 in 10 men. A substantial proportion – 44 per cent – of women with no education and in the poorest households have never heard of AIDS. The proportion of women and men in Chinese-Tibetan headed households who have heard of AIDS is substantially lower than among other ethno-linguistic groups.

All women and men who have heard of AIDS were asked whether they knew of the two main ways of preventing HIV transmission – having only one faithful, uninfected sex partner who has no other partners, and using a condom during all sexual intercourse – and 67 per cent of women and 82 per cent of men knew both. Knowledge of the main ways of preventing AIDS is especially low among women

[1] Law Lao PDR National Assembly, 2010
[2] National Strategy and Action Plan on HIV/AIDS/STI 2011-2015
[3] Surveillance of SW and MSM 2000-2010
[4] Passive case report, cumulative number of HIV/AIDS from 1990-2011
[5] UNGASS, United Nations, 2011

and men with no education; only one third of women and one half of men with no education who have heard of AIDS, know of the two main ways of preventing the transmission of HIV.

As part of the effort to assess HIV and AIDS knowledge, the LSIS obtained information on common misconceptions about HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have HIV, and whether they believe HIV can be transmitted through mosquito bites, supernatural means, or sharing food with a person who has HIV. About 6 in 10 Lao women and men know that a person may appear healthy and also be HIV-positive (57 per cent of women and 62 per cent of men). Among the misconceptions asked about, the two most common were that HIV can be transmitted by mosquitoes or by sharing food. Only 37 per cent of women and 48 per cent of men have heard of HIV and also know that it cannot be transmitted through mosquito bites. Only 58 per cent of women and 68 per cent of men have heard of HIV and also know that it cannot be acquired by sharing food with someone who has AIDS.

Comprehensive knowledge about HIV and AIDS is defined as: (1) knowing that both condom use and limiting sex to one uninfected partner who has no other partners are ways to prevent HIV transmission; (2) being aware that a healthy-looking person can be HIV-positive; and (3) rejecting two common misconceptions about AIDS – that it can be transmitted through mosquito bites or by sharing food with someone who has AIDS. The LSIS indicates that comprehensive knowledge of AIDS is not common, at only 2 in 10 women and 3 in 10 men. There is a very strong correlation between both education and wealth quintile and comprehensive knowledge; the proportion of people having comprehensive knowledge increases by about 10 per cent with every increase in education (see Figure HA.1) and quintile level. The proportion of the population with comprehensive knowledge varies greatly across provinces, from a high of 40 per cent of women in Xayabury and 48 per cent of men in Borikhamxay, to a low of 8 per cent of women in Oudomxay and 17 per cent of men in Saravane.

Table HA.1.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission

Percentage of women age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions*, and percentage who have comprehensive knowledge about HIV transmission Lao PDR 2011-12

		Percentage who know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions* and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge[1]	Number of women
Region											
North	79.3	69.9	69.2	65.6	48.9	40.0	61.6	54.8	24.4	22.8	7,057
Central	88.8	78.8	78.4	72.7	62.0	38.2	68.4	65.0	26.7	24.7	11,255
South	79.1	64.8	62.6	56.2	56.3	31.0	65.4	46.1	19.7	17.0	4,164
Province											
Vientiane Capital	97.7	90.6	89.8	85.0	76.2	55.4	85.3	81.3	40.9	38.1	3,288
Phongsaly	53.4	43.0	43.2	39.5	28.3	17.4	28.5	24.8	10.0	9.7	666
Luangnamtha	75.0	59.9	61.2	54.1	43.6	38.5	46.9	55.1	26.0	23.4	627
Oudomxay	55.4	44.3	45.8	41.5	19.9	21.3	34.2	39.5	8.4	7.9	1,182
Bokeo	91.1	88.0	83.8	82.1	71.3	41.4	67.2	69.4	30.8	29.7	620
Luangprabang	85.5	71.6	69.9	65.5	49.7	50.5	72.6	59.0	29.2	26.2	1,473
Huaphanh	88.3	83.3	82.7	79.1	60.1	32.8	69.0	49.6	17.7	15.9	1,086
Xayabury	95.1	88.8	87.1	86.0	66.2	60.9	87.1	75.2	41.5	40.1	1,402
Xiengkhuang	86.5	79.7	75.4	71.4	71.4	29.1	44.2	51.5	21.7	20.3	930
Vientiane	93.1	73.6	81.0	69.7	60.7	28.7	64.6	58.2	19.6	17.7	1,677
Borikhamxay	85.9	77.1	81.7	75.3	46.7	41.4	65.1	67.5	28.5	26.8	901
Khammuane	92.5	81.9	79.3	74.4	54.2	36.3	65.7	57.1	19.6	18.5	1,082
Savannakhet	78.3	68.9	65.7	61.3	52.9	28.4	62.3	58.2	19.6	17.6	3,376
Saravane	62.1	50.1	46.6	42.0	34.4	26.2	48.7	36.0	12.3	10.4	1,456
Sekong	64.2	58.7	60.6	56.8	27.7	25.6	41.1	42.6	9.5	9.3	388
Champasack	95.2	76.8	74.0	65.6	77.2	37.0	84.1	56.0	27.6	23.6	1,943
Attapeu	77.1	66.1	68.1	62.4	62.2	23.6	58.2	38.2	18.2	16.6	376
Residence											
Urban	95.3	89.2	88.5	84.5	73.9	52.8	82.3	79.7	40.1	37.5	6,649
Rural	79.3	66.7	65.9	60.2	49.7	31.0	58.7	49.3	18.2	16.4	15,827
..Rural with road	80.8	68.6	67.8	62.2	51.0	31.9	60.0	51.1	19.1	17.3	14,268
..Rural without road	65.8	50.1	48.9	42.8	38.2	22.1	46.6	32.6	10.0	8.1	1,559

[1]**MICS indicator 9.1**

* Two most common misconceptions: (1) AIDS can be transmitted by mosquito bites and (2) AIDS can be transmitted by sharing food with someone with AIDS.

Table HA.1.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission

Percentage of women age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions*, and percentage who have comprehensive knowledge about HIV transmission Lao PDR 2011-12

		Percentage who know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions* and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge[1]	Number of women
Age											
15-24	84.2	73.1	72.8	67.3	58.8	39.6	65.4	59.0	26.3	24.0	8,032
25-29	84.7	76.4	75.3	70.7	59.5	39.7	68.4	62.0	27.5	25.8	3,642
30-39	84.3	73.7	72.3	67.4	55.4	35.8	65.7	57.6	23.0	21.0	6,079
40-49	82.9	71.2	70.6	65.1	53.4	34.0	64.1	55.3	21.9	20.1	4,722
Marital status											
Ever married/in union	83.3	72.9	71.7	66.8	55.0	35.2	64.4	56.5	22.6	20.7	17,445
Never married/in union	86.4	75.2	75.6	69.8	63.3	45.0	70.2	64.7	32.0	29.6	5,031
Education											
None	56.3	41.4	39.2	34.6	24.6	16.6	32.6	26.9	6.1	5.2	4,660
Primary	85.7	73.4	72.7	66.5	54.2	32.1	64.5	53.2	17.7	15.7	8,955
Lower secondary	94.5	85.6	85.7	80.4	69.7	43.2	77.0	70.8	30.0	27.8	4,111
Upper secondary	99.0	92.9	93.0	88.7	79.3	56.8	88.5	85.6	45.2	42.3	2,496
Post secondary non tertiary	99.0	95.6	95.1	92.2	82.3	68.0	92.1	89.4	54.6	52.2	1,030
Higher	99.0	95.7	94.2	91.2	88.1	71.0	93.4	91.9	62.0	58.2	1,224
Wealth index quintile											
Poorest	56.1	41.7	40.4	35.6	24.5	19.5	34.2	27.0	7.1	6.0	3,809
Second	74.9	60.5	59.6	53.2	42.6	25.3	51.4	39.8	12.6	10.9	4,088
Middle	87.2	75.4	74.9	69.0	56.8	33.2	66.1	56.7	19.6	17.9	4,309
Fourth	94.9	85.8	84.8	79.7	68.7	44.5	77.8	71.0	31.2	29.0	4,694
Richest	98.2	92.6	92.1	88.0	79.4	55.8	87.2	83.9	44.0	41.1	5,577
Ethno-linguistic group of household head											
Lao-Tai	93.0	84.4	83.7	78.6	68.5	44.1	77.8	69.3	31.5	29.1	15,151
Mon-Khmer	64.4	50.5	49.8	44.9	32.6	24.2	43.3	35.2	10.5	9.2	4,913
Hmong-Mien	72.9	54.7	53.2	45.7	34.5	21.0	36.2	37.7	9.8	8.4	1,606
Chinese-Tibetan	52.7	39.8	38.1	34.0	25.8	20.4	28.5	29.0	10.8	10.0	685
Other, Missing, DK	81.3	68.4	63.3	57.2	52.7	45.7	61.3	58.0	28.2	20.2	121
Total	84.0	73.4	72.6	67.4	56.8	37.4	65.7	58.3	24.7	22.7	22,476

[1]**MICS indicator 9.1**

* Two most common misconceptions: (1) AIDS can be transmitted by mosquito bites and (2) AIDS can be transmitted by sharing food with someone with AIDS.

Table HA.1.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission

Percentage of men age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions*, and percentage who have comprehensive knowledge about HIV transmission Lao PDR 2011-12

		Percentage who know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of men who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions* and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge[1]	Number of men
Region											
North	88.8	83.5	82.8	79.6	54.3	51.1	76.4	63.8	30.3	28.9	3,172
Central	93.5	88.1	87.1	84.0	68.0	48.4	78.6	71.5	34.6	33.0	4,990
South	90.4	84.1	83.3	78.8	59.0	41.0	80.3	63.2	24.1	22.8	1,789
Province											
Vientiane Capital	97.4	92.7	91.8	88.5	77.3	65.6	84.9	80.8	48.2	46.1	1,379
Phongsaly	68.6	63.4	59.1	56.5	40.2	45.6	48.8	51.9	28.9	27.2	318
Luangnamtha	85.4	74.9	65.8	61.5	46.9	56.2	60.8	63.1	36.6	30.9	266
Oudomxay	80.7	69.5	74.1	67.3	48.5	41.2	58.7	50.5	23.4	22.0	530
Bokeo	98.4	95.8	92.2	90.1	75.8	63.4	79.4	80.3	47.9	45.9	267
Luangprabang	89.6	84.7	84.3	80.9	55.1	56.0	88.2	66.8	28.9	27.9	644
Huaphanh	95.7	93.7	93.7	91.8	59.7	32.2	81.0	57.8	18.2	18.1	511
Xayabury	96.6	94.3	94.8	93.4	55.0	65.2	94.7	76.0	37.8	37.5	635
Xiengkhuang	96.0	94.0	93.5	92.6	62.5	35.7	81.4	73.2	22.0	21.8	442
Vientiane	96.5	92.1	90.7	88.5	79.1	43.2	79.8	73.4	34.3	32.8	721
Borikhamxay	98.0	92.3	92.5	91.2	68.8	71.5	91.4	66.2	48.6	47.9	390
Khammuane	97.9	91.8	91.3	87.0	62.8	48.0	75.5	71.1	30.4	29.3	503
Savannakhet	85.6	78.1	76.8	72.6	57.6	33.6	69.5	63.3	24.0	22.2	1,556
Saravane	94.2	84.0	82.8	75.5	50.9	37.3	79.8	63.8	17.5	16.6	597
Sekong	86.9	71.9	81.6	68.3	56.5	44.9	70.5	62.9	28.0	25.3	162
Champasack	87.7	85.1	82.6	81.3	60.3	42.9	81.0	64.1	28.1	26.8	873
Attapeu	94.9	90.9	91.0	88.6	85.0	40.6	89.0	56.0	22.5	21.5	157
Residence											
Urban	97.2	93.7	91.7	89.4	77.5	62.0	88.3	81.6	46.7	44.5	2,800
Rural	89.2	82.8	82.5	78.6	55.9	42.4	74.3	62.0	25.3	24.2	7,151
..Rural with road	90.7	84.6	84.0	80.3	57.4	43.4	76.0	63.8	26.1	25.0	6,457
..Rural without road	75.9	66.8	68.6	62.8	41.9	34.1	58.4	45.3	17.4	16.8	694

[1]**MICS indicator 9.1**

* Two most common misconceptions: (1) AIDS can be transmitted by mosquito bites and (2) AIDS can be transmitted by sharing food with someone with AIDS.

Table HA.1.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission

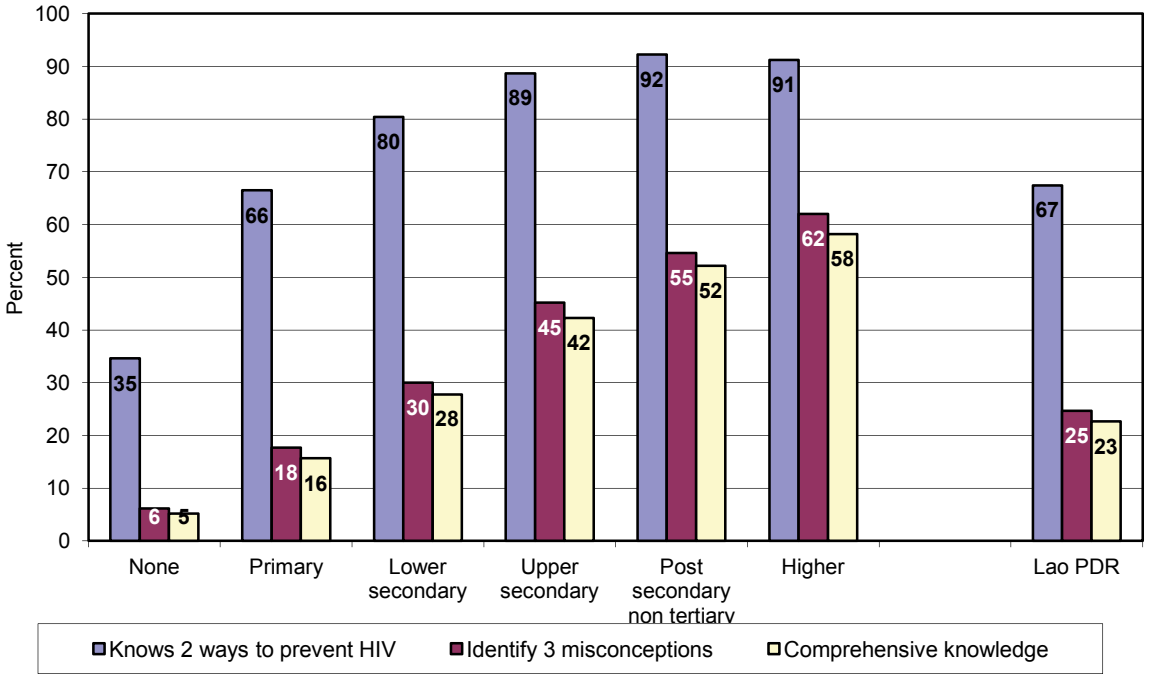
Percentage of men age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions*, and percentage who have comprehensive knowledge about HIV transmission Lao PDR 2011-12

		Percentage who know transmission can be prevented by:			Percentage who know that HIV cannot be transmitted by:						
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of men who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions* and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge[1]	Number of men
Age											
15-24	88.6	81.7	81.5	77.3	60.4	46.3	74.2	63.5	29.2	27.6	3,676
25-29	93.2	88.7	88.4	85.7	64.9	53.7	82.5	70.9	35.5	34.2	1,500
30-39	93.2	87.9	86.7	83.3	63.2	47.8	79.1	70.3	32.1	30.4	2,709
40-49	93.2	88.7	86.8	84.3	61.1	46.9	81.2	68.6	31.1	30.1	2,066
Marital status											
Ever married/in union	92.8	87.9	86.6	83.5	62.0	47.7	79.4	68.6	31.2	29.9	6,788
Never married/in union	88.6	81.6	81.8	77.6	61.9	48.5	75.8	65.2	31.6	29.9	3,163
Education											
None	71.2	58.6	56.0	50.1	30.5	25.7	47.1	37.1	10.2	9.1	923
Primary	88.3	81.6	81.0	76.7	52.9	38.4	72.0	57.5	20.8	19.6	3,872
Lower secondary	95.2	90.7	90.6	87.9	66.7	50.2	83.1	73.4	32.3	30.9	2,351
Upper secondary	98.9	95.7	94.7	92.3	78.6	61.2	90.9	82.7	45.5	43.9	1,450
Post secondary non tertiary	99.9	97.6	95.7	93.7	80.6	68.7	94.8	88.6	53.6	51.4	608
Higher	99.9	98.1	97.2	96.0	85.8	75.4	95.5	92.1	63.4	61.0	747
Wealth index quintile											
Poorest	77.2	67.1	67.6	62.2	39.8	33.3	60.0	44.6	14.4	13.4	1,692
Second	87.3	80.7	78.4	74.7	50.1	37.9	67.4	57.0	20.5	19.2	1,911
Middle	93.2	88.2	87.9	84.6	61.4	46.5	80.6	67.7	29.0	27.6	2,039
Fourth	97.2	93.3	92.9	90.2	71.3	52.6	86.5	77.2	36.7	35.6	2,092
Richest	99.0	95.7	94.1	91.7	80.9	64.8	91.5	84.8	50.6	48.4	2,217
Ethno-linguistic group of household head											
Lao-Tai	95.8	91.8	90.7	88.0	70.0	52.9	84.9	75.0	37.3	35.7	6,635
Mon-Khmer	83.1	73.8	74.8	69.4	47.0	38.3	66.7	51.7	18.8	17.6	2,191
Hmong-Mien	86.7	79.8	78.6	74.6	47.7	35.9	66.5	56.0	19.1	18.8	728
Chinese-Tibetan	71.0	61.5	55.3	50.9	35.5	37.5	45.8	44.4	20.9	18.7	335
Other, Missing, DK	95.7	87.0	84.2	81.2	51.2	57.1	85.5	82.5	34.6	31.8	62
Total	91.5	85.9	85.1	81.6	62.0	48.0	78.2	67.5	31.3	29.9	9,951

[1]MICS indicator 9.1

* Two most common misconceptions: (1) AIDS can be transmitted by mosquito bites and (2) AIDS can be transmitted by sharing food with someone with AIDS.

Figure HA.1: Percentage of women who have comprehensive knowledge of HIV/AIDS transmission, Lao PDR 2011-12



Data on knowledge of HIV transmission among young women and men age 15-24 are presented separately in Tables HA.2.1 and HA.2.2. The findings are very similar in both level and pattern according to background characteristics as those found among the population age 15-49.

The LSIS shows that knowledge of HIV (how it is transmitted and how it can be prevented) is very low in Lao households. In particular, the majority of people who are poor and have lower levels of education do not understand HIV transmission and do not know how to protect themselves from HIV infection. Women have poorer knowledge than men on all indicators related to HIV knowledge.

Table HA.2.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young women

Percentage of young women age 15-24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions*, and percentage who have comprehensive knowledge about HIV transmission Lao PDR 2011-12

		Percentage who know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions* and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge[1]	Number of women age 15-24
Region											
North	79.9	70.5	69.9	66.1	49.9	42.9	61.2	56.8	26.0	24.2	2,573
Central	89.0	78.1	78.7	72.3	65.2	39.8	68.6	65.0	28.6	26.2	3,918
South	79.2	64.8	62.8	56.7	57.2	33.7	64.4	47.5	21.0	17.8	1,541
Province											
Vientiane Capital	97.4	90.7	89.5	84.8	79.0	55.8	86.5	79.4	42.4	40.4	1,110
Phongsaly	60.8	47.1	49.1	43.5	33.2	21.5	31.8	30.4	12.9	12.3	241
Luangnamtha	79.7	66.4	64.5	59.0	51.1	47.3	50.3	60.3	31.0	28.1	237
Oudomxay	57.3	47.4	49.1	44.4	21.9	23.6	35.6	43.0	10.1	9.6	479
Bokeo	91.6	88.7	85.2	84.0	73.0	41.3	69.7	70.1	31.5	30.6	233
Luangprabang	85.2	71.2	70.4	66.5	49.1	55.9	72.4	60.0	30.9	27.7	474
Huaphanh	87.1	79.8	79.2	74.4	60.4	35.6	65.5	50.6	18.9	16.8	408
Xayabury	94.2	89.0	87.1	85.8	65.6	63.7	86.9	76.5	43.6	41.9	502
Xiengkhuang	82.7	72.8	70.2	64.7	67.6	33.8	41.8	49.9	24.6	22.1	389
Vientiane	94.1	70.6	80.9	67.3	63.0	32.0	64.8	61.3	23.2	20.0	542
Borikhamxay	87.1	76.0	82.5	74.1	48.5	42.5	64.4	69.4	28.8	26.3	322
Khammuane	92.3	82.8	81.6	76.5	58.8	40.6	66.6	57.3	23.3	21.4	378
Savannakhet	80.2	70.3	68.2	63.5	59.1	29.2	64.1	59.3	20.9	18.7	1,177
Saravane	62.1	47.3	46.1	40.5	35.9	25.5	47.3	36.2	12.4	10.2	564
Sekong	72.2	65.5	67.8	63.4	30.6	30.8	46.4	49.2	9.7	9.2	154
Champasack	95.8	79.7	75.6	68.7	79.7	43.5	84.2	58.8	31.5	26.5	682
Attapeu	74.5	62.6	62.4	56.6	62.4	21.6	56.8	36.1	17.0	15.2	141
Residence											
Urban	95.1	88.4	87.3	83.0	75.4	54.3	81.5	79.1	41.9	38.7	2,356
Rural	79.6	66.8	66.8	60.8	51.9	33.5	58.7	50.6	19.8	17.9	5,676
..Rural with road	81.0	68.3	68.6	62.5	53.2	34.3	60.1	52.4	20.7	18.7	5,153
..Rural without road	66.1	51.6	49.5	44.4	38.4	25.3	45.2	33.4	11.4	9.2	523

[1] **MICS indicator 9.2; MDG indicator 6.3**

* Two most common misconceptions: (1) AIDS can be transmitted by mosquito bites and (2) AIDS can be transmitted by sharing food with someone with AIDS.

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table HA.2.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young women

Percentage of young women age 15-24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions*, and percentage who have comprehensive knowledge about HIV transmission Lao PDR 2011-12

		Percentage who know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions* and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge[1]	Number of women age 15-24
Age											
15-19	83.1	71.5	71.5	65.3	58.1	39.2	63.0	57.1	25.6	23.3	4,415
20-24	85.5	75.1	74.4	69.8	59.6	40.1	68.4	61.3	27.1	24.7	3,617
Marital status											
Ever married/in union	82.3	71.5	70.3	65.1	54.2	34.9	61.5	54.4	21.2	18.9	3,757
Never married/in union	85.8	74.5	75.0	69.3	62.8	43.7	68.8	63.0	30.7	28.4	4,275
Education											
None	49.1	35.8	32.9	29.0	21.4	14.2	28.0	22.6	4.4	3.6	1,054
Primary	79.8	64.5	64.3	57.5	47.7	29.7	55.4	46.1	14.3	12.4	2,689
Lower secondary	91.5	80.6	82.0	75.5	66.0	41.4	71.1	63.6	26.9	24.6	1,880
Upper secondary	98.6	92.3	92.7	88.4	79.2	56.5	86.6	84.1	44.4	41.5	1,577
Post secondary non tertiary	98.3	94.4	92.7	90.8	78.8	71.2	93.0	85.9	51.9	49.5	216
Higher	98.9	95.2	92.1	88.6	89.9	66.1	92.0	89.1	58.8	53.8	617
Wealth index quintile											
Poorest	57.8	42.9	42.6	37.2	25.6	21.6	34.9	29.9	7.2	6.2	1,328
Second	75.2	60.7	60.8	54.7	43.7	28.5	51.3	42.3	14.2	12.5	1,526
Middle	86.7	74.8	74.3	68.3	60.0	35.7	65.1	56.6	22.3	20.2	1,540
Fourth	94.7	85.7	85.2	80.0	71.4	49.2	78.0	72.0	35.2	32.5	1,648
Richest	97.9	91.1	90.8	85.9	81.1	55.1	86.5	82.2	44.0	40.5	1,990
Ethno-linguistic group of household head											
Lao-Tai	92.7	83.8	83.5	78.1	71.1	46.5	77.5	69.6	33.8	30.9	5,208
Mon-Khmer	67.2	53.2	53.5	48.3	36.5	26.9	45.5	38.2	12.0	11.0	1,818
Hmong-Mien	75.9	57.8	56.9	49.4	37.1	26.9	40.3	43.9	12.9	11.2	689
Chinese-Tibetan	55.0	41.8	40.2	36.2	27.6	25.4	31.9	33.1	13.1	12.6	269
Other, Missing, DK	(78.8)	(63.1)	(55.9)	(52.2)	(51.5)	(34.9)	(55.0)	(56.1)	(18.5)	(13.7)	49
Total	84.2	73.1	72.8	67.3	58.8	39.6	65.4	59.0	26.3	24.0	8,032

[1]MICS indicator 9.2; MDG indicator 6.3

* Two most common misconceptions: (1) AIDS can be transmitted by mosquito bites and (2) AIDS can be transmitted by sharing food with someone with AIDS.

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table HA.2.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young men

Percentage of young men age 15-24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions*, and percentage who have comprehensive knowledge about HIV transmission Lao PDR 2011-12

		Percentage who know transmission can be prevented by:			Percentage who know that HIV cannot be transmitted by:						
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of men who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions* and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge[1]	Number of men age 15-24
Region											
North	86.4	79.7	79.3	75.1	52.9	51.0	72.0	60.4	29.3	27.9	1,133
Central	90.3	84.4	83.8	80.5	66.2	45.9	75.1	66.4	30.9	29.3	1,866
South	87.3	77.6	78.9	72.3	57.2	39.8	75.4	60.9	24.2	22.6	677
Province											
Vientiane Capital	95.5	88.0	89.7	84.9	75.3	61.4	81.3	76.6	44.5	42.1	504
Phongsaly	69.5	62.0	59.1	54.9	40.6	47.9	49.2	59.0	31.5	29.6	130
Luangnamtha	83.7	70.7	61.4	56.2	44.6	55.8	57.6	60.9	33.0	28.3	94
Oudomxay	79.5	66.4	71.3	63.5	49.1	40.2	54.4	46.6	20.8	18.5	204
Bokeo	97.6	93.5	91.3	87.8	70.7	63.4	77.6	79.6	46.4	45.2	90
Luangprabang	84.4	79.0	77.3	73.3	50.8	51.8	82.9	57.2	22.6	22.1	197
Huaphanh	93.3	90.2	90.5	88.0	58.9	36.4	75.7	54.0	22.1	21.7	198
Xayabury	95.0	91.7	93.1	90.7	56.5	68.0	92.8	74.8	39.7	39.3	219
Xiengkhuang	93.7	91.4	90.1	89.8	60.7	40.9	80.3	71.3	24.2	24.2	194
Vientiane	95.5	89.8	89.3	86.3	79.1	37.6	77.1	70.0	28.2	26.4	250
Borikhamxay	98.3	90.0	90.6	88.1	64.3	73.4	93.2	60.7	44.3	43.0	128
Khammuane	96.3	89.9	89.9	85.6	64.4	48.5	76.7	68.5	30.6	30.0	183
Savannakhet	79.2	74.1	71.2	68.2	55.9	31.3	63.1	55.5	20.2	18.3	607
Saravane	92.0	75.9	79.9	67.8	52.6	37.2	73.4	60.4	20.5	19.1	223
Sekong	81.7	65.2	76.4	61.8	49.3	37.7	65.6	60.1	21.0	19.5	62
Champasack	84.2	79.4	77.3	75.4	57.8	42.3	77.1	62.3	28.3	26.4	340
Attapeu	94.3	87.3	88.2	83.6	82.8	37.4	85.2	54.6	17.2	16.3	52
Residence											
Urban	95.7	90.6	89.2	86.3	75.4	57.9	86.9	77.6	41.9	39.5	1,039
Rural	85.7	78.2	78.4	73.8	54.5	41.7	69.2	58.0	24.1	22.9	2,637
..Rural with road	87.0	79.7	79.8	75.3	56.1	42.7	70.5	59.1	25.0	23.7	2,388
..Rural without road	73.8	63.8	65.1	58.6	39.4	32.7	56.8	47.4	15.7	15.3	249

[1]MICS indicator 9.2; MDG indicator 6.3

* Two most common misconceptions: (1) AIDS can be transmitted by mosquito bites and (2) AIDS can be transmitted by sharing food with someone with AIDS.

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table HA.2.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young men

Percentage of young men age 15-24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions*, and percentage who have comprehensive knowledge about HIV transmission Lao PDR 2011-12

		Percentage who know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of men who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	Percentage who reject the two most common misconceptions* and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge[1]	Number of men age 15-24
Age											
15-19	85.4	77.7	78.4	73.3	56.8	43.1	71.6	59.9	26.0	24.6	2,119
20-24	92.8	87.2	85.7	82.7	65.3	50.7	77.7	68.5	33.4	31.7	1,557
Marital status											
Ever married/in union	90.9	84.7	83.5	79.8	59.8	44.8	74.2	63.6	27.9	26.6	955
Never married/in union	87.7	80.6	80.8	76.4	60.6	46.9	74.2	63.5	29.6	28.0	2,721
Education											
None	57.4	47.7	40.9	37.9	24.4	20.0	27.7	29.8	10.5	9.4	187
Primary	79.7	70.0	70.2	64.3	45.0	33.7	61.1	46.6	16.7	15.4	1,163
Lower secondary	91.9	85.2	86.3	82.0	60.6	46.1	76.6	66.1	25.9	24.7	1,077
Upper secondary	98.1	93.6	92.8	89.6	79.2	60.0	89.6	80.0	43.6	41.6	874
Post secondary non tertiary	100.0	96.4	97.2	95.3	85.9	62.5	95.7	85.7	49.9	48.0	104
Higher	99.6	97.0	96.6	95.2	80.6	69.5	95.4	88.0	53.9	51.7	271
Wealth index quintile											
Poorest	71.3	60.7	61.4	55.2	36.1	32.9	54.4	39.6	12.7	11.7	567
Second	83.0	76.2	73.7	70.2	49.7	37.5	61.0	54.0	20.3	18.6	734
Middle	89.0	82.1	82.3	78.1	57.6	47.4	74.9	62.4	28.3	27.4	778
Fourth	95.6	89.4	91.2	86.6	71.0	49.6	84.1	73.4	34.1	32.4	786
Richest	98.4	93.5	92.5	89.5	79.6	59.5	89.7	80.4	44.6	42.5	812
Ethno-linguistic group of household head											
Lao-Tai	92.9	87.3	87.0	83.3	68.6	50.6	81.4	70.1	34.3	32.7	2,407
Mon-Khmer	79.3	69.6	71.5	65.6	45.5	36.6	60.5	48.0	17.8	16.2	798
Hmong-Mien	85.9	78.9	77.5	73.5	48.1	38.5	64.8	56.9	21.2	20.9	301
Chinese-Tibetan	70.8	59.6	54.6	49.7	35.8	41.9	48.1	49.2	22.7	20.3	140
Other, Missing, DK	(96.8)	(84.1)	(75.2)	(72.0)	(40.7)	(58.9)	(82.2)	(83.9)	(29.6)	(23.7)	30
Total	88.6	81.7	81.5	77.3	60.4	46.3	74.2	63.5	29.2	27.6	3,676

[1]MICS indicator 9.2; MDG indicator 6.3

* Two most common misconceptions: (1) AIDS can be transmitted by mosquito bites and (2) AIDS can be transmitted by sharing food with someone with AIDS.

Note: Figures in parentheses are based on 25-49 unweighted cases.

Knowledge of mother-to-child transmission of HIV

Awareness of the potential risk of mother-to-child transmission of HIV is the first step in motivating women to seek HIV testing when they are pregnant, in order to avoid infecting their baby. In the LSIS, women and men were asked whether they think that HIV can be transmitted during pregnancy, during delivery, and through breastfeeding. The results are presented in Tables HA.3.1 and HA.3.2. Eight in 10 adults know that HIV can be transmitted from a mother to her child (77 per cent of women and 82 per cent of men). Fifty-five and 57 per cent of women and men, respectively, are aware of all three modes of mother-to-child transmission. Patterns across background characteristics are essentially the same among men and women.

Prevalence of the knowledge of modes of mother-to-child transmission varies drastically by education and wealth quintile, essentially doubling with increasing education level and wealth quintile. Eight per cent of women and 9 per cent of men are not aware of any of the three modes of mother-to-child transmission. The proportion of women and men who know none of the three modes of transmission is highest in Luangnamtha; among 19 per cent of women and 27 per cent of men.

Table HA.3.1: Knowledge of mother-to-child HIV transmission

Percentage of women age 15-49 years who correctly identify means of HIV transmission from mother to child, Lao PDR 2011-12

	Percentage who know HIV can be transmitted from mother to child	Percent who know HIV can be transmitted: During pregnancy	During delivery	By breastfeeding	All three means[1]	Does not know any of the specific means	Number of women
Region							
North	70.5	67.0	59.1	63.6	54.4	8.8	7,057
Central	82.2	78.6	62.5	73.5	57.5	6.6	11,255
South	71.2	66.0	54.7	65.7	51.4	7.9	4,164
Province							
Vientiane Capital	93.2	88.9	70.3	80.8	63.3	4.5	3,288
Phongsaly	40.7	39.0	35.9	38.2	34.2	12.8	666
Luangnamtha	56.1	54.5	44.8	46.3	42.7	18.9	627
Oudomxay	47.6	46.0	41.0	44.9	39.2	7.7	1,182
Bokeo	87.0	79.6	69.3	79.9	62.6	4.1	620
Luangprabang	74.4	71.2	51.2	60.8	44.0	11.2	1,473
Huaphanh	82.0	77.7	74.1	71.6	64.8	6.2	1,086
Xayabury	90.2	85.5	83.9	88.5	81.2	4.9	1,402
Xiengkhuang	78.4	76.7	71.9	68.6	64.7	8.1	930
Vientiane	84.7	81.2	60.9	74.5	57.1	8.4	1,677
Borikhamxay	81.2	80.4	50.4	77.6	50.1	4.7	901
Khammuane	83.0	77.5	67.6	78.4	64.2	9.5	1,082
Savannakhet	71.4	67.7	54.7	64.4	50.0	6.9	3,376
Saravane	53.7	49.1	42.4	46.5	38.9	8.5	1,456
Sekong	60.2	59.1	57.6	59.3	56.7	3.9	388
Champasack	87.0	80.4	63.2	81.0	59.2	8.1	1,943
Attapeu	68.6	64.5	55.2	67.1	54.1	8.5	376
Residence							
Urban	91.5	88.3	71.4	81.0	65.4	3.9	6,649
Rural	70.2	66.1	55.2	63.8	51.2	9.1	15,827
..Rural with road	71.9	67.8	56.5	65.3	52.5	8.9	14,268
..Rural without road	55.3	50.4	43.2	50.6	39.0	10.5	1,559
Age group							
15-24	76.6	72.1	60.2	68.0	54.9	7.6	8,032
15-19	75.0	70.3	58.6	66.6	53.3	8.0	4,415
20-24	78.4	74.2	62.2	69.7	56.8	7.1	3,617
25-29	79.2	75.5	62.5	71.1	57.9	5.5	3,642
30-39	76.4	73.0	58.8	69.0	54.5	7.9	6,079
40-49	74.5	71.0	59.2	68.7	55.5	8.4	4,722
Marital status							
Ever married/in union	75.8	72.0	59.7	69.1	55.6	7.6	17,445
Never married/in union	79.0	74.7	60.8	68.4	54.8	7.4	5,031
Education							
None	43.9	39.9	33.6	38.8	30.4	12.5	4,660
Primary	76.9	72.5	60.2	70.8	56.2	8.7	8,955
Lower secondary	89.9	86.4	71.2	81.4	66.4	4.6	4,111
Upper secondary	95.3	92.6	75.3	84.9	69.2	3.6	2,496
Post secondary non tertiary	97.3	95.1	77.5	84.4	69.5	1.7	1,030
Higher	96.8	93.0	75.3	81.8	67.2	2.1	1,224
Wealth index quintile							
Poorest	43.9	40.1	35.0	39.5	31.5	12.2	3,809
Second	64.6	60.0	50.5	58.9	46.7	10.4	4,088
Middle	78.8	74.8	62.3	71.4	57.8	8.4	4,309
Fourth	89.4	85.6	70.2	82.4	66.3	5.4	4,694
Richest	94.9	91.6	73.5	83.1	67.0	3.3	5,577
Ethno-linguistic group of household head							
Lao-Tai	87.6	83.6	68.5	79.2	63.6	5.4	15,151
Mon-Khmer	53.1	49.7	42.3	47.8	38.8	11.2	4,913
Hmong-Mien	60.4	56.0	47.0	52.4	41.7	12.5	1,606
Chinese-Tibetan	37.6	35.7	28.6	31.7	27.0	15.1	685
Other, Missing, DK	68.7	62.5	51.6	62.0	46.6	12.6	121
Total	76.5	72.6	60.0	68.9	55.4	7.5	22,476

[1] MICS indicator 9.3

Table HA.3.2: Knowledge of mother-to-child HIV transmission

Percentage of men age 15-49 years who correctly identify means of HIV transmission from mother to child, Lao PDR 2011-12

	Percentage who know HIV can be transmitted from mother to child	Percent who know HIV can be transmitted:				Does not know any of the specific means	Number of men
		During pregnancy	During delivery	By breastfeeding	All three means[1]		
Region							
North	78.5	75.4	62.8	67.3	56.0	10.3	3,172
Central	85.7	81.2	66.5	71.7	57.0	7.9	4,990
South	80.4	77.2	64.5	72.6	59.0	10.0	1,789
Province							
Vientiane Capital	89.5	85.8	70.0	72.4	58.6	7.9	1,379
Phongsaly	59.5	57.4	56.3	53.0	50.6	9.2	318
Luangnamtha	58.8	55.7	50.6	52.6	46.9	26.6	266
Oudomxay	67.4	65.8	60.7	62.5	58.2	13.4	530
Bokeo	93.2	85.7	71.2	82.9	61.7	5.2	267
Luangprabang	76.3	72.4	40.9	51.3	29.5	13.3	644
Huaphanh	91.9	87.5	81.4	79.2	71.3	3.8	511
Xayabury	90.8	89.5	76.7	84.6	72.7	5.9	635
Xiengkhuang	91.4	87.8	81.9	69.3	63.3	4.6	442
Vientiane	91.4	88.4	64.4	75.1	59.0	5.1	721
Borikhamxay	84.1	81.5	74.7	79.8	73.2	13.9	390
Khammuane	90.4	82.7	70.9	79.3	62.1	7.5	503
Savannakhet	76.9	71.3	56.7	65.7	47.2	8.7	1,556
Saravane	79.5	74.4	62.2	69.4	55.4	14.7	597
Sekong	81.7	80.7	67.2	65.9	62.4	5.2	162
Champasack	81.8	80.4	64.9	76.5	60.9	5.9	873
Attapeu	75.3	66.7	68.8	69.7	57.9	19.6	157
Residence							
Urban	91.7	88.6	75.1	75.8	64.0	5.4	2,800
Rural	78.8	74.7	61.0	68.4	54.3	10.4	7,151
..Rural with road	80.1	76.0	62.4	69.5	55.4	10.5	6,457
..Rural without road	66.4	62.5	48.6	57.9	43.7	9.5	694
Age group							
15-24	77.9	73.5	61.3	65.3	52.8	10.7	3,676
15-19	74.3	69.9	57.7	61.8	49.4	11.1	2,119
20-24	82.7	78.5	66.3	70.2	57.4	10.1	1,557
25-29	85.6	82.0	68.4	73.6	60.9	7.6	1,500
30-39	84.9	81.5	66.2	73.1	58.9	8.3	2,709
40-49	85.0	81.4	67.4	73.7	59.3	8.1	2,066
Marital status							
Ever married/in union	84.6	81.1	66.9	73.2	59.3	8.2	6,788
Never married/in union	77.8	73.3	60.9	64.4	52.1	10.8	3,163
Education							
None	52.4	47.6	38.6	44.2	33.6	18.8	923
Primary	77.3	73.0	58.7	67.0	51.9	11.0	3,872
Lower secondary	88.0	84.6	71.2	76.3	63.3	7.2	2,351
Upper secondary	92.8	89.1	76.7	80.0	67.8	6.1	1,450
Post secondary non tertiary	96.9	94.1	76.3	80.5	65.4	2.9	608
Higher	96.8	94.6	78.4	75.5	65.4	3.0	747
Wealth index quintile							
Poorest	62.9	58.9	48.0	52.8	41.8	14.3	1,692
Second	76.0	70.9	59.0	65.2	51.4	11.3	1,911
Middle	83.8	80.4	66.3	73.9	59.6	9.4	2,039
Fourth	90.9	87.2	73.5	80.3	66.3	6.3	2,092
Richest	93.5	90.6	73.9	76.0	62.5	5.4	2,217
Ethno-linguistic group of household head							
Lao-Tai	88.8	85.0	70.5	76.4	62.2	6.9	6,635
Mon-Khmer	69.6	65.5	52.2	59.1	46.1	13.6	2,191
Hmong-Mien	78.4	74.7	63.7	63.5	53.5	8.3	728
Chinese-Tibetan	50.7	48.0	42.3	42.4	36.2	20.3	335
Other, Missing, DK	76.3	71.2	63.4	61.6	49.0	19.4	62
Total	82.4	78.6	65.0	70.4	57.0	9.0	9,951

[1] **MICS indicator 9.3**

Accepting Attitudes towards People Living with HIV/AIDS (Stigma and Discrimination)

The indicators on attitudes towards people living with HIV measure stigma and discrimination in the community. Stigma and discrimination are low if respondents report an accepting attitude on the following four questions: 1) would you care for a family member in your own household who is sick with AIDS?; 2) would you buy fresh vegetables from a vendor who is HIV-positive?; 3) do you think that a female teacher who is HIV-positive should be allowed to continue teaching in school?; and 4) would you ***not*** want to keep HIV status of a family member a secret? Tables HA.4.1 and HA.4.2 present the percentages of women and men who hold accepting attitudes towards people living with HIV/AIDS, among those who have heard of AIDS.

In Lao PDR, 94 per cent of women and men who have heard of AIDS have at least one accepting attitude towards people living with HIV/AIDS. As with HIV knowledge, patterns and differentials across the background characteristics of people with accepting attitudes are generally the same among women and men.

The most common accepting attitude pertains to secrecy. Most people who have heard of AIDS (8 in 10) agree that if they had a family member who was sick with AIDS, they would not feel the need to keep the HIV status of the person a secret. Accepting attitudes are held by a much smaller percentage of people with respect to the other three indicators.

Only 4 in 10 women said they would buy fresh vegetables from a shopkeeper or a vendor who has HIV. However, the percentage of women who would buy fresh vegetables from a vendor who has HIV increases tremendously with increasing education, with positive responses from 8 in 10 women with a higher education level. Only 4 in 10 women said that they would be willing to care for a family member with AIDS in their household, and this figure is even lower among women in rural areas without roads (26 per cent). Only 48 per cent of women believe that if a female teacher is HIV-positive, she should be allowed to continue teaching.

The percentage of people expressing positive attitudes towards people who are living with HIV/AIDS regarding all four indicators asked about is very low: among only 17 per cent of women and 14 per cent of men. The percentage of people with accepting attitudes on all four indicators varies significantly across provinces, from highs of 32 and 31 per cent among women in Borikhamxay and Bokeo provinces, to lows of 1 per cent in Sekong and 5 per cent in Phongsaly. The range across provinces among men ranges from lows of 2 per cent in Phongsaly and 4 per cent in Laungprabang, to highs of 23 per cent in Savannakhet and 25 per cent in Bokeo.

Accepting attitudes towards people living HIV/AIDS is generally rather low. Educational programmes to provide knowledge regarding HIV and AIDS, transmission, prevention, and behavior information could be targeted especially at particular provinces.

Table HA.4.1: Accepting attitudes toward people living with HIV/AIDS

Percentage of women age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, Lao PDR 2011-12

	Percentage of women who:						
	Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators[1]	Number of women who have heard of AIDS
Region							
North	34.4	36.1	38.0	83.8	93.2	12.6	5,597
Central	52.5	51.3	55.6	76.3	94.7	21.9	9,995
South	30.8	36.6	43.8	80.9	93.8	9.5	3,293
Province							
Vientiane Capital	53.3	67.7	67.8	72.4	96.2	25.3	3,211
Phongsaly	16.2	24.1	29.3	81.5	89.1	4.5	356
Luangnamtha	46.4	41.8	49.6	79.7	95.4	18.8	471
Oudomxay	21.6	22.4	18.7	76.1	85.1	5.9	654
Bokeo	58.2	45.0	55.5	78.5	92.3	30.5	564
Luangprabang	42.3	47.0	41.4	78.5	91.8	17.1	1,260
Huaphanh	18.3	21.7	26.5	89.8	94.7	6.3	959
Xayabury	35.2	40.5	43.3	92.5	98.3	8.4	1,333
Xiengkhuang	36.6	30.0	33.1	85.2	95.6	11.6	804
Vientiane	58.0	51.2	51.5	85.9	95.3	26.3	1,561
Borikhamxay	57.2	48.4	58.9	78.4	91.7	31.6	774
Khammuane	37.9	33.2	39.7	76.5	93.4	11.1	1,001
Savannakhet	57.2	45.7	55.1	71.9	93.8	19.6	2,644
Saravane	47.6	31.2	37.6	71.4	90.1	11.6	905
Sekong	4.2	30.4	36.1	91.8	96.3	0.9	249
Champasack	24.0	41.1	49.0	84.6	95.4	9.9	1,849
Attapeu	44.0	30.1	36.0	77.5	93.6	7.4	290
Residence							
Urban	49.2	63.1	65.2	74.9	96.2	22.9	6,338
Rural	40.3	34.7	39.8	81.5	93.1	14.0	12,548
..Rural with road	41.6	35.8	40.6	81.5	93.4	14.5	11,523
..Rural without road	25.8	23.0	30.5	81.5	89.7	7.9	1,025

[1] **MICS indicator 9.4**

Table HA.4.1: Accepting attitudes toward people living with HIV/AIDS

Percentage of women age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, Lao PDR 2011-12

	Percentage of women who:						
	Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators[1]	Number of women who have heard of AIDS
Age							
15-24	45.1	43.0	48.9	74.3	92.9	16.0	6,760
15-19	43.4	39.2	45.8	73.8	91.9	14.3	3,668
20-24	47.0	47.5	52.6	75.0	94.2	18.2	3,093
25-29	46.5	49.5	53.1	77.9	95.0	20.2	3,085
30-39	42.2	44.9	46.2	82.5	94.5	16.7	5,127
40-49	39.2	41.4	46.3	84.7	95.0	16.4	3,914
Marital status							
Ever married/in union	42.2	42.3	46.1	81.3	94.4	16.4	14,540
Never married/in union	47.0	50.8	55.7	72.7	93.3	18.9	4,346
Education							
None	29.5	17.8	23.0	76.4	87.5	5.7	2,625
Primary	40.0	33.9	38.4	82.5	93.8	12.8	7,673
Lower secondary	46.8	49.3	52.9	80.5	95.2	19.3	3,887
Upper secondary	51.8	64.2	69.0	74.9	96.4	24.9	2,470
Post secondary non tertiary	51.6	77.3	77.2	80.9	97.8	32.2	1,020
Higher	58.7	82.0	84.9	69.0	99.3	31.4	1,212
Wealth index quintile							
Poorest	26.2	17.5	21.4	77.1	87.2	5.1	2,137
Second	34.0	23.5	28.8	81.4	92.2	7.8	3,063
Middle	40.6	34.4	41.3	82.2	94.0	13.4	3,756
Fourth	48.3	51.4	54.2	82.2	95.3	20.6	4,452
Richest	53.0	67.2	69.8	74.6	97.1	26.2	5,478
Ethno-linguistic group of household head							
Lao-Tai	47.6	51.0	55.7	80.0	96.1	19.9	14,093
Mon-Khmer	30.4	24.3	27.1	77.7	88.6	8.1	3,163
Hmong-Mien	32.2	22.7	22.7	78.4	88.1	8.5	1,170
Chinese-Tibetan	24.3	23.8	32.7	76.9	87.8	6.5	361
Other, Missing, DK	53.9	43.4	42.0	55.8	88.2	18.2	99
Total	43.3	44.2	48.3	79.3	94.1	17.0	18,886

[1] MICS indicator 9.4

Table HA.4.2: Accepting attitudes toward people living with HIV/AIDS

Percentage of men age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, Lao PDR 2011-12

	Percentage of men who:						
	Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators[1]	Number of men who have heard of AIDS
Region							
North	24.6	35.2	32.9	85.5	94.8	8.0	2,817
Central	49.4	48.4	54.8	74.8	93.7	18.8	4,668
South	35.6	38.3	41.9	77.2	92.2	11.7	1,617
Province							
Vientiane Capital	46.3	62.9	65.4	71.8	95.0	21.0	1,343
Phongsaly	10.7	13.9	16.1	91.4	94.8	2.3	218
Luangnamtha	30.2	51.5	56.2	71.6	96.5	6.1	228
Oudomxay	42.3	19.9	26.7	84.6	91.7	9.0	428
Bokeo	48.5	52.8	55.4	88.4	97.1	24.8	263
Luangprabang	9.8	56.7	30.8	75.6	92.0	3.6	577
Huaphanh	23.2	19.4	24.1	88.0	93.9	7.2	489
Xayabury	19.9	32.3	33.9	95.4	98.6	7.3	614
Xiengkhuang	35.9	37.3	46.3	81.6	93.0	11.5	424
Vientiane	46.7	42.7	48.1	77.7	94.8	13.7	696
Borikhamxay	41.4	31.7	46.6	76.4	85.5	13.9	382
Khammuane	51.9	42.9	50.0	77.5	94.3	19.5	492
Savannakhet	59.6	47.0	54.6	72.8	94.2	22.7	1,331
Saravane	22.8	30.7	32.0	81.0	91.3	5.8	562
Sekong	46.7	32.1	45.1	77.0	95.3	15.5	141
Champasack	42.0	42.5	45.9	72.6	91.7	14.7	765
Attapeu	40.2	51.0	55.9	87.0	95.0	15.1	149
Residence							
Urban	45.3	60.9	64.4	72.9	95.4	20.4	2,720
Rural	36.7	34.7	37.8	81.0	93.1	11.5	6,382
..Rural with road	37.0	35.4	38.7	81.1	93.2	11.9	5,855
..Rural without road	33.1	26.7	28.0	79.4	92.4	7.8	527

[1] **MICS indicator 9.4**

Table HA.4.2: Accepting attitudes toward people living with HIV/AIDS

Percentage of men age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, Lao PDR 2011-12

	Percentage of men who:						
	Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators[1]	Number of men who have heard of AIDS
Age							
15-24	39.9	39.9	45.0	72.4	91.6	13.0	3,256
15-19	39.5	36.6	41.8	69.8	89.9	11.5	1,810
20-24	40.4	43.9	49.1	75.7	93.7	14.8	1,445
25-29	39.5	43.9	48.8	78.5	94.5	14.7	1,399
30-39	39.7	45.1	45.7	82.4	95.0	15.3	2,523
40-49	37.5	42.5	44.8	84.1	95.3	14.4	1,925
Marital status							
Ever married/in union	38.6	42.0	44.4	82.0	94.9	14.3	6,300
Never married/in union	40.7	43.6	48.8	70.8	91.3	14.0	2,802
Education							
None	30.1	17.3	22.0	75.0	88.5	2.8	657
Primary	33.3	29.0	31.8	80.5	92.6	8.1	3,420
Lower secondary	41.0	43.4	46.7	79.2	93.6	15.4	2,239
Upper secondary	47.0	54.6	59.6	76.6	94.9	20.2	1,434
Post secondary non tertiary	45.1	69.9	67.7	82.2	97.8	24.3	607
Higher	50.1	78.5	83.1	71.5	98.5	28.5	746
Wealth index quintile							
Poorest	26.6	21.9	22.8	81.3	91.1	4.6	1,306
Second	33.7	27.8	33.4	80.2	92.3	8.9	1,669
Middle	37.8	36.5	39.9	81.4	93.7	11.5	1,901
Fourth	45.0	49.3	53.7	79.5	94.7	18.8	2,033
Richest	47.1	64.9	66.6	72.4	95.7	21.9	2,194
Ethno-linguistic group of household head							
Lao-Tai	43.2	49.2	52.8	78.2	94.9	17.1	6,353
Mon-Khmer	31.5	28.0	30.8	80.2	91.8	8.2	1,822
Hmong-Mien	29.6	25.1	25.2	79.8	90.0	6.7	631
Chinese-Tibetan	23.4	21.7	29.5	75.6	90.6	2.4	238
Other, Missing, DK	26.7	41.3	32.0	71.9	83.2	12.6	59
Total	39.3	42.5	45.8	78.6	93.8	14.2	9,102

[1] MICS indicator 9.4

Knowledge of a HIV Testing Location

The National Strategy and Action Plan on HIV/AIDS/STI 2011-2015 defines the following expected outcomes by 2015: Quality assured Voluntary Counseling and Testing (VCT) services available in all 94 priority districts; and 80 per cent of most-at-risk populations report they have received an HIV test and know the results within the previous 12 months.

In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. This knowledge is also a critical factor in the decision to seek treatment. All women and men were asked if they know where they can go for an HIV test, whether they have ever been tested, whether they have been tested within the 12 months prior to the survey, and whether they know the result of the test. The findings are presented in Tables HA.5.1 and HA.5.2. Thirty-seven per cent of women and 47 per cent of men know where they can go to be tested. Seven per cent of women and men age 15-49 have been tested for HIV at some time. Nationally, 3 per cent of both women and men had been tested for HIV within the 12 months prior to the survey, and 2 per cent had been tested and told the result within the 12 months prior to the survey.

While urban-rural differences in knowing where one can go for an HIV test are to be expected, the difference is rather large. Fifty-six per cent of women who live in urban areas know where to be tested for HIV, while only 18 per cent women who live in rural areas without roads know where they can go. Similarly, 62 per cent of urban men know where to go for a test, while only 29 per cent of men in rural areas without roads know where they can get an HIV test.

Ten per cent or more of women and men have had at least one HIV test in their life in Vientiane Capital (18 and 14 per cent respectively), Bokeo (11 per cent of women), and Savannakhet (10 per cent of women and men), and Vientiane (10 per cent of men). The lowest level of having ever been tested is in Xiengkhuang province (1 per cent of women) and Sekong (2 per cent of men). The percentage of people who have ever been tested for HIV rises steadily with increasing education and wealth quintile. Six per cent of women and men in the highest wealth quintile have been tested within the 12 months prior to the survey and told the results.

Table HA.5.1: Knowledge of a place for HIV testing

Percentage of women age 15-49 years who know where to get an HIV test, percentage of women who have ever been tested, percentage of women who have been tested in the last 12 months, and percentage of women who have been tested and have been told the result, Lao PDR 2011-12

	Percentage of women who:				
	Know a place to get tested[1]	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result[2]	Number of women
Region					
North	36.1	4.0	1.1	1.0	7,057
Central	38.1	9.8	3.8	3.5	11,255
South	37.0	5.0	1.6	1.3	4,164
Province					
Vientiane Capital	51.5	17.5	7.0	6.4	3,288
Phongsaly	32.4	1.7	1.1	0.8	666
Luangnamtha	26.3	6.5	1.6	1.4	627
Oudomxay	33.8	1.0	0.5	0.5	1,182
Bokeo	51.0	11.3	2.5	2.5	620
Luangprabang	26.7	6.4	1.6	1.4	1,473
Huaphanh	49.6	2.1	0.8	0.8	1,086
Xayabury	37.2	2.2	0.6	0.4	1,402
Xiengkhuang	25.9	0.9	0.3	0.2	930
Vientiane	22.5	4.9	1.9	1.5	1,677
Borikhamxay	20.0	5.2	1.4	1.0	901
Khammuane	36.1	4.7	1.7	1.6	1,082
Savannakhet	41.6	10.0	3.9	3.8	3,376
Saravane	26.0	3.0	0.6	0.4	1,456
Sekong	27.0	2.7	0.4	0.4	388
Champasack	45.1	7.5	2.8	2.4	1,943
Attapeu	47.5	2.3	0.3	0.3	376
Residence					
Urban	56.2	14.2	5.5	5.0	6,649
Rural	29.3	4.1	1.3	1.2	15,827
..Rural with road	30.6	4.4	1.4	1.3	14,268
..Rural without road	18.0	1.3	0.3	0.2	1,559
Age					
15-24	36.2	5.2	2.7	2.3	8,032
15-19	33.0	2.5	1.3	1.1	4,415
20-24	40.1	8.6	4.3	3.8	3,617
25-29	40.2	11.1	3.8	3.5	3,642
30-39	37.6	8.2	2.4	2.2	6,079
40-49	36.6	5.7	1.5	1.5	4,722
Marital status					
Ever married/in union	37.0	8.4	2.9	2.6	17,445
Never married/in union	38.3	2.6	1.3	1.2	5,031
Education					
None	14.5	1.3	0.3	0.3	4,660
Primary	33.0	5.7	1.7	1.6	8,955
Lower secondary	44.1	8.7	3.1	2.7	4,111
Upper secondary	54.7	11.6	4.8	4.2	2,496
Post secondary non tertiary	69.1	18.8	7.4	7.1	1,030
Higher	70.5	15.0	6.1	5.8	1,224
Wealth index quintile					
Poorest	15.0	1.1	0.3	0.2	3,809
Second	25.6	2.4	0.8	0.7	4,088
Middle	34.7	4.0	1.3	1.1	4,309
Fourth	42.2	7.2	2.3	1.9	4,694
Richest	59.0	16.9	6.5	6.2	5,577
Ethno-linguistic group of household head					
Lao-Tai	44.9	9.4	3.5	3.2	15,151
Mon-Khmer	23.6	2.2	0.5	0.4	4,913
Hmong-Mien	14.1	1.2	0.5	0.4	1,606
Chinese-Tibetan	19.6	1.2	0.5	0.3	685
Other, Missing, DK	46.0	20.3	9.2	8.5	121
Total	37.3	7.1	2.5	2.3	22,476

[1] **MICS indicator 9.5**

[2] **MICS indicator 9.6**

Table HA.5.2: Knowledge of a place for HIV testing

Percentage of men age 15-49 years who know where to get an HIV test, percentage of men who have ever been tested, percentage of men who have been tested in the last 12 months, and percentage of men who have been tested and have been told the result, Lao PDR 2011-12

	Percentage of men who:				
	Know a place to get tested[1]	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result[2]	Number of men
Region					
North	45.3	4.1	1.3	1.2	3,172
Central	43.7	9.8	3.7	3.1	4,990
South	56.7	5.7	2.0	1.5	1,789
Province					
Vientiane Capital	51.0	14.4	6.6	5.4	1,379
Phongsaly	20.7	3.6	1.4	1.4	318
Luangnamtha	29.4	4.6	1.4	1.2	266
Oudomxay	46.0	2.5	0.7	0.7	530
Bokeo	48.2	9.2	2.9	2.1	267
Luangprabang	48.2	5.2	1.9	1.9	644
Huaphanh	58.8	3.8	1.2	1.2	511
Xayabury	48.9	2.5	0.3	0.3	635
Xiengkhuang	43.9	4.1	1.9	1.3	442
Vientiane	38.0	9.8	1.5	1.3	721
Borikhamxay	27.6	3.1	1.2	0.8	390
Khammuane	44.1	8.4	3.7	2.8	503
Savannakhet	43.6	9.6	3.4	3.0	1,556
Saravane	54.8	6.6	1.8	0.9	597
Sekong	69.1	2.2	0.3	0.3	162
Champasack	53.2	5.6	2.3	2.0	873
Attapeu	70.0	6.4	2.9	2.7	157
Residence					
Urban	62.3	12.4	5.3	4.6	2,800
Rural	40.4	5.2	1.6	1.3	7,151
..Rural with road	41.5	5.4	1.6	1.3	6,457
..Rural without road	29.3	3.3	1.2	1.2	694
Age					
15-24	40.4	4.0	2.0	1.6	3,676
15-19	37.1	2.3	1.3	1.1	2,119
20-24	44.9	6.3	2.9	2.3	1,557
25-29	49.1	8.4	2.8	2.6	1,500
30-39	50.0	9.3	3.3	2.9	2,709
40-49	51.1	9.5	2.8	2.1	2,066
Marital status					
Ever married/in union	48.9	8.6	2.8	2.3	6,788
Never married/in union	41.4	4.4	2.3	2.0	3,163
Education					
None	19.1	2.4	1.0	0.8	923
Primary	38.2	5.1	1.6	1.4	3,872
Lower secondary	47.8	6.1	2.2	1.8	2,351
Upper secondary	57.0	8.2	3.8	3.2	1,450
Post secondary non tertiary	75.0	13.6	4.0	3.3	608
Higher	76.0	20.9	8.1	6.4	747
Wealth index quintile					
Poorest	27.3	1.5	0.5	0.4	1,692
Second	38.0	4.4	1.4	1.1	1,911
Middle	45.3	4.4	1.1	0.8	2,039
Fourth	51.9	9.4	3.0	2.6	2,092
Richest	64.6	14.6	6.4	5.5	2,217
Ethno-linguistic group of household head					
Lao-Tai	53.0	9.4	3.4	2.8	6,635
Mon-Khmer	35.9	2.8	0.8	0.6	2,191
Hmong-Mien	33.1	2.2	1.0	1.0	728
Chinese-Tibetan	16.7	1.8	1.1	1.1	335
Other, Missing, DK	50.1	19.3	14.1	10.6	62
Total	46.5	7.2	2.6	2.2	9,951

[1] **MICS indicator 9.5**

[2] **MICS indicator 9.6**

Tables HA.6.1 and HA.6.2 present the same findings as Tables HA.5.1 and HA.5.2, but for sexually active young people age 15-24. Some 46 per cent of young women and 42 per cent of young men had sexual intercourse in the 12 months prior to the survey (and were considered sexually active). Note that among the never-married, 3 per cent of young women and 22 per cent of young men reported having had intercourse in the previous 12 months.

Sexually active young people know where to go for an HIV test, in equal proportion to the general population (36 per cent of young women and 45 per cent of young men). Patterns in testing coverage generally mimic the patterns observed among the population age 15-49 (higher among urban than rural areas, rising with higher education levels and wealth quintiles). Four 4 per cent of sexually active young women and 3 per cent of young men had been tested within the previous 12 months and told the results. Testing among either young women or men is higher than the national average in Vientiane Capital, Bokeo, Xiengkhuang, Vientiane, Khammuane, Savannakhet and Champasack. However, the gender differential in coverage of testing is quite pronounced in Vientiane Capital, where only 2 per cent of young men report having been tested in the previous 12 months and told their results, compared with 13 per cent of young women.

Table HA.6.1: Knowledge of a place for HIV testing among sexually active young women

Percentage of women age 15-24 years who have had sex in the last 12 months, and among women who have had sex in the last 12 months, the percentage who know where to get an HIV test, percentage of women who have ever been tested, percentage of women who have been tested in the last 12 months, and percentage of women who have been tested and have been told the result, Lao PDR 2011-12

			Percentage of women who:				
	Percentage who have had sex in the last 12 months	Number of women age 15-24 years	Know a place to get tested	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result[1]	Number of women age 15-24 years who have had sex in the last 12 months
Region							
North	54.4	2,573	35.7	5.4	1.6	1.4	1,401
Central	42.6	3,918	35.9	12.6	7.2	6.6	1,668
South	42.9	1,541	35.3	5.8	2.8	2.0	662
Province							
Vientiane Capital	32.7	1,110	52.7	23.0	14.0	13.4	363
Phongsaly	60.4	241	34.0	3.4	1.9	1.4	145
Luangnamtha	59.5	237	27.3	10.2	3.1	2.1	141
Oudomxay	51.6	479	37.2	1.5	1.1	1.1	248
Bokeo	58.0	233	50.1	14.7	4.1	4.1	135
Luangprabang	51.0	474	28.9	8.3	1.0	1.0	242
Huaphanh	52.2	408	39.9	3.1	1.5	1.5	213
Xayabury	55.3	502	35.2	2.2	0.7	0.4	278
Xiengkhuang	43.0	389	20.4	0.3	0.3	0.3	167
Vientiane	50.2	542	22.0	7.7	3.7	2.3	272
Borikhamxay	46.4	322	17.7	6.5	3.4	2.8	149
Khammuane	47.9	378	31.1	6.5	3.6	3.6	181
Savannakhet	45.4	1,177	43.0	15.8	9.0	8.3	535
Saravane	48.1	564	24.1	2.8	1.0	0.6	272
Sekong	41.1	154	19.9	2.8	0.5	0.5	63
Champasack	38.0	682	47.0	10.5	5.9	4.1	259
Attapeu	48.0	141	50.3	3.2	0.6	0.6	68
Residence							
Urban	33.3	2,356	55.4	19.6	10.9	9.5	785
Rural	51.9	5,676	30.5	5.8	2.6	2.3	2,946
..Rural with road	52.0	5,153	31.3	6.2	2.8	2.6	2,678
..Rural without road	51.3	523	22.5	1.7	0.4	0.2	268
Age							
15-19	26.8	4,415	29.9	5.5	2.9	2.8	1,185
20-24	70.4	3,617	38.4	10.2	5.0	4.3	2,545
Marital status							
Ever married/in union	95.9	3,757	35.2	8.6	4.3	3.8	3,602
Never married/in union	3.0	4,275	49.4	11.3	5.5	5.5	128
Education							
None	68.2	1,054	14.3	1.8	0.8	0.8	719
Primary	61.0	2,689	31.2	6.2	2.9	2.5	1,639
Lower secondary	42.9	1,880	45.2	12.3	6.2	5.3	806
Upper secondary	22.8	1,577	56.7	17.6	9.2	8.3	359
Post secondary non tertiary	38.9	216	78.3	30.5	13.1	11.4	84
Higher	20.0	617	67.9	18.2	12.5	12.5	123
Wealth index quintile							
Poorest	61.1	1,328	17.8	2.0	0.5	0.4	812
Second	55.1	1,526	29.8	3.7	2.2	1.9	841
Middle	47.1	1,540	36.3	5.7	2.4	2.0	725
Fourth	43.3	1,648	42.9	12.7	5.8	4.5	714
Richest	32.1	1,990	57.8	22.7	12.8	12.3	638
Ethno-linguistic group of household head							
Lao-Tai	42.3	5,208	43.9	12.1	6.2	5.4	2,202
Mon-Khmer	52.5	1,818	26.7	4.2	1.6	1.5	955
Hmong-Mien	55.9	689	16.6	1.3	0.8	0.6	385
Chinese-Tibetan	58.4	269	20.2	3.9	1.2	0.7	157
Other, Missing, DK	(64.7)	49	(50.2)	(23.1)	(17.0)	(17.0)	32
Total	46.4	8,032	35.7	8.7	4.4	3.8	3,731

[1] **MICS indicator 9.7**

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table HA.6.2: Knowledge of a place for HIV testing among sexually active young men

Percentage of men age 15-24 years who have had sex in the last 12 months, and among men who have had sex in the last 12 months, the percentage who know where to get an HIV test, percentage of men who have ever been tested, percentage of men who have been tested in the last 12 months, and percentage of men who have been tested and have been told the result, Lao PDR 2011-12

			Percentage of men who:				
	Percentage who have had sex in the last 12 months	Number of men age 15-24 years	Know a place to get tested	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result[1]	Number of men age 15-24 years who have had sex in the last 12 months
Region							
North	55.0	1,133	42.6	3.7	1.3	1.3	623
Central	37.1	1,866	42.6	8.2	4.4	3.3	692
South	32.5	677	61.4	8.0	5.2	3.7	220
Province							
Vientiane Capital	45.7	504	48.3	9.2	4.9	2.4	230
Phongsaly	69.8	130	21.6	3.6	0.7	0.7	90
Luangnamtha	60.2	94	22.9	1.8	0.9	0.9	57
Oudomxay	50.1	204	41.8	2.6	1.1	1.1	102
Bokeo	62.2	90	46.7	8.1	2.8	2.8	56
Luangprabang	44.6	197	46.1	7.3	2.2	2.2	88
Huaphanh	59.4	198	56.6	2.8	2.2	2.2	118
Xayabury	50.9	219	51.1	1.9	0.0	0.0	112
Xiengkhuang	44.7	194	36.9	4.9	4.0	3.0	87
Vientiane	37.6	250	33.9	11.4	3.6	3.6	94
Borikhamxay	35.4	128	21.7	3.5	1.8	0.0	45
Khammuane	25.8	183	40.5	9.8	7.1	7.1	47
Savannakhet	31.0	607	48.3	7.8	4.3	4.3	188
Saravane	35.6	223	58.5	6.3	2.2	0.0	80
Sekong	29.7	62	54.5	0.0	0.0	0.0	19
Champasack	30.2	340	63.6	12.2	9.5	7.9	103
Attapeu	37.4	52	68.4	(0.0)	(0.0)	(0.0)	19
Residence							
Urban	38.3	1,039	60.7	10.1	5.8	4.0	398
Rural	43.1	2,637	39.9	5.1	2.4	2.1	1,137
..Rural with road	42.1	2,388	41.3	4.9	2.4	2.0	1,006
..Rural without road	52.4	249	29.6	6.1	2.3	2.3	131
Age							
15-19	20.8	2,119	41.3	4.9	3.3	2.6	441
20-24	70.3	1,557	46.9	7.0	3.3	2.6	1,094
Marital status							
Ever married/in union	97.2	955	42.7	6.2	2.7	2.1	929
Never married/in union	22.3	2,721	49.4	6.6	4.1	3.3	606
Education							
None	47.5	187	7.5	0.0	0.0	0.0	89
Primary	49.4	1,163	35.6	4.5	1.9	1.6	575
Lower secondary	35.6	1,077	45.9	5.2	2.7	2.5	384
Upper secondary	30.2	874	56.1	7.8	3.8	2.3	264
Post secondary non tertiary	56.5	104	71.2	15.5	11.1	11.1	59
Higher	61.0	271	71.7	13.5	7.5	4.9	165
Wealth index quintile							
Poorest	52.2	567	23.9	1.8	0.3	0.3	296
Second	43.2	734	39.6	5.0	2.8	2.3	317
Middle	38.2	778	44.8	3.8	2.0	1.7	297
Fourth	35.0	786	53.2	8.9	4.1	3.8	275
Richest	43.0	812	63.0	11.7	6.7	4.6	349
Ethno-linguistic group of household head							
Lao-Tai	38.2	2,407	54.7	9.3	5.0	3.8	918
Mon-Khmer	42.2	798	33.4	2.0	0.1	0.1	337
Hmong-Mien	55.7	301	33.7	1.8	1.0	1.0	168
Chinese-Tibetan	71.0	140	15.3	1.3	0.7	0.7	99
Other, Missing, DK	(41.3)	30	*	*	*	*	12
Total	41.8	3,676	45.3	6.4	3.3	2.6	1,535

[1] **MICS indicator 9.7**

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

Counselling and Testing during Antenatal Care

The National Strategy and Action Plan on HIV/AIDS/STI 2011-2015 estimates that the number of pregnant women who are HIV-positive will rise from 280 in 2010 to 410 in 2015. The National Strategy and Action Plan on HIV/AIDS/STI 2011-2015 defines the following expected outcomes (with regard to prevention of mother-to-child transmission) by 2015: 50 per cent of ANC attendants to receive Provider Initiated Counselling and Testing (PICT); 90 per cent of identified HIV-positive pregnant women to receive antiretroviral medicines to reduce the risk of mother-to-child transmission; and 100% of infants born to identified HIV-infected mothers to receive antiretroviral drugs.

Table HA.7 presents the percentage of women who received information and HIV testing during antenatal care, among those who gave birth within the two years preceding the survey. Some 54 per cent of women received antenatal care from a healthcare professional during their last pregnancy. Only 12 per cent received HIV information during antenatal care, and only 6 per cent were offered an HIV test during antenatal care, were tested, and told the result.

The percentage of women who were offered an HIV test, were tested and told the result exceeds the national average of 6 per cent of women in only four provinces: Vientiane Capital (26 per cent); Luangprabang (11 per cent); Savannakhet (9 per cent); and Champasack (8 per cent). The percentage rises steadily from below 1 per cent to over 20 per cent with increasing education level and wealth quintile. Note that testing among ethno-linguistic groups other than Lao-Tai is especially low.

Table HA.7: HIV counselling and testing during antenatal care

Among women age 15-49 who gave birth in the last 2 years, percentage of women who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counselling, percentage who were offered and accepted an HIV test and received the results, Lao PDR 2011-12

	Percentage of women who:					Number of women who gave birth in the 2 years preceding the survey
	Received antenatal care from a health care professional for last pregnancy	Received HIV counselling during antenatal care[1]	Were offered an HIV test and were tested for HIV during antenatal care	Were offered an HIV test and were tested for HIV during antenatal care, and received the results[2]	Received HIV counselling, were offered an HIV test, accepted and received the results	
Region						
North	45.0	7.8	3.3	3.3	3.1	1,377
Central	63.3	16.2	10.5	9.1	7.0	1,989
South	48.6	9.7	5.1	4.2	3.9	940
Province						
Vientiane Capital	89.8	40.0	30.0	25.6	20.4	415
Phongsaly	25.2	2.5	0.8	0.8	0.8	148
Luangnamtha	62.3	14.4	2.4	2.4	2.4	99
Oudomxay	34.9	4.3	0.7	0.7	0.3	266
Bokeo	37.9	6.9	4.1	4.1	3.1	141
Luangprabang	46.0	19.0	10.5	10.5	10.3	280
Huaphanh	42.1	1.0	1.0	1.0	0.6	237
Xayabury	70.9	5.9	1.5	1.5	1.5	205
Xiengkhuang	50.3	5.0	0.0	0.0	0.0	200
Vientiane	74.1	2.7	4.0	3.1	1.3	295
Borikhamxay	60.7	12.2	3.6	1.0	0.5	162
Khammuane	47.5	8.3	1.9	1.9	1.8	233
Savannakhet	52.2	14.5	9.2	8.6	6.8	683
Saravane	47.8	7.2	2.7	2.0	1.8	361
Sekong	40.4	1.0	0.7	0.7	0.7	99
Champasack	51.1	15.8	9.0	7.5	7.2	397
Attapeu	49.6	1.6	1.6	1.6	1.1	83
Residence						
Urban	83.4	29.5	20.3	18.3	15.7	957
Rural	45.9	7.1	3.2	2.7	2.0	3,349
..Rural with road	49.7	7.8	3.5	3.0	2.2	2,928
..Rural without road	19.0	2.3	1.2	0.7	0.7	421

[1] **MICS indicator 9.8**

[2] **MICS indicator 9.9**

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

Table HA.7: HIV counselling and testing during antenatal care

Among women age 15-49 who gave birth in the last 2 years, percentage of women who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counselling, percentage who were offered and accepted an HIV test and received the results, Lao PDR 2011-12

	Percentage of women who:					Number of women who gave birth in the 2 years preceding the survey
	Received antenatal care from a health care professional for last pregnancy	Received HIV counselling during antenatal care[1]	Were offered an HIV test and were tested for HIV during antenatal care	Were offered an HIV test and were tested for HIV during antenatal care, and received the results[2]	Received HIV counselling, were offered an HIV test, accepted and received the results	
Age						
15-24	55.2	10.6	6.4	5.3	4.2	1,837
15-19	49.4	6.5	3.5	3.3	3.1	525
20-24	57.5	12.2	7.5	6.0	4.7	1,312
25-29	58.0	14.7	8.6	7.7	6.6	1,193
30-39	51.4	12.3	6.7	6.0	5.0	1,102
40-49	35.2	8.1	5.8	5.8	3.9	175
Marital status						
Ever married/in union	54.2	12.1	7.0	6.2	5.1	4,302
Never married/in union	*	*	*	*	*	4
Education						
None	23.1	1.4	0.3	0.3	0.3	1,248
Primary	56.1	8.8	4.4	3.7	2.4	1,763
Lower secondary	72.7	18.6	11.4	9.8	7.5	693
Upper secondary	90.3	31.5	21.6	20.0	18.1	334
Post secondary non tertiary	94.3	44.6	25.2	21.0	19.6	146
Higher	93.0	40.0	27.4	25.7	25.7	122
Wealth index quintile						
Poorest	22.9	1.6	0.4	0.4	0.4	1,178
Second	42.1	4.0	2.1	1.8	1.2	927
Middle	62.0	10.6	4.7	4.0	2.8	810
Fourth	77.1	17.7	9.6	7.9	6.3	707
Richest	91.7	37.0	25.3	22.8	19.9	684
Ethno-linguistic group of household head						
Lao-Tai	71.5	19.6	12.0	10.5	8.7	2,401
Mon-Khmer	36.2	2.5	0.9	0.9	0.7	1,213
Hmong-Mien	23.9	1.2	0.5	0.5	0.3	530
Chinese-Tibetan	24.6	2.9	0.0	0.0	0.0	140
Other, Missing, DK	*	*	*	*	*	21
Total	54.2	12.1	7.0	6.2	5.1	4,306

[1] **MICS indicator 9.8**

[2] **MICS indicator 9.9**

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

Sexual Behaviour Related to HIV Transmission

The National Strategy and Action Plan on HIV/AIDS/STI 2011-2015 defines the following expected outcomes (with regard to condom programming) by 2015: 90 per cent of most-at-risk populations to report easy access to condoms; and 6 million condoms distributed annually until 2015.

Promoting safer sexual behaviour is critical for reducing HIV prevalence. In most countries, over half of new HIV infections are among young people age 15-24 years, so a change in behaviour among this age group will be especially important to reduce new infections. Not all risk factors for HIV were asked about in the LSIS, but those that can be measured among young people include: sex with a non-marital non-cohabiting partner (only among the never-married); sex at an early age (before 15); and young women having sex with older men (men 10 or more years older than themselves).

Table HA.8.1: Sexual behaviour that increases the risk of HIV infection

Percentage of never-married young women age 15-24 years who have never had sex, percentage of young women age 15-24 years who have had sex before age 15, and percentage of young women age 15-24 years who had sex with a man 10 or more years older during the last 12 months, Lao PDR 2011-12

	Percentage of never-married women age 15-24 years who have never had sex[1]	Number of never-married women age 15-24 years	Percentage of women age 15-24 years who had sex before age 15[2]	Number of women age 15-24 years	Percentage of women age 15-24 years who had sex in the last 12 months with a man 10 or more years older[3]	Number of women age 15-24 years who had sex in the 12 months preceding the survey
Region						
North	94.4	1,197	9.4	2,573	9.2	1,401
Central	96.9	2,249	4.5	3,918	12.1	1,668
South	98.1	829	6.2	1,541	11.4	662
Province						
Vientiane Capital	95.1	764	2.2	1,110	15.3	363
Phongsaly	96.1	95	5.1	241	6.0	145
Luangnamtha	86.6	104	13.7	237	9.6	141
Oudomxay	98.0	230	9.4	479	10.9	248
Bokeo	95.8	98	15.2	233	11.9	135
Luangprabang	99.1	229	6.5	474	11.6	242
Huaphanh	86.8	216	15.0	408	6.0	213
Xayabury	95.5	225	4.8	502	8.1	278
Xiengkhuang	100.0	218	7.8	389	9.4	167
Vientiane	94.1	276	4.4	542	12.1	272
Borikhamxay	95.8	172	4.2	322	12.2	149
Khammuane	98.6	188	6.0	378	5.6	181
Savannakhet	99.1	630	5.2	1,177	13.0	535
Saravane	99.7	261	10.6	564	10.8	272
Sekong	97.8	86	8.6	154	16.8	63
Champasack	97.1	412	1.6	682	10.3	259
Attapeu	99.1	70	8.7	141	12.7	68
Residence						
Urban	95.7	1,596	2.1	2,356	16.3	785
Rural	96.9	2,679	8.2	5,676	9.4	2,946
..Rural with road	96.9	2,430	8.1	5,153	9.7	2,678
..Rural without road	97.3	250	9.0	523	6.7	268
Age						
15-19	97.8	3,264	5.2	4,415	13.2	1,185
20-24	92.3	1,011	7.9	3,617	9.8	2,545
Marital status						
Ever married/in union	na	na	13.4	3,757	10.9	3,602
Never married/in union	96.5	4,275	0.3	4,275	9.8	128
Education						
None	96.8	311	17.3	1,054	9.2	719
Primary	96.5	1,015	10.0	2,689	10.6	1,639
Lower secondary	96.1	1,078	3.3	1,880	13.0	806
Upper secondary	97.5	1,229	0.1	1,577	12.6	359
Post secondary non tertiary	95.5	134	0.2	216	5.7	84
Higher	94.7	508	0.0	617	9.2	123
Wealth index quintile						
Poorest	96.6	499	14.8	1,328	8.9	812
Second	96.8	673	10.3	1,526	9.9	841
Middle	97.6	801	5.5	1,540	9.1	725
Fourth	96.8	921	3.4	1,648	12.2	714
Richest	95.3	1,382	1.0	1,990	15.2	638
Ethno-linguistic group of household head						
Lao-Tai	96.3	2,987	3.8	5,208	11.8	2,202
Mon-Khmer	97.7	847	9.9	1,818	11.2	955
Hmong-Mien	96.3	307	15.1	689	7.5	385
Chinese-Tibetan	92.4	118	12.2	269	4.3	157
Other, Missing, DK	*	17	(5.6)	49	(10.1)	32
Total	96.5	4,275	6.4	8,032	10.9	3,731

[1] MICS indicator 9.10
[2] MICS indicator 9.11
[3] MICS indicator 9.12

na = Not applicable
Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

Table HA.8.2: Sexual behaviour that increases the risk of HIV infection

Percentage of never-married young men age 15-24 years who have never had sex, and percentage of young men age 15-24 years who have had sex before age 15, Lao PDR 2011-12

	Percentage of never-married men age 15-24 years who have never had sex[1]	Number of never-married men age 15-24 years	Percentage of men age 15-24 years who had sex before age 15[2]	Number of men age 15-24 years
Region				
North	62.6	774	4.6	1,133
Central	78.1	1,433	2.1	1,866
South	83.1	513	1.3	677
Province				
Vientiane Capital	65.5	404	1.5	504
Phongsaly	43.8	84	3.8	130
Luangnamtha	59.8	59	6.1	94
Oudomxay	73.6	139	4.5	204
Bokeo	45.8	55	5.3	90
Luangprabang	73.2	147	1.6	197
Huaphanh	53.0	143	11.7	198
Xayabury	69.5	147	0.5	219
Xiengkhuang	74.4	137	3.0	194
Vientiane	72.5	204	1.3	250
Borikhamxay	80.0	100	0.0	128
Khammuane	92.0	139	1.7	183
Savannakhet	88.4	448	3.2	607
Saravane	90.6	144	2.9	223
Sekong	87.6	48	1.5	62
Champasack	78.6	283	0.3	340
Attapeu	81.9	38	0.6	52
Residence				
Urban	70.2	867	1.4	1,039
Rural	76.7	1,854	3.2	2,637
..Rural with road	76.7	1,701	3.0	2,388
..Rural without road	77.0	153	5.9	249
Age				
15-19	84.6	1,920	2.9	2,119
20-24	50.6	801	2.4	1,557
Marital status				
Ever married/in union	na	na	7.0	955
Never married/in union	74.6	2,721	1.2	2,721
Education				
None	80.7	110	5.6	187
Primary	74.5	734	5.0	1,163
Lower secondary	80.2	834	2.2	1,077
Upper secondary	80.1	736	0.8	874
Post secondary non tertiary	48.5	79	0.0	104
Higher	42.9	228	0.2	271
Wealth index quintile				
Poorest	75.5	346	6.4	567
Second	79.6	497	4.6	734
Middle	77.4	589	1.4	778
Fourth	76.5	626	1.6	786
Richest	66.2	663	0.8	812
Ethno-linguistic group of household head				
Lao-Tai	74.2	1,900	1.4	2,407
Mon-Khmer	81.1	541	5.0	798
Hmong-Mien	73.8	174	4.9	301
Chinese-Tibetan	43.1	87	7.2	140
Other, Missing, DK	*	19	(0.0)	30
Total	74.6	2,721	2.7	3,676

[1] **MICS indicator 9.10**

[2] **MICS indicator 9.11**

na = Not applicable.

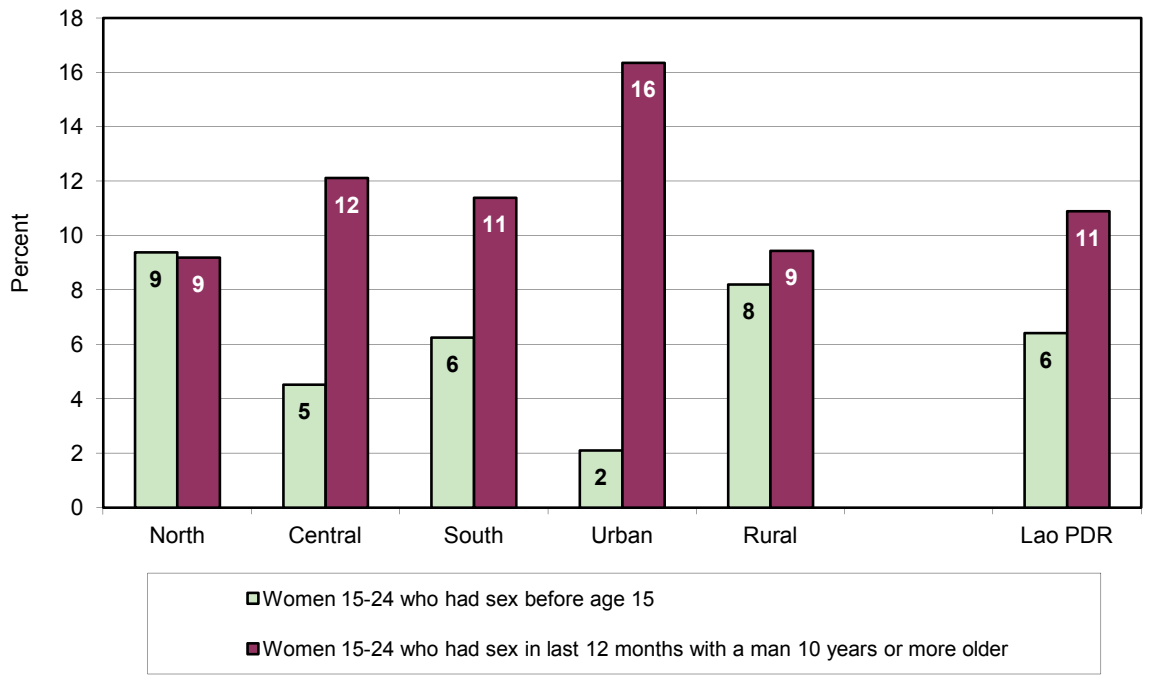
Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

Tables HA.8.1 and HA.8.2 indicate that 3 per cent of never-married women age 15-24 and 25 per cent of young never-married men have had sexual intercourse. The percentage does not vary by background characteristics among women, but it does among men. Over half the never-married young men in Phongsaly and Bokeo report they have had sexual intercourse.

The proportions of 15-24 year-olds that have had sex before 15 years are 6 per cent among women and 3 per cent among men. The percentage of women who have sex before 15 increases in relation to decreasing wealth quintile (up to 15 per cent among the poorest women). Only 2 per cent of urban young women report having sex before the age of 15, compared with 8 per cent of rural women.

The percentage of young women and men having sex before 15 is highest in Huaphanh, Bokeo and Laungnamtha provinces, and the percentage tends to be a bit lower among men than women. In addition, 11 per cent of young women who had sex in the 12 months before the survey had sex with a man who was 10 or more years older than themselves (Figure HA.2).

Figure HA.2: Sexual behaviour that increases risk of HIV infection, Lao PDR 2011-12



Self-reporting of Sexually Transmitted Infections

Information about the prevalence of sexually transmitted infections (STIs) is not only useful as a marker of unprotected sexual intercourse, but also because STI infection is a co-factor in HIV transmission. The LSIS asked respondents who have ever had sexual intercourse whether they had a disease that they acquired through sexual contact in the previous 12 months. They were also asked whether, in the previous 12 months, they had any genital discharge or a genital sore or ulcer. These symptoms have been shown to be useful in identifying STIs in men. For women, however, discharge is less easily interpreted as a symptom of STI because women experience non-STI conditions of the reproductive tract that also produce discharge.

Seven per cent of women who have had sexual intercourse reported having either an STI, bad-smelling or abnormal genital discharge, or a genital sore or ulcer in the previous 12 months (Table HA.9.1), compared to only 2 per cent of men (Table HA.9.2). Given the low prevalence among men, variations across background characteristics are rather small. Reporting of an STI or STI symptom is especially high among women in Bokeo (18 per cent), followed by women in Vientiane Capital (10 per cent). The lowest prevalence is reported among women in Xiengkhuang province, at 1 per cent.

Table HA.9.1: Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, Lao PDR 2011-12

	Percentage of women who reported having in the past 12 months:				
	STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse
Region					
North	4.5	5.2	3.1	7.0	5,801
Central	3.5	5.2	2.2	7.0	8,624
South	5.6	5.3	2.4	8.3	3,214
Province					
Vientiane Capital	7.0	6.9	3.3	10.4	2,328
Phongsaly	4.4	5.9	0.7	6.1	568
Luangnamtha	6.2	4.6	5.2	9.5	529
Oudomxay	5.3	5.7	1.4	6.5	933
Bokeo	14.7	16.7	8.0	17.9	515
Luangprabang	2.8	4.1	5.7	8.2	1,206
Huaphanh	4.2	5.0	1.6	5.4	890
Xayabury	0.6	0.9	0.8	1.7	1,160
Xiengkhuang	0.3	0.7	0.1	0.9	691
Vientiane	4.4	4.3	2.2	6.2	1,366
Borikhamxay	2.8	2.3	0.5	3.4	709
Khammuane	2.0	3.7	1.8	5.0	865
Savannakhet	1.3	6.6	2.2	7.5	2,664
Saravane	5.5	6.3	3.5	9.2	1,148
Sekong	2.9	4.5	3.5	4.5	294
Champasack	6.1	5.3	1.6	8.7	1,472
Attapeu	5.7	2.8	1.1	6.0	300
Residence					
Urban	5.8	6.1	2.8	8.8	4,733
Rural	3.6	4.9	2.4	6.6	12,905
..Rural with road	3.7	4.9	2.3	6.7	11,608
..Rural without road	2.8	4.5	2.9	6.2	1,297
Age					
15-24	4.2	5.9	2.4	7.7	3,904
15-19	3.2	4.8	2.4	6.3	1,222
20-24	4.7	6.5	2.4	8.3	2,683
25-29	5.0	5.6	3.0	8.0	3,318
30-39	4.7	5.8	2.6	7.8	5,825
40-49	3.0	3.5	2.1	5.4	4,591
Marital status					
Currently married/in union	4.3	5.2	2.5	7.3	16,359
Formerly married/in union	2.4	4.5	2.3	5.8	1,077
Never married/in union	2.9	7.4	1.9	7.4	202
Education					
None	2.4	4.4	2.3	5.4	4,278
Primary	3.9	5.1	2.6	7.2	7,780
Lower secondary	5.8	5.7	2.5	8.4	2,980
Upper secondary	6.4	7.6	2.3	9.5	1,201
Post secondary non tertiary	5.2	5.4	2.6	8.2	832
Higher	6.2	5.7	3.2	9.1	568
Wealth index quintile					
Poorest	2.4	4.4	2.5	5.7	3,271
Second	2.8	4.5	2.5	5.8	3,375
Middle	4.3	5.0	2.5	7.1	3,436
Fourth	4.2	5.1	2.5	7.3	3,657
Richest	6.7	6.9	2.4	9.6	3,901
Ethno-linguistic group of household head					
Lao-Tai	4.6	5.5	2.3	7.7	11,675
Mon-Khmer	3.4	5.1	3.5	6.8	3,999
Hmong-Mien	2.9	4.0	1.8	4.9	1,292
Chinese-Tibetan	3.3	4.1	1.4	5.3	571
Other, Missing, DK	2.6	1.7	1.0	2.6	102
Total	4.2	5.2	2.5	7.2	17,638

Table HA.9.2: Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

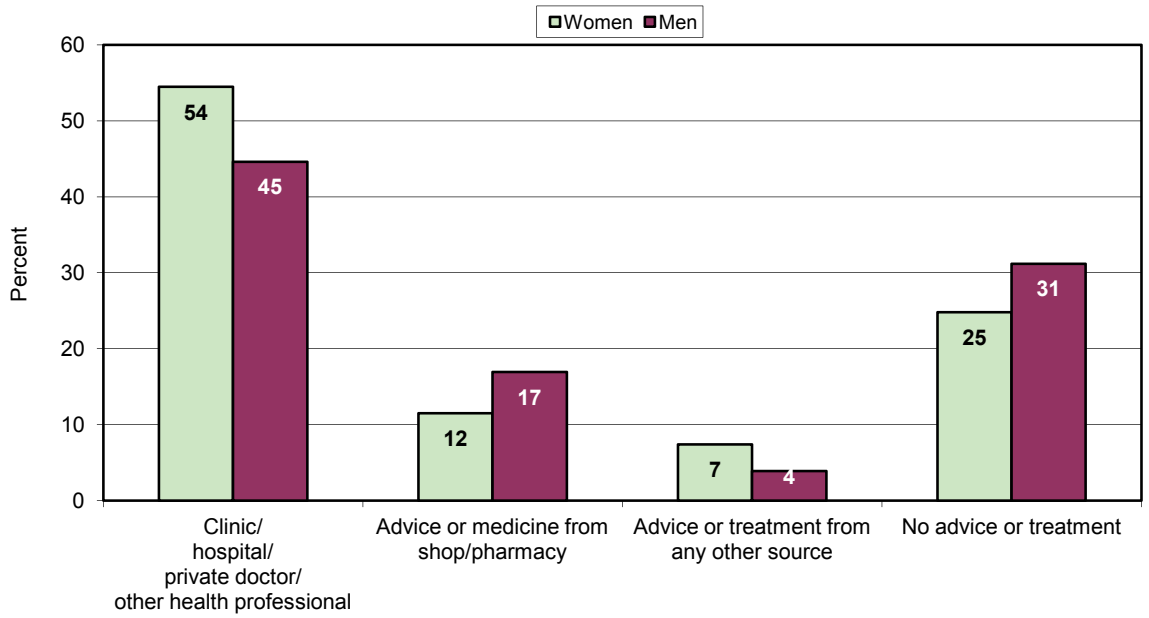
Among men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, Lao PDR 2011-12

	Percentage of men who reported having in the past 12 months:				
	STI	Abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer	Number of men who ever had sexual intercourse
Region					
North	1.3	1.2	1.0	1.7	2,665
Central	1.6	1.6	1.0	2.3	3,774
South	0.7	0.8	1.1	1.3	1,336
Province					
Vientiane Capital	1.8	1.4	0.9	2.3	1,094
Phongsaly	0.0	0.0	0.0	0.0	280
Luangnamtha	1.2	1.0	1.3	2.1	230
Oudomxay	2.4	1.4	1.8	2.4	423
Bokeo	1.2	1.4	2.5	2.7	241
Luangprabang	2.3	2.2	0.8	2.5	531
Huaphanh	0.9	1.0	1.0	1.6	434
Xayabury	0.8	0.6	0.4	0.8	526
Xiengkhuang	1.0	0.7	0.7	1.0	336
Vientiane	0.8	1.0	1.2	1.8	568
Borikhamxay	1.4	1.7	0.3	1.7	300
Khammuane	3.1	1.8	1.7	3.8	358
Savannakhet	1.5	2.4	1.0	2.7	1,118
Saravane	0.5	0.4	1.3	1.5	460
Sekong	0.8	0.6	1.8	1.8	118
Champasack	0.7	1.2	1.2	1.2	634
Attapeu	1.0	1.0	0.0	1.0	125
Residence					
Urban	2.1	1.6	1.1	2.6	2,138
Rural	1.0	1.2	1.0	1.7	5,638
..Rural with road	1.1	1.3	1.1	1.8	5,070
..Rural without road	0.7	1.1	0.5	1.3	568
Age					
15-24	2.2	2.4	1.9	3.1	1,642
15-19	1.7	1.2	1.4	2.7	491
20-24	2.5	2.9	2.1	3.3	1,151
25-29	2.5	1.9	1.4	3.2	1,426
30-39	0.9	0.9	0.7	1.5	2,660
40-49	0.3	0.7	0.5	0.8	2,048
Marital status					
Currently married/in union	1.0	1.1	0.9	1.6	6,601
Formerly married/in union	4.3	3.8	2.6	5.5	177
Never married/in union	3.1	2.7	1.8	3.7	997
Education					
None	0.8	0.9	0.5	1.4	812
Primary	1.4	1.5	1.2	2.0	3,263
Lower secondary	1.4	1.5	0.9	1.8	1,656
Upper secondary	0.9	1.3	1.1	2.0	846
Post secondary non tertiary	1.3	1.0	0.4	1.8	566
Higher	2.1	1.3	1.7	2.8	633
Wealth index quintile					
Poorest	0.9	1.1	0.9	1.5	1,421
Second	1.2	1.4	1.0	2.2	1,479
Middle	1.5	1.7	1.4	2.0	1,565
Fourth	1.2	1.3	0.7	1.8	1,573
Richest	1.8	1.3	1.1	2.2	1,738
Ethno-linguistic group of household head					
Lao-Tai	1.4	1.5	1.0	2.0	5,123
Mon-Khmer	1.4	1.4	1.3	2.1	1,721
Hmong-Mien	0.6	0.2	0.4	0.9	596
Chinese-Tibetan	0.6	0.4	1.2	1.3	296
Other, Missing, DK	(4.6)	(2.2)	(0.0)	(4.6)	40
Total	1.3	1.3	1.0	1.9	7,776

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

It is important for people experiencing STIs to be able to recognize them and seek appropriate treatment. If respondents reported an STI or an STI symptom (discharge, sore, ulcer) in the previous 12 months, they were asked if they sought advice or treatment, and from whom. Figure HA.3 presents the percentage of women and men with an STI or STI symptom who sought treatment or care. Fifty-four per cent of women and 45 per cent of men sought advice or treatment from a clinic, hospital, private doctor, or other health professional. Twelve per cent of women and 17 per cent of men sought advice or treatment from a shop or pharmacy. Twenty-five per cent of women and 31 per cent of men did not seek any advice or treatment for their STI or STI symptom.

Figure HA.3: Percentage of women and men age 15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment, Lao PDR 2011-12



XVI. Access to Mass Media and Use of Information/Communication Technology

The 2011-12 LSIS collected information on exposure to mass media and use of computers and the Internet.

Information was collected on:

- Exposure to newspapers or magazines, radio, and television among women and men age 15-49
- Use of computers among women and men age 15-24
- Use of the Internet among women and men age 15-24

Access to Mass Media

The proportion of women who read a newspaper, listen to the radio and watch television at least once a week is shown in Table MT.1.1.

Only 13 per cent of women in Lao PDR read a newspaper at least once a week. One in three women listen to the radio at least once a week, while as many as three quarters of women watch television at least once a week. Five per cent of women age 15-49 do not have regular exposure to any of the three media, and only 7 per cent are exposed to all the three types of media at least once a week.

Table MT.1.1: Exposure to mass media

Percentage of women age 15-49 years who are exposed to specific mass media on a weekly basis, Lao PDR 2011-12

	Percentage of women age 15-49 who:					
	Read a newspaper at least once a week	Listen to the radio at least once a week	Watch television at least once a week	All three media at least once a week[1]	No media at least once a week	Number of women age 15-49 years
Age						
15-19	17.1	41.9	78.8	9.9	6.8	4,415
20-24	15.6	38.3	75.5	9.6	6.3	3,617
25-29	13.1	33.7	75.1	6.6	5.5	3,642
30-34	9.9	29.2	75.3	4.8	3.5	3,015
35-39	8.3	29.1	72.9	4.0	4.5	3,065
40-44	10.4	30.6	75.5	4.4	3.8	2,507
45-49	9.6	31.6	75.5	5.2	4.1	2,215
Region						
North	8.1	24.2	68.0	3.8	7.6	7,057
Central	16.6	39.3	81.6	9.4	3.9	11,255
South	9.3	37.8	72.9	4.8	4.4	4,164
Province						
Vientiane Capital	31.1	46.5	95.5	19.4	1.8	3,288
Phongsaly	10.0	10.7	38.2	4.7	10.6	666
Luangnamtha	9.9	19.8	67.1	6.9	8.8	627
Oudomxay	4.9	14.3	68.9	2.3	5.5	1,182
Bokeo	4.7	26.4	74.2	2.7	4.4	620
Luangprabang	10.5	42.7	72.8	4.8	3.9	1,473
Huaphanh	7.2	17.3	61.0	3.6	12.2	1,086
Xayabury	9.0	26.0	79.5	3.0	9.3	1,402
Xiengkhuang	15.8	21.6	63.4	5.8	13.4	930
Vientiane	12.4	25.5	86.2	5.4	4.7	1,677
Borikhamxay	12.0	36.8	89.1	8.4	2.8	901
Khammuane	7.5	42.5	81.7	4.2	2.6	1,082
Savannakhet	8.9	43.6	68.6	4.4	3.6	3,376
Saravane	7.7	43.7	57.4	5.0	4.1	1,456
Sekong	4.0	27.9	65.8	2.0	10.9	388
Champasack	11.9	36.6	86.3	5.6	2.8	1,943
Attapeu	8.0	31.2	70.9	2.7	6.9	376
Residence						
Urban	27.1	38.2	94.3	14.8	2.0	6,649
Rural	6.5	32.6	67.9	3.4	6.5	15,827
..Rural with road	6.9	32.9	70.2	3.6	6.3	14,268
..Rural without road	2.7	30.4	46.7	1.4	7.5	1,559
Education						
None	0.0	21.5	43.9	0.0	0.3	4,660
Primary	4.0	33.4	74.9	2.1	8.8	8,955
Lower secondary	13.2	36.7	90.1	6.8	6.7	4,111
Upper secondary	27.4	44.3	95.5	14.6	2.4	2,496
Post secondary non tertiary	46.5	45.4	96.3	25.4	1.4	1,030
Higher	62.0	51.6	96.3	35.0	1.0	1,224
Wealth index quintile						
Poorest	0.9	23.8	28.3	0.3	10.7	3,809
Second	3.6	29.9	56.8	1.4	10.1	4,088
Middle	7.5	33.3	86.9	3.8	4.4	4,309
Fourth	12.4	36.9	94.8	6.4	1.7	4,694
Richest	31.3	43.1	97.2	17.8	1.2	5,577
Ethno-linguistic group of household head						
Lao-Tai	16.7	38.7	87.6	9.1	3.7	15,151
Mon-Khmer	3.5	28.5	54.6	1.7	7.4	4,913
Hmong-Mien	3.8	20.4	43.8	1.5	11.7	1,606
Chinese-Tibetan	5.7	7.7	40.3	3.0	6.4	685
Other, Missing, DK	18.7	44.6	71.1	10.7	4.2	121
Total	12.6	34.3	75.7	6.8	5.2	22,476

[1] **MICS indicator MT.1**

Not surprisingly, larger proportions of women are exposed to all the media types in urban areas (15 per cent) than in rural areas (3 per cent). Exposure of women to all the three mass media is higher in the Central region (9 per cent) than in the Southern (5 per cent) and Northern region (4 per cent).

Exposure to all three types of media is significantly higher in Vientiane Capital (19 per cent) than any other province (the next highest is 8 per cent in Borikhamxay). The percentage of women exposed to all three media types on a weekly basis rises steadily with increasing education level and increasing wealth quintile. Differentials by wealth quintile are similar in level to the differentials across provinces, varying from 0.3 per cent exposure to all three media among women in the lowest wealth quintile to 18 per cent of women in the highest wealth quintile. Differentials in exposure to all three media are greatest by education level, while differentials in exposure to television on a weekly basis are greatest by wealth quintile. The percentage of women exposed to all three media types on a weekly basis is highest among women in Lao-Tai headed households (9 per cent). The most common type of media to which all ethno-linguistic groups are regularly exposed is television (viewed regularly by 40-88 per cent of women of different ethno-linguistic households), followed by radio.

Men report a slightly higher level of exposure to newspaper and radio than women. Eighteen per cent of men read a newspaper or magazine at least once a week and 42 per cent listen to the radio at least once a week. On a par with women, three quarters of men watch television on a weekly basis. Nine per cent of men do not have regular exposure to any of the three media, while 10 per cent are exposed to all the three types of media at least once a week. Table MT.1.2 shows that relationships between exposure to mass media and background characteristics are generally similar to those observed among women.

Table MT.1.2: Exposure to mass media

Percentage of men age 15-49 years who are exposed to specific mass media on a weekly basis, Lao PDR 2011-12

	Percentage of men age 15-49 who:					
	Read a newspaper at least once a week	Listen to the radio at least once a week	Watch television at least once a week	All three media at least once a week[1]	No media at least once a week	Number of men age 15-49 years
Age						
15-19	17.5	42.5	80.6	9.8	8.0	2,119
20-24	18.2	45.9	75.6	11.6	10.5	1,557
25-29	17.1	40.9	75.3	9.3	10.2	1,500
30-34	15.7	40.4	75.3	8.2	8.7	1,264
35-39	17.7	40.7	74.9	9.8	7.4	1,445
40-44	17.0	43.4	74.9	10.1	7.4	1,043
45-49	19.9	42.9	74.1	10.7	8.3	1,023
Region						
North	13.5	29.7	68.5	6.9	14.7	3,172
Central	21.6	48.4	81.3	12.7	5.3	4,990
South	13.5	48.2	75.9	7.8	7.6	1,789
Province						
Vientiane Capital	39.4	56.3	95.1	26.9	2.4	1,379
Phongsaly	18.0	19.4	50.3	7.8	18.8	318
Luangnamtha	12.6	21.1	68.9	8.4	13.9	266
Oudomxay	15.6	35.5	77.0	12.9	10.3	530
Bokeo	22.8	40.1	74.7	11.9	9.2	267
Luangprabang	8.8	40.1	60.9	4.2	13.9	644
Huaphanh	14.8	25.1	69.6	5.0	16.5	511
Xayabury	9.5	22.5	74.5	2.8	18.1	635
Xiengkhuang	24.3	40.9	68.7	12.7	14.1	442
Vientiane	17.7	38.6	86.5	9.5	5.8	721
Borikhamxay	27.7	37.9	86.4	6.9	3.3	390
Khammuane	7.7	51.0	82.6	5.3	5.1	503
Savannakhet	9.9	49.9	68.7	5.3	5.6	1,556
Saravane	13.6	51.6	62.8	6.6	7.1	597
Sekong	9.2	35.9	64.9	6.3	19.8	162
Champasack	12.8	47.5	86.0	7.3	5.8	873
Attapeu	21.5	51.9	80.2	16.9	7.4	157
Residence						
Urban	34.0	47.7	92.7	20.5	3.1	2,800
Rural	11.1	40.3	69.8	5.8	10.9	7,151
..Rural with road	11.6	40.5	72.4	6.1	10.0	6,457
..Rural without road	6.5	39.0	46.1	3.3	19.4	694
Education						
None	0.0	29.7	43.3	0.0	1.3	923
Primary	6.7	39.7	66.4	3.6	14.2	3,872
Lower secondary	14.2	41.0	84.6	7.4	9.3	2,351
Upper secondary	24.3	49.9	92.8	14.8	4.0	1,450
Post secondary non tertiary	48.7	50.9	92.8	26.5	2.6	608
Higher	67.4	55.1	96.3	40.3	1.5	747
Wealth index quintile						
Poorest	4.1	32.7	31.6	1.5	22.8	1,692
Second	9.8	40.1	59.8	4.3	14.6	1,911
Middle	13.1	39.9	87.8	7.0	5.5	2,039
Fourth	17.2	45.1	94.4	10.2	2.5	2,092
Richest	38.9	51.6	96.8	23.8	1.5	2,217
Ethno-linguistic group of household head						
Lao-Tai	21.5	45.7	87.1	12.3	5.1	6,635
Mon-Khmer	9.0	40.2	57.5	5.6	13.8	2,191
Hmong-Mien	10.3	29.5	46.9	4.0	22.6	728
Chinese-Tibetan	10.1	15.8	50.0	4.3	15.4	335
Other, Missing, DK	21.3	58.6	61.8	13.3	11.4	62
Total	17.6	42.4	76.3	9.9	8.7	9,951

[1] **MICS indicator MT.1**

Use of Information/Communication Technology

Only 15-24 year old women and men were asked questions on computer and Internet use.

As displayed in Table MT.2.1, 17 per cent of 15-24 year-old women have ever used a computer, 14 per cent had used a computer within the previous year and 11 per cent had used a computer at least once a week during the previous month. Nine per cent of women age 15-24 had ever used the Internet, while 8 per cent had used the Internet within the previous year. Only 6 per cent of young women used the Internet as frequently as once a week or more during the previous month.

While use of a computer or the Internet is fairly low across most of the country, about half of young women in Vientiane capital had used a computer in the previous year and one third had used the Internet in the previous year. As expected, both computer and Internet use increase steadily with increasing education level and increasing wealth quintile. Less than 1 per cent of women with primary education reported using a computer during the last year, compared with 79 per cent of women with higher education. Use of computer in the previous year climbed from less than 1 per cent among women in the two lowest wealth quintiles to 45 per cent among women in the highest. Use of the Internet in the previous year rises from less than 1 per cent in the lowest wealth quintile to 26 per cent among young women in the richest.

Table MT.2.1: Use of computers and internet

Percentage of young women age 15-24 who have ever used a computer, percentage who have used a computer during the last 12 months, and frequency of use during the last one month, Lao PDR 2011-12

	Percentage of women age 15-24 who have:			Percentage of women age 15-24 who have:			
	Ever used a computer	Used a computer during the last 12 months[1]	Used a computer at least once a week during the last one month	Ever used the internet	Used the internet during the last 12 months[2]	Used the internet at least once a week during the last one month	Number of women age 15-24 years
Age							
15-19	14.8	12.0	9.2	6.9	6.1	4.7	4,415
20-24	19.5	16.1	12.5	10.6	9.3	7.3	3,617
Region							
North	8.5	5.7	3.7	2.6	1.9	1.0	2,573
Central	24.5	21.2	16.8	13.9	12.5	10.3	3,918
South	11.8	8.9	6.9	4.9	4.2	2.4	1,541
Province							
Vientiane Capital	55.0	48.9	40.2	35.9	32.0	27.5	1,110
Phongsaly	2.7	2.4	1.4	0.8	0.8	0.8	241
Luangnamtha	8.8	4.3	2.2	2.2	0.7	0.5	237
Oudomxay	2.8	2.2	1.7	1.6	1.2	0.9	479
Bokeo	8.7	7.5	5.2	4.4	3.6	2.9	233
Luangprabang	14.7	10.6	5.2	5.0	3.6	1.6	474
Huaphanh	5.4	3.4	2.3	2.0	1.8	0.4	408
Xayabury	13.1	7.9	6.5	2.2	1.4	0.6	502
Xiengkhuang	10.6	7.8	5.5	3.0	2.6	1.7	389
Vientiane	12.6	10.0	7.6	5.7	5.5	3.7	542
Borikhamxay	14.2	13.2	11.5	6.3	6.0	5.0	322
Khammuane	13.5	11.6	6.8	5.2	4.6	3.0	378
Savannakhet	12.1	9.9	7.2	5.4	5.0	3.9	1,177
Saravane	4.8	3.2	1.6	1.4	1.1	0.5	564
Sekong	4.7	4.5	3.9	1.9	1.9	0.8	154
Champasack	20.2	15.3	12.4	8.4	7.1	4.1	682
Attapeu	6.8	6.0	4.6	5.0	4.4	3.4	141
Residence							
Urban	43.3	37.9	30.3	24.4	21.9	17.6	2,356
Rural	6.0	3.9	2.5	2.0	1.5	1.0	5,676
..Rural with road	6.5	4.3	2.8	2.2	1.7	1.0	5,153
..Rural without road	0.8	0.6	0.3	0.1	0.0	0.0	523
Education							
None	0.1	0.0	0.0	0.1	0.1	0.0	1,054
Primary	1.3	0.3	0.2	0.4	0.3	0.2	2,689
Lower secondary	7.3	5.2	3.4	2.6	1.9	1.2	1,880
Upper secondary	31.8	26.0	19.3	13.8	12.1	9.0	1,577
Post secondary non tertiary	65.7	51.8	34.7	23.2	19.5	14.2	216
Higher	88.0	79.1	66.8	58.4	53.0	43.6	617
Wealth index quintile							
Poorest	0.2	0.1	0.1	0.0	0.0	0.0	1,328
Second	2.2	0.9	0.3	0.5	0.5	0.1	1,526
Middle	4.5	2.5	1.1	0.7	0.6	0.1	1,540
Fourth	14.5	10.5	7.3	5.2	4.0	2.5	1,648
Richest	51.0	44.7	36.0	29.3	26.2	21.3	1,990
Ethno-linguistic group of household head							
Lao-Tai	23.8	19.9	15.6	12.5	11.0	8.6	5,208
Mon-Khmer	3.3	2.2	1.2	0.7	0.5	0.4	1,818
Hmong-Mien	6.1	3.9	2.2	2.3	2.0	0.8	689
Chinese-Tibetan	2.6	2.0	1.7	1.7	1.7	1.3	269
Other, Missing, DK	16.3	16.3	8.1	10.6	10.6	6.0	49
Total	16.9	13.9	10.7	8.6	7.5	5.8	8,032

[1] MICS indicator MT.2

[2] MICS indicator MT.3

Similar proportions of young men as young women had used a computer and the Internet during the previous year, as shown in Table MT.2.2. Sixteen per cent of 15-24 year-old men had used a computer and 9 per cent had used the Internet during the previous year.

Differentials by background characteristics among young men are similar to those observed among young women. Use of computers and the Internet is most common in Vientiane Capital, and also rises steadily with increasing education level and wealth quintile. Less than one per cent of young men in the poorest households had used the Internet during the previous year, compared with 36 per cent among young men in the richest households. While use of computers and the Internet is limited to a minority of the population, a significantly higher proportion of young men of Lao-Tai headed households had used computers (22 per cent) or accessed the internet (14 per cent) in the 12 months prior to the survey than young men of other ethno-linguistic groups.

Table MT.2.2: Use of computers and internet

Percentage of young men age 15-24 who have ever used a computer, percentage who have used a computer during the last 12 months, and frequency of use during the last one month, Lao PDR 2011-12

	Percentage of men age 15-24 who have:			Percentage of men age 15-24 who have:			
	Ever used a computer	Used a computer during the last 12 months[1]	Used a computer at least once a week during the last one month	Ever used the internet	Used the internet during the last 12 months[2]	Used the internet at least once a week during the last one month	Number of men age 15-24 years
Age							
15-19	17.3	14.5	11.4	9.5	8.1	6.3	2,119
20-24	21.6	17.8	13.5	12.3	11.1	8.7	1,557
Region							
North	10.3	7.9	5.7	4.7	4.0	2.7	1,133
Central	26.5	22.7	17.8	15.7	14.0	11.0	1,866
South	13.8	10.6	8.0	6.7	5.7	5.0	677
Province							
Vientiane Capital	57.2	50.4	42.2	36.4	33.8	27.3	504
Phongsaly	9.3	4.5	2.7	0.4	0.4	0.4	130
Luangnamtha	7.0	5.3	3.1	3.1	3.1	3.1	94
Oudomxay	4.3	2.4	1.8	2.0	1.6	1.0	204
Bokeo	18.3	14.8	8.7	11.9	9.1	6.2	90
Luangprabang	12.6	10.6	7.3	9.3	8.4	5.9	197
Huaphanh	8.1	6.0	6.0	2.5	1.7	1.2	198
Xayabury	14.6	12.7	9.5	5.3	4.8	2.4	219
Xiengkhuang	14.0	7.0	4.5	6.8	4.9	3.7	194
Vientiane	18.5	16.1	10.0	7.9	6.4	4.9	250
Borikhamxay	9.4	5.7	3.7	3.2	3.2	1.9	128
Khammuane	19.6	15.6	12.8	9.2	8.7	6.6	183
Savannakhet	13.9	13.2	9.3	9.3	7.6	5.4	607
Saravane	6.5	4.3	2.1	2.5	2.1	1.7	223
Sekong	7.1	6.6	3.8	2.4	2.4	1.6	62
Champasack	19.2	14.9	12.0	10.0	8.5	7.7	340
Attapeu	17.3	14.8	11.3	8.3	6.7	5.1	52
Residence							
Urban	47.6	42.0	34.1	29.6	27.1	21.4	1,039
Rural	7.9	5.6	3.6	3.2	2.4	1.7	2,637
..Rural with road	8.5	6.0	3.9	3.5	2.6	1.9	2,388
..Rural without road	2.6	1.7	1.3	0.4	0.4	0.4	249
Education							
None	0.4	0.0	0.0	0.0	0.0	0.0	187
Primary	2.1	1.2	0.9	1.1	1.0	0.6	1,163
Lower secondary	7.8	5.9	3.9	4.2	3.0	2.7	1,077
Upper secondary	32.7	27.0	19.7	15.0	13.1	9.4	874
Post secondary non tertiary	59.8	48.3	39.3	29.5	22.1	14.6	104
Higher	91.2	81.9	68.3	63.6	60.4	49.9	271
Wealth index quintile							
Poorest	0.3	0.1	0.0	0.2	0.2	0.0	567
Second	2.9	2.1	1.4	0.7	0.6	0.6	734
Middle	7.8	4.4	2.6	1.1	0.5	0.3	778
Fourth	19.5	15.2	10.6	7.6	6.2	4.9	786
Richest	57.6	51.3	41.5	39.2	35.5	27.5	812
Ethno-linguistic group of household head							
Lao-Tai	26.2	22.4	17.4	15.1	13.5	10.5	2,407
Mon-Khmer	3.9	2.4	1.6	1.4	0.8	0.5	798
Hmong-Mien	8.5	4.9	2.4	4.0	3.3	2.4	301
Chinese-Tibetan	5.2	3.6	2.7	1.1	1.1	1.1	140
Other, Missing, DK	30.6	27.7	24.1	13.1	13.1	9.5	30
Total	19.2	15.9	12.3	10.7	9.4	7.3	3,676

[1] **MICS indicator MT.2**

[2] **MICS indicator MT.3**

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Appendix A. Sample Design

The primary objective of the sample design for the 2011-12 Lao Social Indicator Survey (LSIS) was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for each of the 17 provinces of the country. The survey was designed to provide information on fertility and early childhood mortality, family planning, reproductive and child health, nutrition, water and sanitation, child protection, child development and education, use of mass media and information technology, knowledge and behaviour regarding HIV/AIDS, and adult and maternal mortality. All women age 15-49 who were usual residents of the selected households were eligible for the survey. A male survey was also conducted in half of the households. All men aged 15-49 who were usual residents of every second household visited by the field team were eligible for the male survey.

The sizes of the provinces vary greatly, ranging from 16,000 to 140,000 households and this posed a challenge for the sample design. A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample. Urban areas, rural areas with roads, and rural areas without roads in each of the 17 provinces were defined as the sampling strata.

Sampling Frame

The sampling frame for this survey consisted of all villages in the country, arranged by province, with appropriate size estimates (number of households) and other relevant information about each village. The list of villages is updated each year, with the most recent update prior to the design in December 2009. Table SD.1 shows the distribution of villages and households by province, according to whether the village is classified as urban, rural with road, or rural without road.

Table SD.1. Villages and households in Lao PDR, by province and locality (urban, rural with and without road)

Code	Province	No. of districts	Villages				Households			
			Total	Urban	Rural with road	Rural w/o road	Total	Urban	Rural with road	Rural w/o road
	Lao PDR	**143**	**8703**	**1378**	**6051**	**1274**	**1,021,674**	**315,998**	**623,453**	**82,223**
1	Vientiane Capital	9	**491**	264	223	3	**130,470**	90,909	39,405	156
2	Phongsaly	7	**542**	52	347	143	**29,461**	5,294	18,282	5,885
3	Luangnamtha	5	**355**	37	271	47	**28,523**	6,294	19,809	2,420
4	Oudomxay	7	**472**	49	303	120	**46,299**	9,389	29,203	7,707
5	Bokeo	5	**291**	42	212	37	**25,968**	5,625	18,525	1,818
6	Luangprabang	12	**794**	160	413	221	**71,579**	25,063	33,018	13,498
7	Huaphanh	8	**727**	28	646	53	**45,453**	6,141	37,067	2,245
8	Xayabury	11	**447**	97	316	34	**67,003**	20,772	43,702	2,529
9	Xiengkhuang	8	**509**	69	394	46	**40,439**	11,455	27,231	1,753
10	Vientiane	13	**518**	87	408	23	**83,947**	22,277	60,054	1,616
11	Borikhamxay	7	**326**	56	251	19	**42,988**	13,086	28,836	1,066
12	Khammuane	9	**590**	114	368	108	**61,569**	18,207	36,607	6,755
13	Savannakhet	15	**1006**	154	724	128	**140,086**	35,184	96,382	8,520
14	Saravane	8	**612**	32	551	29	**59,750**	4,871	53,412	1,467
15	Sekong	4	**235**	20	138	77	**15,970**	3,853	9,254	2,863
16	Champasack	10	**639**	95	383	161	**109,263**	31,569	58,376	19,318
17	Attapeu	5	**150**	22	103	25	**22,906**	6,009	14,290	2,607

Source: Surveys Division, Department of Statistics

Sample Size and Sample Allocation

For the calculation of the sample size, the key indicator used was the contraceptive prevalence rate (modern method). The following formula was used to estimate the required sample size for this indicator:

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

where

- *n* is the required sample size, expressed as number of households
- *4* is a factor to achieve the 95 percent level of confidence
- *r* is the predicted or anticipated value of the indicator, expressed in the form of a proportion
- *1.1* is the factor necessary to raise the sample size by 10 per cent for the expected non-response [the actual factor will be based on the non-response level experienced in previous surveys in the country]
- *f* is the shortened symbol for *deff* (design effect)
- *se.r* is the margin of error to be tolerated at the 95 percent level of confidence, defined as 12 per cent of *r* (relative margin of error of *r*) for the national estimates and 20 percent of *r* for the provincial estimates
- *p* is the proportion of the total population upon which the indicator, *r*, is based
- $\bar{n}$ is the average household size (number of persons per household)

The calculations shown in Table SD.2 suggested the need for a sample size of 27,000 households, if this key indicator was to be measured to the required degree of precision (a relative margin of 0.2, implying a coefficient of variation of 0.1). However, this calculation was based on the results of the 2005 Lao Reproductive Health Survey (LRHS), and it was considered possible to reduce the sampling errors in the LSIS as a result of the two modifications to the sample design: increasing the number of primary sampling units (PSUs) covered relative to the LRHS (and at the same time reducing the 'take' in each one); and changing the way in which the sample was allocated across the provinces. It was therefore recommended that the sample size for LSIS be set at 20,000 households, visiting 1,000 villages, but reducing the 'take' to 20 households per village.

Various methods were available for allocating the sample to the different provinces. At one extreme is the method of equal allocation used in both the 2005 LRHS and the 2006 Multiple Indicator Cluster Survey (MICS), but this method is inefficient for producing national estimates. At the other extreme is the method of proportional allocation, where the share of the total sample that a province gets depends on its size. This method is good for producing national estimates, but not for producing provincial estimates as the sampling error will be large in the smaller provinces where the sample size is small. As a compromise the allocation was based on the square root of the size of each province, with a minimum of 1,000 households selected in each province and a maximum of 1,500 households.

After arriving at the sample size allocation for each province the number of villages selected per province was calculated using a fixed 'take' of 20 households per village. Once the number of villages for a province was determined, the villages (PSUs) were distributed to the urban, rural with road and rural without road domains, in proportion with the number of households in each domain. The resulting allocation of sample villages to the provinces is shown in Table SD.3.[1]

[1] In the process of finalizing the sample selection, a few changes were made to the allocation, resulting in a net loss of one village and leaving 999 villages in the final sample. A further one village was inaccessible at the time of fieldwork, resulting in a total of 998 villages in the final data file.

Table SD.2. Estimating the required sample size, using contraceptive prevalence rate as the key indicator

	Prevalence	Standard error	Coefficient of variation	Design effect	Relevant group as proportion of total pop	Average house-hold size	Accept-able relative margin	Required sample size using MICS formula
	r	se	se/r	*deff*	p	n_h		N
							TOTAL	**= 27,003**
Lao PDR	**0.35600**	**0.00900**	0.025	**3.700**	**0.077**	**5.8**	**0.12**	**(4,349)**
Vientiane Capital	0.37720	0.02890	0.077	4.450	0.077	5.2	0.2	**1,917**
Phongsaly	0.36310	0.04250	0.117	2.480	0.077	5.8	0.2	**1,017**
Luangnamtha	0.39150	0.03910	0.100	1.760	0.077	5.5	0.2	**675**
Oudomxay	0.41520	0.03800	0.092	3.440	0.077	6.1	0.2	**1,078**
Bokeo	0.54050	0.04770	0.088	4.980	0.077	5.6	0.2	**1,026**
Luangprabang	0.30360	0.03230	0.106	2.830	0.077	5.7	0.2	**1,545**
Huaphanh	0.38900	0.04190	0.108	4.390	0.077	6.5	0.2	**1,439**
Xayabury	0.57170	0.04480	0.078	5.100	0.077	5.4	0.2	**960**
Xiengkhuang	0.23980	0.03430	0.143	3.560	0.077	6.3	0.2	**2,430**
Vientiane	0.36460	0.03240	0.089	3.660	0.077	5.5	0.2	**1,573**
Borikhamxay	0.41590	0.04060	0.098	3.600	0.077	5.8	0.2	**1,183**
Khammuane	0.35960	0.03890	0.108	3.160	0.077	5.5	0.2	**1,388**
Savannakhet	0.30500	0.03530	0.116	3.030	0.077	6.3	0.2	**1,487**
Saravane	0.28430	0.03540	0.125	3.080	0.077	6.1	0.2	**1,724**
Sekong	0.12590	0.02370	0.188	3.080	0.077	6.7	0.2	**4,330**
Champasack	0.29900	0.03010	0.101	2.270	0.077	5.7	0.2	**1,267**
Attapeu	0.22100	0.02670	0.121	2.300	0.077	5.6	0.2	**1,964**
Xaysomboon SR	*0.27360*	*0.05230*	0.191	*4.480*	0.077	*5.9*	*0.2*	**2,735**

Table SD.3: Allocation of Villages (PSUs) to Sampling Strata

Region	**Number of Villages**			
	Urban	Rural with road	Rural without road	Total
Vientiane Capital	52	23	0	75
Phongsaly	9	33	8	50
Luangnamtha	11	34	5	50
Oudomxay	11	34	9	54
Bokeo	11	35	4	50
Luangprabang	23	31	13	67
Huaphanh	7	44	3	54
Xayabury	20	42	2	64
Xiengkhuang	14	34	2	50
Vientiane	18	47	1	66
Borikhamxay	16	35	1	52
Khammuane	18	37	7	62
Savannakhet	19	50	5	74
Saravane	5	55	1	61
Sekong	13	28	9	50
Champasack	20	37	13	70
Attapeu	13	32	5	50
Total	280	631	88	999

Sample Selection

Before selecting the sample villages, village size was reviewed. Those with fewer than 20 households were grouped with an adjacent village and if either was selected in the sample, both were included, but considered as one village.

The selection of the villages was performed by first ordering the list of villages according to the three types of locality (urban, rural with road, rural without road). Villages were selected with probability proportional to the number of households in the village, based on a fixed interval of selection and a random start chosen between 0 and the sampling interval.

Villages that contained 300 households or more were segmented into two or more roughly equal segments and one segment was selected in each village prior to the listing. The number of segments used depended on the number of households in the village, as follows:

Households			Segmentation
0	-	299	No segmentation
300	-	599	2 segments
600	-	899	3 segments
900	-	1199	4 segments

Listing Activities

Since the sampling frame was not up-to-date, a new listing of households was conducted in all the sample enumeration areas prior to the selection of households. For this purpose, teams were formed to visit each enumeration area and to list the occupied households. The listing operation took place from November 2010 to early January 2011 with 70 operators covering all 999 enumeration areas. In each province there were two teams each consisting of a lister and a mapper, except in Champasack, where three teams were assigned.

Selection of Households

Lists of households for each enumeration area were prepared by the listing teams in the field. The households were then sequentially numbered from 1 to n (the total number of households in each enumeration area) at the Surveys Division of the Lao Statistics Bureau, where the selection of 20 households in each enumeration area was carried out using a systematic selection procedure beginning from a random start.

Calculation of Sample Weights

The LSIS sample is not self-weighted. By allocating numbers of households to each of the provinces non-proportionally, different sampling fractions were used in each province since the size of the provinces varied. For this reason, sample weights were calculated and used in the subsequent analyses of the survey data. The sampling strata used in the calculation of the weights were the 17 provinces.

The major component of the weight is the reciprocal of the sampling fraction employed in selecting the number of sample households in that particular sampling stratum (h) and PSU (i):

$$W_{hi} = \frac{1}{f_{hi}}$$

The term f_{hi}, the sampling fraction for the *i-th* sample PSU in the *h-th* stratum, is the product of probabilities of selection at every stage in each sampling stratum:

$$f_{hi} = p_{1hi} \times p_{2hi}$$

where p_{shi} is the probability of selection of the sampling unit at stage *s* for the *i-th* sample PSU in the *h-th* sampling stratum. The sampling probabilities will be calculated separately for each sampling stage and for each PSU. We use the following notations:

P_{1hi}: first-stage sampling probability of the *i-th* PSU in stratum *h*
P_{2hi}: second-stage sampling probability of selecting a household within the *i-th* PSU

Let a_h be the number of PSUs selected in stratum h, M_{hi} the number of households according to the sampling frame in the *i-th* PSU, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the *i-th* PSU in the 2011-12 LSIS sample was calculated as follows:

$$P_{1hi} = \frac{a_h \, M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households in the selected segment compared to the total number of households in PSU i in stratum h if the EA is segmented, otherwise $b_{hi} = 1$. Then the probability of selecting cluster i in the sample is:

$$P_{1hi} = \frac{a_h \, M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let M'_{hi} be the number of households listed in the household listing operation in cluster i in stratum h, let m_{hi} be the number of households selected in the PSU. The second stage selection probability for each household in the PSU is calculated as follows:

$$P_{2hi} = \frac{m_{hi}}{M'_{hi}}$$

The overall selection probability of each household in PSU i of stratum h is therefore the product of the two stages selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

or

$$P_{hi} = \frac{a_h \, M_{hi}}{\sum M_{hi}} \times \frac{m_{hi}}{M'_{hi}}$$

Since the estimated number of households in each enumeration area (PSU) in the sampling frame used for the first stage selection and the updated number of households in the enumeration area from the listing were different, individual sampling fractions for households in each sample enumeration area (village) were calculated. The sampling fractions for households in each enumeration area (village), therefore, included the first stage probability of selection of the enumeration area in that particular sampling stratum and the second stage probability of selection of a household in the sample enumeration area (village).

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

RR_h = Number of interviewed households in stratum h /
Number of occupied households listed in stratum h

After the completion of fieldwork, response rates were calculated for each sampling stratum. These were used to adjust the sample weights calculated for each village. Response rates in the LSIS are shown in Table HH.1 of this report.

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

RR_h = Completed women's (or men's or under-5's) questionnaires in stratum h /
Eligible women (or men or under-5s) in stratum h

The non-response adjustment factors for women's, men's and under-5's questionnaires are applied to the adjusted household weights. Numbers of eligible women, men and under-5 children were obtained from the roster of household members in the Household Questionnaire for households where interviews were completed.

The sample weights for the households were calculated by multiplying W_{hi} by $1/RR_h$ for each enumeration area. These weights were then standardized (or normalized); one purpose of this is to make the weighted sum of the interviewed sample units equal the total sample size at the national level. Normalization is performed by multiplying the sample weights by a constant factor equal to the unweighted number of households at the national level divided by the weighted total number of households (using the un-normalized sample weights). A similar standardization procedure was followed in obtaining standardized weights for the women's and under-5's questionnaires. Adjusted (normalized) weights varied between 0.141 and 3.841 in the 998 sample enumeration areas (villages).

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

Appendix B. List of Personnel Involved in the Survey

LSIS Steering Committee

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Appendix C. Estimates of Sampling Errors

The sample of respondents selected in the Lao Social Indicator Survey is only one of the samples that could have been selected from the same population, using the same design and size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between the estimates from all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey data.

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

- Standard error (*se*): Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). Standard error is the square root of the variance of the estimate. The Taylor linearization method is used for the estimation of standard errors.
- Coefficient of variation (*se*/*r*) is the ratio of the standard error to the value of the indicator, and is a measure of the relative sampling error.
- Design effect (*deff*) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect (*deft*) is used to show the efficiency of the sample design in relation to the precision. A *deft* value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a *deft* value above 1.0 indicates an increase in the standard error due to the use of a more complex sample design.
- Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall, with a specified level of confidence. For any given statistic calculated from the survey, the value of that statistic will fall within a range of plus or minus two times the standard error ($r + 2.se$ or $r - 2.se$) of the statistic in 95 percent of all possible samples of identical size and design.

Sampling errors for adult and maternal mortality were calculated using a custom program written using SAS version 9.2. The calculation of all other sampling errors presented in the report was done using SPSS Version 19 Complex Samples module. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and unweighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest, for the national level, for urban areas, rural areas, rural areas with road access, rural areas without road access, for North, Central, and South regions, and for each of the 17 provinces, including Vientiane Capital. Two of the selected indicators are based on households, five are based on household members, 34 are based on women, 10 are based on men and 19 are based on children under five years of age. 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.27 show the calculated sampling errors for selected domains.

Table SE.1: Indicators selected for sampling error calculations

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Lao PDR 2011-12

MICS4 Indicator		Base Population
	HOUSEHOLDS	
2.16	Iodized salt consumption	All households in which salt was tested or with no salt
3.12	Household availability of insecticide-treated nets (ITNs)	All households
	HOUSEHOLD MEMBERS	
4.1	Use of improved drinking water sources	All household members
4.3	Use of improved sanitation	All household members
7.5	Secondary school net attendance ratio (adjusted)	Children of secondary school age
9.18	Prevalence of children with one or both parents dead	Children age 0-17 years
8.5	Violent discipline	Children age 2-14 years
	WOMEN	
7.1	Literacy rate among young women	Women age 15-24 years
-	Currently married/in union	Women age 15-49 years
8.7	Marriage before age 18	Women age 20-49 years
-	Children ever born	Women age 15-49 years
-	Children living	Women age 15-49 years
-	Children ever born to women age 40-49	Women age 40-49 years
5.2	Early childbearing	Women age 20-24 years
-	Pregnant women	Women age 15-49 years
-	Want no more children	Women age 15-49 years who are currently married or in union
-	Want to delay birth at least 2 years	Women age 15-49 years who are currently married or in union
-	Knows any contraceptive method	Women age 15-49 years who are currently married or in union
5.3	Contraceptive prevalence	Women age 15-49 years who are currently married or in union
5.4	Unmet need	Women age 15-49 years who are currently married or in union
5.5a	Antenatal care coverage - at least once by skilled personnel	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.5b	Antenatal care coverage – at least four times by any provider	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.7	Skilled attendant at delivery	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.8	Institutional deliveries	Women age 15-49 years with a live birth in the 2 years preceding the survey
5.9	Caesarean section	Women age 15-49 years with a live birth in the 2 years preceding the survey
3.19	Pregnant women sleeping under insecticide-treated nets (ITNs)	Pregnant women
9.2	Comprehensive knowledge about HIV prevention among young people	Women age 15-24 years
9.3	Knowledge of mother- to-child transmission of HIV	Women age 15-49 years
9.4	Accepting attitudes towards people living with HIV	Women age 15-49 years who have heard of HIV
9.6	Women who have been tested for HIV and know the results	Women age 15-49 years
9.7	Sexually active young women who have been tested for HIV and know the results	Women age 15-24 years who have had sex in the 12 months preceding the survey
9.11	Sex before age 15 among young women	Women age 15-24 years
-	Total fertility rate	Women-years of exposure to childbearing

-	Adolescent birth rates (15-19)	Women-years of exposure to childbearing among those age 15-19 years
1.3	Neonatal mortality	Children exposed to the risk of mortality
1.4	Post-neonatal mortality	Children exposed to the risk of mortality
1.2	Infant mortality	Children exposed to the risk of mortality
1.5	Child mortality	Children exposed to the risk of mortality
1.1	Under five mortality	Children exposed to the risk of mortality

	MEN	
7.1	Literacy rate among young men	Men age 15-24 years
-	Currently married/in union	Men age 15-49 years
8.7	Marriage before age 18	Men age 20-49 years
-	Knows any contraceptive method	Men age 15-24 years
9.2	Comprehensive knowledge about HIV prevention among young people	Men age 15-24 years
9.3	Knowledge of mother- to-child transmission of HIV	Men age 15-49 years
9.4	Accepting attitudes towards people living with HIV	Men age 15-49 years who have heard of HIV
9.6	Men who have been tested for HIV and know the results	Men age 15-49 years
9.7	Sexually active young men who have been tested for HIV and know the results	Men age 15-24 years who have had sex in the 12 months preceding the survey
9.11	Sex before age 15 among young men	Men age 15-24 years

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

Table SE.2: Sampling errors: Total sample

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.795	0.007	0.009	5.396	2.323	18674	18693	0.782	0.809
Household availability of insecticide-treated nets (ITNs)	3.12	0.502	0.009	0.018	6.463	2.542	18843	18843	0.483	0.520
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.699	0.011	0.016	10.727	3.275	97421	18843	0.677	0.721
Use of improved sanitation	4.3	0.569	0.010	0.018	8.399	2.898	97421	18843	0.548	0.590
Secondary school net attendance ratio (adjusted)	7.5	0.446	0.009	0.019	5.071	2.252	16126	16683	0.429	0.464
Prevalence of children with one or both parents dead	9.18	0.053	0.002	0.035	3.038	1.743	41840	43411	0.049	0.057
Violent discipline	8.5	0.757	0.006	0.007	2.510	1.584	31369	14547	0.746	0.768
WOMEN										
Literacy rate among young women	7.1	0.687	0.010	0.015	4.099	2.025	8032	8156	0.666	0.708
Currently married/in union	-	0.728	0.004	0.006	2.105	1.451	22476	22476	0.720	0.737
Marriage before age 18	8.7	0.370	0.006	0.015	2.336	1.528	18061	17918	0.359	0.381
Children ever born	-	2.460	0.026	0.011	2.492	1.578	22476	22476	2.407	2.513
Children living	-	2.089	0.021	0.010	2.356	1.535	22476	22476	2.047	2.131
Children ever born to women age 40-49	-	4.782	0.059	0.012	2.057	1.434	4722	4622	4.665	4.899
Early childbearing	5.2	0.182	0.008	0.045	1.623	1.274	3617	3598	0.165	0.198
Pregnant women	-	0.052	0.002	0.034	1.429	1.195	22476	22476	0.048	0.055
Want no more children	-	0.579	0.005	0.009	1.792	1.339	16368	16550	0.569	0.590
Want to delay birth at least 2 years	-	0.194	0.004	0.020	1.582	1.258	16368	16550	0.186	0.201
Knows any contraceptive method	-	0.940	0.004	0.004	6.205	2.491	22476	22476	0.932	0.948
Contraceptive prevalence	5.3	0.498	0.007	0.014	3.041	1.744	16368	16550	0.484	0.511
Unmet need	5.4	0.199	0.005	0.023	2.206	1.485	16368	16550	0.190	0.209
Antenatal care coverage - at least once by skilled personnel	5.5a	0.542	0.013	0.024	2.910	1.706	4306	4444	0.517	0.568
Antenatal care coverage – at least four times by any provider	5.5b	0.369	0.012	0.032	2.661	1.631	4306	4444	0.345	0.392
Skilled attendant at delivery	5.7	0.415	0.012	0.029	2.662	1.632	4306	4444	0.391	0.440
Institutional deliveries	5.8	0.375	0.012	0.031	2.530	1.590	4306	4444	0.352	0.398
Caesarean section	5.9	0.037	0.003	0.092	1.436	1.198	4306	4444	0.030	0.044
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.432	0.018	0.042	1.519	1.233	1118	1136	0.396	0.468
Comprehensive knowledge about HIV prevention among young people	9.2	0.240	0.007	0.028	2.020	1.421	8032	8156	0.226	0.253
Knowledge of mother- to-child transmission of HIV	9.3	0.554	0.007	0.013	4.551	2.133	22476	22476	0.540	0.568
Accepting attitudes towards people living with HIV	9.4	0.170	0.005	0.031	3.644	1.909	18886	18366	0.159	0.180
Women who have been tested for HIV and know the results	9.6	0.023	0.001	0.064	2.197	1.482	22476	22476	0.020	0.026
Sexually active young women who have been tested for HIV and know the results	9.7	0.038	0.004	0.114	2.034	1.426	3731	3919	0.030	0.047
Sex before age 15 among young women	9.11	0.064	0.004	0.058	1.887	1.374	8032	8156	0.057	0.072
Total fertility rate	-	3.17	0.07	0.022	3.312	1.820	63279	62835	3.03	3.31
Adolescent birth rates (ASFR 15-19)	5.1	0.094	0.004	0.041	2.045	1.430	12476	12688	0.087	0.102
Neonatal mortality	1.3	31.8	2.9	0.090	1.084	1.041	4401	4545	26.1	37.6
Post-neonatal mortality	1.4	36.2	3.2	0.089	1.245	1.116	4424	4566	29.8	42.7
Infant mortality	1.2	68.1	4.4	0.064	1.203	1.097	4428	4570	59.3	76.8
Child mortality	1.5	11.4	1.8	0.158	1.230	1.109	4432	4580	7.8	15.0
Under five mortality	1.1	78.7	4.7	0.059	1.237	1.112	4463	4609	69.4	88.1

	MICS Indicator	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*
Literacy rate among young men	7.1	0.774	0.011	0.014	2.363	1.537	3676	3682	0.753	0.795
Currently married/in union	-	0.664	0.006	0.009	1.614	1.270	9951	9951	0.652	0.676
Marriage before age 18	8.7	0.146	0.005	0.035	1.629	1.276	7832	7800	0.135	0.156
Knows any contraceptive method	-	0.953	0.004	0.004	3.192	1.787	9951	9951	0.945	0.960
Comprehensive knowledge about HIV prevention among young people	9.2	0.276	0.010	0.035	1.767	1.329	3676	3682	0.257	0.296
Knowledge of mother- to-child transmission of HIV	9.3	0.570	0.008	0.013	2.367	1.538	9951	9951	0.555	0.586
Accepting attitudes towards people living with HIV	9.4	0.142	0.005	0.036	1.894	1.376	9102	9084	0.132	0.152
Men who have been tested for HIV and know the results	9.6	0.022	0.002	0.088	1.740	1.319	9951	9951	0.018	0.026
Sexually active young men who have been tested for HIV and know the results	9.7	0.026	0.005	0.178	1.350	1.162	1535	1609	0.017	0.035
Sex before age 15 among young men	9.11	0.027	0.003	0.116	1.379	1.174	3676	3682	0.021	0.033
UNDER-5s										
Underweight prevalence	2.1a	0.266	0.008	0.030	3.501	1.871	10814	10814	0.250	0.282
Stunting prevalence	2.2a	0.442	0.008	0.018	2.601	1.613	10618	10613	0.426	0.457
Wasting prevalence	2.3a	0.059	0.003	0.053	1.886	1.373	10671	10683	0.053	0.066
Exclusive breastfeeding under 6 months	2.6	0.404	0.017	0.041	1.360	1.166	1182	1168	0.371	0.438
Age-appropriate breastfeeding	2.14	0.367	0.010	0.027	1.903	1.380	4448	4433	0.347	0.387
Tuberculosis immunization coverage	-	0.783	0.013	0.016	2.047	1.431	2135	2166	0.758	0.808
Received polio immunization	-	0.526	0.016	0.030	2.124	1.457	2136	2165	0.494	0.557
Received DPT-HepB-Hib immunization	-	0.555	0.016	0.029	2.225	1.492	2133	2163	0.523	0.587
Received measles immunization	-	0.637	0.014	0.022	1.851	1.360	2133	2161	0.609	0.665
Diarrhoea in the previous 2 weeks	-	0.100	0.004	0.037	1.672	1.293	11067	11067	0.093	0.108
Illness with a cough in the previous 2 weeks	-	0.033	0.003	0.086	2.801	1.674	11067	11067	0.027	0.038
Fever in last two weeks	-	0.142	0.005	0.037	2.485	1.576	11067	11067	0.131	0.152
Oral rehydration therapy with continued feeding	3.8	0.574	0.019	0.033	1.670	1.292	1109	1169	0.536	0.611
Antibiotic treatment of suspected pneumonia	3.10	0.574	0.042	0.073	2.663	1.632	363	367	0.490	0.659
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.432	0.011	0.025	5.054	2.248	10490	10598	0.411	0.454
Anti-malarial treatment of children under age 5	3.18	0.012	0.003	0.273	1.355	1.164	1567	1551	0.005	0.018
Support for learning	6.1	0.574	0.013	0.023	3.170	1.780	4426	4476	0.548	0.601
Attendance to early childhood education	6.7	0.230	0.010	0.042	2.411	1.553	4426	4476	0.211	0.250
Birth registration	8.1	0.748	0.008	0.011	4.142	2.035	11067	11067	0.731	0.764

Table SE.3: Sampling errors: Urban areas

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.866	0.010	0.012	4.307	2.075	5133	4694	0.845	0.886
Household availability of insecticide-treated nets (ITNs)	3.12	0.376	0.016	0.043	5.293	2.301	5177	4730	0.344	0.408
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.876	0.012	0.014	6.564	2.562	24845	4730	0.852	0.901
Use of improved sanitation	4.3	0.880	0.011	0.013	5.795	2.407	24845	4730	0.857	0.902
Secondary school net attendance ratio (adjusted)	7.5	0.724	0.015	0.021	4.073	2.018	3762	3662	0.694	0.754
Prevalence of children with one or both parents dead	9.18	0.047	0.004	0.080	2.603	1.613	8769	8395	0.039	0.054
Violent discipline	8.5	0.743	0.012	0.016	2.351	1.533	6135	3194	0.719	0.767
WOMEN										
Literacy rate among young women	7.1	0.906	0.010	0.011	2.525	1.589	2356	2138	0.885	0.926
Currently married/in union	-	0.647	0.009	0.014	2.289	1.513	6649	5970	0.628	0.666
Marriage before age 18	8.7	0.232	0.010	0.042	2.513	1.585	5420	4791	0.213	0.251
Children ever born	-	1.704	0.038	0.022	2.385	1.544	6649	5970	1.628	1.780
Children living	-	1.549	0.032	0.021	2.247	1.499	6649	5970	1.485	1.614
Children ever born to women age 40-49	-	3.585	0.088	0.024	2.038	1.427	1398	1258	3.410	3.761
Early childbearing	5.2	0.059	0.008	0.135	1.087	1.042	1127	959	0.043	0.075
Pregnant women	-	0.036	0.003	0.087	1.674	1.294	6649	5970	0.030	0.042
Want no more children	-	0.554	0.010	0.018	1.537	1.240	4301	3933	0.534	0.574
Want to delay birth at least 2 years	-	0.217	0.008	0.037	1.482	1.217	4301	3933	0.201	0.233
Knows any contraceptive method	-	0.976	0.003	0.004	3.117	1.766	6649	5970	0.969	0.983
Contraceptive prevalence	5.3	0.526	0.012	0.023	2.338	1.529	4301	3933	0.501	0.550
Unmet need	5.4	0.192	0.008	0.040	1.500	1.225	4301	3933	0.177	0.208
Antenatal care coverage - at least once by skilled personnel	5.5a	0.834	0.022	0.027	3.167	1.780	957	890	0.790	0.878
Antenatal care coverage – at least four times by any provider	5.5b	0.706	0.023	0.032	2.257	1.502	957	890	0.660	0.752
Skilled attendant at delivery	5.7	0.796	0.020	0.025	2.251	1.500	957	890	0.756	0.837
Institutional deliveries	5.8	0.742	0.022	0.029	2.177	1.476	957	890	0.698	0.785
Caesarean section	5.9	0.100	0.012	0.121	1.443	1.201	957	890	0.076	0.125
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.326	0.041	0.125	1.586	1.259	234	211	0.244	0.407
Comprehensive knowledge about HIV prevention among young people	9.2	0.387	0.014	0.035	1.690	1.300	2356	2138	0.359	0.414
Knowledge of mother- to-child transmission of HIV	9.3	0.654	0.013	0.019	4.214	2.053	6649	5970	0.629	0.679
Accepting attitudes towards people living with HIV	9.4	0.229	0.011	0.047	3.613	1.901	6338	5622	0.208	0.250
Women who have been tested for HIV and know the results	9.6	0.050	0.004	0.084	2.242	1.497	6649	5970	0.042	0.059
Sexually active young women who have been tested for HIV and know the results	9.7	0.095	0.016	0.170	2.211	1.487	785	729	0.063	0.128
Sex before age 15 among young women	9.11	0.021	0.004	0.183	1.526	1.235	2356	2138	0.013	0.029
Total fertility rate	-	2.21	0.08	0.036	1.662	1.289	18759	16759	2.05	2.37
Adolescent birth rates (ASFR 15-19)	5.1	0.044	0.005	0.113	1.814	1.355	3509	3235	0.034	0.054
Neonatal mortality	1.3	22.5	4.3	0.192	1.498	1.224	2193	2035	13.8	31.1
Post-neonatal mortality	1.4	16.1	3.8	0.238	1.804	1.343	2194	2037	8.5	23.8
Infant mortality	1.2	38.6	5.6	0.144	1.496	1.223	2194	2038	27.5	49.7
Child mortality	1.5	6.5	2.1	0.332	1.332	1.154	2202	2040	2.2	10.7
Under five mortality	1.1	44.8	6.2	0.139	1.638	1.280	2204	2044	32.4	57.2

	MICS Indicator	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*
MEN										
Literacy rate among young men	7.1	0.920	0.011	0.012	1.497	1.223	1039	947	0.899	0.942
Currently married/in union	-	0.587	0.014	0.023	1.921	1.386	2800	2517	0.560	0.615
Marriage before age 18	8.7	0.073	0.008	0.110	1.867	1.366	2224	1972	0.057	0.089
Knows any contraceptive method	-	0.972	0.004	0.005	1.866	1.366	2800	2517	0.963	0.981
Comprehensive knowledge about HIV prevention among young people	9.2	0.395	0.022	0.055	1.873	1.368	1039	947	0.351	0.438
Knowledge of mother- to-child transmission of HIV	9.3	0.640	0.014	0.022	2.152	1.467	2800	2517	0.612	0.668
Accepting attitudes towards people living with HIV	9.4	0.204	0.010	0.051	1.618	1.272	2720	2451	0.183	0.225
Men who have been tested for HIV and know the results	9.6	0.046	0.005	0.113	1.526	1.235	2800	2517	0.035	0.056
Sexually active young men who have been tested for HIV and know the results	9.7	0.040	0.011	0.280	1.145	1.070	398	354	0.018	0.062
Sex before age 15 among young men	9.11	0.014	0.005	0.368	1.771	1.331	1039	947	0.004	0.024
UNDER-5s										
Underweight prevalence	2.1a	0.161	0.009	0.057	1.282	1.132	2263	2031	0.143	0.180
Stunting prevalence	2.2a	0.274	0.012	0.044	1.426	1.194	2213	1988	0.250	0.298
Wasting prevalence	2.3a	0.054	0.006	0.109	1.345	1.160	2214	1989	0.042	0.066
Exclusive breastfeeding under 6 months	2.6	0.382	0.039	0.102	1.370	1.171	239	213	0.304	0.461
Age-appropriate breastfeeding	2.14	0.294	0.021	0.070	1.896	1.377	1015	915	0.253	0.336
Tuberculosis immunization coverage	-	0.863	0.022	0.025	1.862	1.365	505	467	0.819	0.906
Received polio immunization	-	0.638	0.031	0.049	1.982	1.408	506	468	0.575	0.700
Received DPT-HepB-Hib immunization	-	0.677	0.030	0.044	1.891	1.375	506	468	0.618	0.737
Received measles immunization	-	0.717	0.028	0.040	1.853	1.361	506	469	0.660	0.773
Diarrhoea in the previous 2 weeks	-	0.054	0.006	0.104	1.302	1.141	2319	2081	0.043	0.066
Illness with a cough in the previous 2 weeks	-	0.021	0.004	0.185	1.524	1.235	2319	2081	0.013	0.029
Fever in last two weeks	-	0.158	0.012	0.075	2.182	1.477	2319	2081	0.134	0.181
Oral rehydration therapy with continued feeding	3.8	0.712	0.055	0.077	1.797	1.341	126	123	0.602	0.822
Antibiotic treatment of suspected pneumonia	3.10	0.743	0.087	0.117	1.947	1.395	49	50	0.569	0.918
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.310	0.019	0.062	3.484	1.866	2248	2028	0.271	0.348
Anti-malarial treatment of children under age 5	3.18	0.010	0.006	0.552	1.023	1.012	366	320	0.000	0.022
Support for learning	6.1	0.775	0.022	0.028	2.167	1.472	885	788	0.731	0.819
Attendance to early childhood education	6.7	0.547	0.027	0.050	2.378	1.542	885	788	0.492	0.602
Birth registration	8.1	0.878	0.014	0.016	3.613	1.901	2319	2081	0.851	0.905

Table SE.4: Sampling errors: Rural areas

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.769	0.009	0.011	5.833	2.415	13541	13999	0.751	0.786
Household availability of insecticide-treated nets (ITNs)	3.12	0.549	0.011	0.020	7.107	2.666	13666	14113	0.527	0.572
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.638	0.014	0.022	11.813	3.437	72576	14113	0.610	0.666
Use of improved sanitation	4.3	0.463	0.013	0.027	9.152	3.025	72576	14113	0.438	0.489
Secondary school net attendance ratio (adjusted)	7.5	0.362	0.010	0.027	5.337	2.310	12365	13021	0.342	0.381
Prevalence of children with one or both parents dead	9.18	0.055	0.002	0.039	3.149	1.774	33071	35016	0.050	0.059
Violent discipline	8.5	0.761	0.006	0.008	2.550	1.597	25233	11353	0.748	0.773
WOMEN										
Literacy rate among young women	7.1	0.597	0.013	0.022	4.133	2.033	5676	6018	0.571	0.622
Currently married/in union	-	0.762	0.004	0.006	1.824	1.350	15827	16506	0.753	0.771
Marriage before age 18	8.7	0.429	0.006	0.015	2.174	1.474	12641	13127	0.416	0.441
Children ever born	-	2.778	0.032	0.011	2.364	1.538	15827	16506	2.714	2.841
Children living	-	2.316	0.025	0.011	2.225	1.492	15827	16506	2.266	2.366
Children ever born to women age 40-49	-	5.285	0.072	0.014	2.147	1.465	3325	3364	5.141	5.428
Early childbearing	5.2	0.237	0.011	0.044	1.609	1.269	2490	2639	0.216	0.258
Pregnant women	-	0.058	0.002	0.036	1.345	1.160	15827	16506	0.054	0.062
Want no more children	-	0.588	0.006	0.010	1.881	1.371	12066	12617	0.576	0.600
Want to delay birth at least 2 years	-	0.185	0.004	0.024	1.595	1.263	12066	12617	0.177	0.194
Knows any contraceptive method	-	0.924	0.005	0.006	6.782	2.604	15827	16506	0.914	0.935
Contraceptive prevalence	5.3	0.488	0.008	0.017	3.283	1.812	12066	12617	0.471	0.504
Unmet need	5.4	0.202	0.006	0.028	2.467	1.571	12066	12617	0.191	0.213
Antenatal care coverage - at least once by skilled personnel	5.5a	0.459	0.014	0.030	2.786	1.669	3349	3554	0.431	0.487
Antenatal care coverage – at least four times by any provider	5.5b	0.272	0.012	0.045	2.640	1.625	3349	3554	0.248	0.296
Skilled attendant at delivery	5.7	0.307	0.013	0.042	2.797	1.672	3349	3554	0.281	0.332
Institutional deliveries	5.8	0.270	0.012	0.045	2.606	1.614	3349	3554	0.246	0.294
Caesarean section	5.9	0.019	0.003	0.139	1.311	1.145	3349	3554	0.013	0.024
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.460	0.020	0.044	1.492	1.221	884	925	0.420	0.500
Comprehensive knowledge about HIV prevention among young people	9.2	0.179	0.007	0.041	2.174	1.474	5676	6018	0.164	0.193
Knowledge of mother- to-child transmission of HIV	9.3	0.512	0.008	0.017	4.723	2.173	15827	16506	0.495	0.529
Accepting attitudes towards people living with HIV	9.4	0.140	0.006	0.041	3.476	1.864	12548	12744	0.128	0.151
Women who have been tested for HIV and know the results	9.6	0.012	0.001	0.094	1.731	1.316	15827	16506	0.010	0.014
Sexually active young women who have been tested for HIV and know the results	9.7	0.023	0.003	0.140	1.492	1.222	2946	3190	0.017	0.030
Sex before age 15 among young women	9.11	0.082	0.005	0.061	1.990	1.411	5676	6018	0.072	0.092
Total fertility rate	-	3.58	0.08	0.023	3.353	1.831	44520	46098	3.41	3.74
Adolescent birth rates (ASFR 15-19)	5.1	0.114	0.005	0.041	1.902	1.379	8967	9453	0.105	0.124
Neonatal mortality	1.3	38.9	2.6	0.066	1.293	1.137	8789	9368	33.8	44.1
Post-neonatal mortality	1.4	46.3	3.2	0.069	1.860	1.364	8807	9384	39.9	52.7
Infant mortality	1.2	85.2	4.1	0.048	1.603	1.266	8810	9387	77.1	93.4
Child mortality	1.5	15.9	1.5	0.094	1.295	1.138	8849	9447	12.9	18.8
Under five mortality	1.1	99.7	4.2	0.042	1.535	1.239	8873	9469	91.3	108.2

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.717	0.014	0.019	2.461	1.569	2637	2735	0.689	0.744
Currently married/in union	-	0.694	0.006	0.009	1.411	1.188	7151	7434	0.682	0.707
Marriage before age 18	8.7	0.175	0.006	0.036	1.628	1.276	5608	5828	0.162	0.187
Knows any contraceptive method	-	0.945	0.005	0.005	3.514	1.874	7151	7434	0.935	0.955
Comprehensive knowledge about HIV prevention among young people	9.2	0.229	0.010	0.045	1.664	1.290	2637	2735	0.209	0.250
Knowledge of mother- to-child transmission of HIV	9.3	0.543	0.009	0.017	2.462	1.569	7151	7434	0.525	0.561
Accepting attitudes towards people living with HIV	9.4	0.115	0.006	0.048	2.009	1.417	6382	6633	0.104	0.126
Men who have been tested for HIV and know the results	9.6	0.013	0.002	0.140	1.876	1.370	7151	7434	0.009	0.016
Sexually active young men who have been tested for HIV and know the results	9.7	0.021	0.005	0.231	1.425	1.194	1137	1255	0.011	0.030
Sex before age 15 among young men	9.11	0.032	0.004	0.121	1.328	1.152	2637	2735	0.025	0.040
UNDER-5s										
Underweight prevalence	2.1a	0.293	0.009	0.032	3.738	1.934	8551	8783	0.275	0.312
Stunting prevalence	2.2a	0.486	0.009	0.018	2.657	1.630	8405	8625	0.468	0.503
Wasting prevalence	2.3a	0.061	0.004	0.060	2.017	1.420	8457	8694	0.053	0.068
Exclusive breastfeeding under 6 months	2.6	0.410	0.019	0.045	1.357	1.165	943	955	0.373	0.447
Age-appropriate breastfeeding	2.14	0.389	0.011	0.029	1.863	1.365	3434	3518	0.366	0.411
Tuberculosis immunization coverage	-	0.758	0.015	0.020	2.121	1.456	1631	1699	0.728	0.789
Received polio immunization	-	0.491	0.018	0.036	2.165	1.471	1630	1697	0.455	0.527
Received DPT-HepB-Hib immunization	-	0.517	0.019	0.036	2.334	1.528	1628	1695	0.479	0.554
Received measles immunization	-	0.612	0.016	0.026	1.876	1.370	1627	1692	0.580	0.645
Diarrhoea in the previous 2 weeks	-	0.112	0.004	0.039	1.703	1.305	8748	8986	0.104	0.121
Illness with a cough in the previous 2 weeks	-	0.036	0.003	0.095	3.029	1.740	8748	8986	0.029	0.043
Fever in last two weeks	-	0.137	0.006	0.042	2.545	1.595	8748	8986	0.126	0.149
Oral rehydration therapy with continued feeding	3.8	0.556	0.020	0.035	1.633	1.278	983	1046	0.517	0.595
Antibiotic treatment of suspected pneumonia	3.10	0.548	0.046	0.083	2.650	1.628	314	317	0.457	0.639
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.466	0.013	0.027	5.633	2.373	8243	8570	0.440	0.491
Anti-malarial treatment of children under age 5	3.18	0.012	0.004	0.312	1.454	1.206	1201	1231	0.004	0.019
Support for learning	6.1	0.524	0.015	0.028	3.235	1.799	3540	3688	0.495	0.554
Attendance to early childhood education	6.7	0.151	0.009	0.060	2.387	1.545	3540	3688	0.133	0.169
Birth registration	8.1	0.713	0.010	0.014	4.358	2.088	8748	8986	0.693	0.733

Table SE.5: Sampling errors: Rural areas with roads

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.766	0.009	0.012	6.006	2.451	12187	12473	0.748	0.785
Household availability of insecticide-treated nets (ITNs)	3.12	0.539	0.012	0.022	7.080	2.661	12285	12566	0.516	0.563
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.664	0.015	0.022	12.010	3.466	64866	12566	0.635	0.693
Use of improved sanitation	4.3	0.492	0.014	0.028	9.653	3.107	64866	12566	0.464	0.520
Secondary school net attendance ratio (adjusted)	7.5	0.383	0.011	0.028	5.485	2.342	11047	11530	0.362	0.404
Prevalence of children with one or both parents dead	9.18	0.054	0.002	0.042	3.065	1.751	29207	30527	0.050	0.059
Violent discipline	8.5	0.758	0.007	0.009	2.532	1.591	22208	10057	0.744	0.771
WOMEN										
Literacy rate among young women	7.1	0.615	0.014	0.022	4.264	2.065	5153	5405	0.588	0.642
Currently married/in union	-	0.760	0.005	0.006	1.832	1.353	14268	14723	0.751	0.770
Marriage before age 18	8.7	0.428	0.007	0.016	2.253	1.501	11412	11716	0.414	0.442
Children ever born	-	2.710	0.033	0.012	2.407	1.552	14268	14723	2.643	2.777
Children living	-	2.270	0.026	0.012	2.271	1.507	14268	14723	2.217	2.322
Children ever born to women age 40-49	-	5.197	0.076	0.015	2.214	1.488	2990	2998	5.045	5.349
Early childbearing	5.2	0.229	0.011	0.048	1.626	1.275	2298	2398	0.207	0.251
Pregnant women	-	0.057	0.002	0.039	1.366	1.169	14268	14723	0.053	0.062
Want no more children	-	0.586	0.006	0.011	1.801	1.342	10845	11221	0.573	0.598
Want to delay birth at least 2 years	-	0.187	0.005	0.025	1.582	1.258	10845	11221	0.178	0.196
Knows any contraceptive method	-	0.932	0.005	0.005	6.112	2.472	14268	14723	0.922	0.943
Contraceptive prevalence	5.3	0.502	0.009	0.017	3.379	1.838	10845	11221	0.484	0.519
Unmet need	5.4	0.193	0.006	0.031	2.569	1.603	10845	11221	0.181	0.205
Antenatal care coverage - at least once by skilled personnel	5.5a	0.497	0.015	0.031	2.926	1.710	2928	3067	0.466	0.528
Antenatal care coverage – at least four times by any provider	5.5b	0.297	0.014	0.046	2.770	1.664	2928	3067	0.270	0.325
Skilled attendant at delivery	5.7	0.333	0.015	0.044	2.963	1.721	2928	3067	0.303	0.362
Institutional deliveries	5.8	0.292	0.014	0.046	2.728	1.652	2928	3067	0.265	0.319
Caesarean section	5.9	0.021	0.003	0.140	1.302	1.141	2928	3067	0.015	0.027
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.462	0.021	0.046	1.445	1.202	781	809	0.420	0.504
Comprehensive knowledge about HIV prevention among young people	9.2	0.187	0.008	0.042	2.201	1.483	5153	5405	0.172	0.203
Knowledge of mother- to-child transmission of HIV	9.3	0.525	0.009	0.017	4.790	2.189	14268	14723	0.507	0.543
Accepting attitudes towards people living with HIV	9.4	0.145	0.006	0.042	3.470	1.863	11523	11642	0.133	0.157
Women who have been tested for HIV and know the results	9.6	0.013	0.001	0.095	1.726	1.314	14268	14723	0.010	0.015
Sexually active young women who have been tested for HIV and know the results	9.7	0.026	0.004	0.141	1.486	1.219	2678	2869	0.018	0.033
Sex before age 15 among young women	9.11	0.081	0.005	0.065	2.043	1.429	5153	5405	0.071	0.092
Total fertility rate	-	3.44	0.09	0.025	3.312	1.820	40149	41113	3.27	3.61
Adolescent birth rates (ASFR 15-19)	5.1	0.112	0.005	0.044	1.893	1.376	8117	8458	0.102	0.122
Neonatal mortality	1.3	39.0	2.8	0.071	1.300	1.140	7650	8047	33.4	44.5
Post-neonatal mortality	1.4	42.8	3.1	0.073	1.737	1.318	7665	8060	36.6	49.1
Infant mortality	1.2	81.8	4.0	0.049	1.433	1.197	7666	8061	73.8	89.9
Child mortality	1.5	13.6	1.5	0.107	1.212	1.101	7694	8109	10.7	16.5
Under five mortality	1.1	94.3	4.2	0.045	1.409	1.187	7711	8124	85.9	102.8

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.733	0.014	0.019	2.548	1.596	2388	2467	0.705	0.762
Currently married/in union	-	0.690	0.007	0.010	1.442	1.201	6457	6674	0.677	0.704
Marriage before age 18	8.7	0.167	0.007	0.040	1.685	1.298	5066	5220	0.154	0.181
Knows any contraceptive method	-	0.955	0.005	0.005	3.193	1.787	6457	6674	0.945	0.964
Comprehensive knowledge about HIV prevention among young people	9.2	0.237	0.011	0.046	1.601	1.265	2388	2467	0.216	0.259
Knowledge of mother- to-child transmission of HIV	9.3	0.554	0.010	0.017	2.484	1.576	6457	6674	0.535	0.573
Accepting attitudes towards people living with HIV	9.4	0.119	0.006	0.049	1.948	1.396	5855	6048	0.107	0.130
Men who have been tested for HIV and know the results	9.6	0.013	0.002	0.149	1.918	1.385	6457	6674	0.009	0.017
Sexually active young men who have been tested for HIV and know the results	9.7	0.020	0.005	0.251	1.454	1.206	1006	1103	0.010	0.031
Sex before age 15 among young men	9.11	0.030	0.004	0.125	1.180	1.086	2388	2467	0.022	0.037
UNDER-5s										
Underweight prevalence	2.1a	0.290	0.010	0.035	3.891	1.972	7491	7577	0.270	0.311
Stunting prevalence	2.2a	0.478	0.009	0.020	2.613	1.617	7364	7442	0.460	0.497
Wasting prevalence	2.3a	0.061	0.004	0.065	2.078	1.442	7400	7492	0.053	0.069
Exclusive breastfeeding under 6 months	2.6	0.424	0.020	0.047	1.389	1.178	839	840	0.383	0.464
Age-appropriate breastfeeding	2.14	0.398	0.012	0.031	1.899	1.378	3021	3045	0.373	0.422
Tuberculosis immunization coverage	-	0.774	0.015	0.020	2.020	1.421	1445	1477	0.743	0.805
Received polio immunization	-	0.506	0.019	0.038	2.232	1.494	1443	1474	0.468	0.545
Received DPT-HepB-Hib immunization	-	0.538	0.020	0.038	2.430	1.559	1441	1472	0.497	0.578
Received measles immunization	-	0.624	0.017	0.028	1.849	1.360	1440	1470	0.589	0.658
Diarrhoea in the previous 2 weeks	-	0.105	0.005	0.045	1.806	1.344	7661	7749	0.096	0.115
Illness with a cough in the previous 2 weeks	-	0.036	0.004	0.104	3.127	1.768	7661	7749	0.029	0.044
Fever in last two weeks	-	0.135	0.006	0.047	2.622	1.619	7661	7749	0.122	0.147
Oral rehydration therapy with continued feeding	3.8	0.573	0.022	0.038	1.606	1.267	806	845	0.530	0.616
Antibiotic treatment of suspected pneumonia	3.10	0.569	0.051	0.090	2.911	1.706	277	273	0.467	0.672
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.461	0.013	0.029	5.338	2.310	7226	7403	0.434	0.488
Anti-malarial treatment of children under age 5	3.18	0.012	0.004	0.342	1.499	1.224	1032	1042	0.004	0.020
Support for learning	6.1	0.537	0.016	0.030	3.357	1.832	3092	3162	0.504	0.569
Attendance to early childhood education	6.7	0.164	0.010	0.062	2.360	1.536	3092	3162	0.144	0.185
Birth registration	8.1	0.728	0.010	0.014	4.237	2.059	7661	7749	0.707	0.748

Table SE.6: Sampling errors: Rural areas without roads

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.790	0.021	0.026	3.918	1.979	1354	1526	0.748	0.831
Household availability of insecticide-treated nets (ITNs)	3.12	0.638	0.034	0.053	7.775	2.788	1380	1547	0.570	0.707
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.420	0.044	0.106	12.522	3.539	7710	1547	0.331	0.509
Use of improved sanitation	4.3	0.221	0.030	0.134	7.868	2.805	7710	1547	0.162	0.280
Secondary school net attendance ratio (adjusted)	7.5	0.185	0.023	0.124	5.163	2.272	1318	1491	0.139	0.230
Prevalence of children with one or both parents dead	9.18	0.057	0.007	0.118	3.792	1.947	3863	4489	0.044	0.071
Violent discipline	8.5	0.782	0.019	0.024	2.697	1.642	3025	1296	0.744	0.820
WOMEN										
Literacy rate among young women	7.1	0.414	0.036	0.087	3.289	1.813	523	613	0.342	0.486
Currently married/in union	-	0.784	0.012	0.016	1.629	1.276	1559	1783	0.759	0.808
Marriage before age 18	8.7	0.436	0.015	0.035	1.326	1.152	1229	1411	0.405	0.466
Children ever born	-	3.397	0.104	0.030	2.159	1.469	1559	1783	3.190	3.604
Children living	-	2.738	0.077	0.028	1.898	1.378	1559	1783	2.584	2.891
Children ever born to women age 40-49	-	6.067	0.201	0.033	1.581	1.258	335	366	5.666	6.469
Early childbearing	5.2	0.337	0.037	0.111	1.502	1.226	192	241	0.262	0.412
Pregnant women	-	0.067	0.006	0.096	1.174	1.084	1559	1783	0.054	0.080
Want no more children	-	0.612	0.021	0.034	2.616	1.618	1222	1396	0.570	0.654
Want to delay birth at least 2 years	-	0.170	0.013	0.077	1.702	1.305	1222	1396	0.144	0.196
Knows any contraceptive method	-	0.851	0.028	0.033	10.853	3.294	1559	1783	0.795	0.906
Contraceptive prevalence	5.3	0.364	0.022	0.060	2.885	1.698	1222	1396	0.320	0.407
Unmet need	5.4	0.276	0.016	0.059	1.874	1.369	1222	1396	0.243	0.309
Antenatal care coverage - at least once by skilled personnel	5.5a	0.190	0.027	0.140	2.233	1.494	421	487	0.137	0.243
Antenatal care coverage – at least four times by any provider	5.5b	0.099	0.019	0.187	1.874	1.369	421	487	0.062	0.136
Skilled attendant at delivery	5.7	0.124	0.019	0.152	1.595	1.263	421	487	0.087	0.162
Institutional deliveries	5.8	0.116	0.018	0.154	1.506	1.227	421	487	0.080	0.152
Caesarean section	5.9	0.000	0.000	0.000	na	na	421	487	0.000	0.000
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.446	0.063	0.141	1.841	1.357	103	116	0.320	0.571
Comprehensive knowledge about HIV prevention among young people	9.2	0.092	0.014	0.157	1.516	1.231	523	613	0.063	0.121
Knowledge of mother- to-child transmission of HIV	9.3	0.390	0.025	0.063	4.592	2.143	1559	1783	0.341	0.440
Accepting attitudes towards people living with HIV	9.4	0.079	0.016	0.198	3.718	1.928	1025	1102	0.048	0.111
Women who have been tested for HIV and know the results	9.6	0.002	0.001	0.592	0.953	0.976	1559	1783	0.000	0.003
Sexually active young women who have been tested for HIV and know the results	9.7	0.002	0.002	1.012	0.660	0.812	268	321	0.000	0.006
Sex before age 15 among young women	9.11	0.090	0.014	0.156	1.466	1.211	523	613	0.062	0.118
Total fertility rate	-	4.78	0.27	0.057	3.211	1.792	4371	4985	4.23	5.33
Adolescent birth rates (ASFR 15-19)	5.1	0.137	0.016	0.113	1.929	1.389	850	996	0.106	0.168
Neonatal mortality	1.3	38.7	7.0	0.180	1.309	1.144	1139	1321	24.8	52.7
Post-neonatal mortality	1.4	69.6	13.0	0.187	2.611	1.616	1142	1324	43.5	95.6
Infant mortality	1.2	108.3	16.9	0.156	2.699	1.643	1144	1326	74.5	142.0
Child mortality	1.5	31.0	5.6	0.179	1.430	1.196	1155	1338	19.9	42.2
Under five mortality	1.1	136.0	16.3	0.120	2.292	1.514	1162	1345	103.4	168.5

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.555	0.042	0.075	1.890	1.375	249	268	0.471	0.638
Currently married/in union	-	0.734	0.016	0.022	1.012	1.006	694	760	0.702	0.766
Marriage before age 18	8.7	0.243	0.018	0.075	1.109	1.053	542	608	0.206	0.280
Knows any contraceptive method	-	0.859	0.027	0.032	4.723	2.173	694	760	0.804	0.914
Comprehensive knowledge about HIV prevention among young people	9.2	0.153	0.034	0.223	2.395	1.547	249	268	0.085	0.221
Knowledge of mother- to-child transmission of HIV	9.3	0.437	0.028	0.063	2.374	1.541	694	760	0.382	0.493
Accepting attitudes towards people living with HIV	9.4	0.078	0.019	0.251	3.103	1.762	527	585	0.039	0.117
Men who have been tested for HIV and know the results	9.6	0.012	0.005	0.398	1.402	1.184	694	760	0.002	0.021
Sexually active young men who have been tested for HIV and know the results	9.7	0.023	0.014	0.578	1.213	1.101	131	152	0.000	0.051
Sex before age 15 among young men	9.11	0.059	0.021	0.355	2.091	1.446	249	268	0.017	0.100
UNDER-5s										
Underweight prevalence	2.1a	0.316	0.022	0.071	2.778	1.667	1061	1206	0.271	0.360
Stunting prevalence	2.2a	0.538	0.025	0.047	3.079	1.755	1042	1183	0.488	0.589
Wasting prevalence	2.3a	0.057	0.008	0.140	1.414	1.189	1057	1202	0.041	0.073
Exclusive breastfeeding under 6 months	2.6	0.301	0.044	0.147	1.065	1.032	104	115	0.212	0.390
Age-appropriate breastfeeding	2.14	0.323	0.026	0.079	1.405	1.185	413	473	0.272	0.374
Tuberculosis immunization coverage	-	0.639	0.053	0.084	2.736	1.654	185	222	0.532	0.746
Received polio immunization	-	0.371	0.039	0.106	1.458	1.207	187	223	0.293	0.449
Received DPT-HepB-Hib immunization	-	0.355	0.039	0.111	1.497	1.224	187	223	0.276	0.433
Received measles immunization	-	0.525	0.047	0.089	1.957	1.399	186	222	0.431	0.619
Diarrhoea in the previous 2 weeks	-	0.163	0.012	0.072	1.262	1.123	1086	1237	0.140	0.187
Illness with a cough in the previous 2 weeks	-	0.034	0.007	0.220	2.110	1.453	1086	1237	0.019	0.049
Fever in last two weeks	-	0.156	0.014	0.092	1.933	1.390	1086	1237	0.127	0.184
Oral rehydration therapy with continued feeding	3.8	0.481	0.047	0.098	1.762	1.327	178	201	0.387	0.574
Antibiotic treatment of suspected pneumonia	3.10	(0.391)	(0.106)	(0.271)	(2.031)	(1.425)	37	44	(0.179)	(0.603)
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.499	0.042	0.083	8.109	2.848	1017	1167	0.416	0.583
Anti-malarial treatment of children under age 5	3.18	0.011	0.008	0.718	1.069	1.034	169	189	0.000	0.027
Support for learning	6.1	0.438	0.036	0.082	2.744	1.657	448	526	0.366	0.510
Attendance to early childhood education	6.7	0.060	0.020	0.331	3.701	1.924	448	526	0.020	0.100
Birth registration	8.1	0.611	0.030	0.048	4.547	2.132	1086	1237	0.552	0.670

Table SE.7: Sampling errors: North region

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.824	0.008	0.010	3.179	1.783	6028	7364	0.809	0.840
Household availability of insecticide-treated nets (ITNs)	3.12	0.583	0.015	0.026	7.167	2.677	6065	7408	0.552	0.614
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.794	0.017	0.022	13.379	3.658	31310	7408	0.760	0.828
Use of improved sanitation	4.3	0.597	0.017	0.029	9.329	3.054	31310	7408	0.563	0.632
Secondary school net attendance ratio (adjusted)	7.5	0.433	0.014	0.032	4.984	2.232	5223	6488	0.406	0.461
Prevalence of children with one or both parents dead	9.18	0.055	0.003	0.052	2.628	1.621	13835	17096	0.049	0.060
Violent discipline	8.5	0.795	0.008	0.010	2.152	1.467	10527	5816	0.779	0.810
WOMEN										
Literacy rate among young women	7.1	0.652	0.016	0.025	3.708	1.926	2573	3221	0.620	0.685
Currently married/in union	-	0.772	0.005	0.007	1.504	1.227	7057	8793	0.761	0.783
Marriage before age 18	8.7	0.445	0.008	0.018	1.853	1.361	5654	7034	0.429	0.461
Children ever born	-	2.601	0.036	0.014	1.815	1.347	7057	8793	2.529	2.672
Children living	-	2.178	0.029	0.013	1.769	1.330	7057	8793	2.121	2.235
Children ever born to women age 40-49	-	5.014	0.086	0.017	1.744	1.321	1424	1780	4.842	5.186
Early childbearing	5.2	0.260	0.013	0.052	1.376	1.173	1170	1462	0.233	0.287
Pregnant women	-	0.048	0.003	0.055	1.320	1.149	7057	8793	0.043	0.053
Want no more children	-	0.635	0.007	0.011	1.530	1.237	5446	6778	0.620	0.649
Want to delay birth at least 2 years	-	0.175	0.006	0.033	1.572	1.254	5446	6778	0.164	0.187
Knows any contraceptive method	-	0.938	0.006	0.007	5.691	2.386	7057	8793	0.926	0.950
Contraceptive prevalence	5.3	0.570	0.010	0.018	2.817	1.678	5446	6778	0.550	0.590
Unmet need	5.4	0.167	0.006	0.035	1.674	1.294	5446	6778	0.156	0.179
Antenatal care coverage - at least once by skilled personnel	5.5a	0.450	0.019	0.043	2.633	1.623	1377	1724	0.411	0.489
Antenatal care coverage – at least four times by any provider	5.5b	0.287	0.017	0.059	2.439	1.562	1377	1724	0.253	0.321
Skilled attendant at delivery	5.7	0.310	0.017	0.056	2.422	1.556	1377	1724	0.276	0.345
Institutional deliveries	5.8	0.277	0.016	0.057	2.153	1.467	1377	1724	0.245	0.309
Caesarean section	5.9	0.023	0.004	0.173	1.192	1.092	1377	1724	0.015	0.031
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.481	0.030	0.063	1.503	1.226	334	415	0.421	0.542
Comprehensive knowledge about HIV prevention among young people	9.2	0.242	0.010	0.043	1.890	1.375	2573	3221	0.222	0.263
Knowledge of mother- to-child transmission of HIV	9.3	0.544	0.011	0.020	4.069	2.017	7057	8793	0.522	0.565
Accepting attitudes towards people living with HIV	9.4	0.126	0.008	0.061	3.666	1.915	5597	6856	0.110	0.141
Women who have been tested for HIV and know the results	9.6	0.010	0.001	0.119	1.254	1.120	7057	8793	0.008	0.012
Sexually active young women who have been tested for HIV and know the results	9.7	0.014	0.003	0.220	1.231	1.109	1401	1768	0.008	0.021
Sex before age 15 among young women	9.11	0.094	0.007	0.072	1.718	1.311	2573	3221	0.080	0.107
Total fertility rate	-	3.15	0.10	0.031	2.709	1.646	19894	24816	2.95	3.35
Adolescent birth rates (ASFR 15-19)	5.1	0.120	0.006	0.051	1.669	1.292	3985	5019	0.107	0.132
Neonatal mortality	1.3	48.5	3.9	0.080	1.186	1.089	3592	4513	40.7	56.2
Post-neonatal mortality	1.4	37.8	3.1	0.081	1.080	1.039	3594	4517	31.7	43.9
Infant mortality	1.2	86.3	5.0	0.058	1.190	1.091	3597	4520	76.2	96.3
Child mortality	1.5	19.1	2.3	0.123	1.225	1.107	3620	4552	14.4	23.8
Under five mortality	1.1	103.7	5.5	0.053	1.284	1.133	3627	4562	92.7	114.8

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.787	0.015	0.019	1.921	1.386	1133	1469	0.758	0.817
Currently married/in union	-	0.712	0.008	0.012	1.410	1.188	3172	4055	0.695	0.729
Marriage before age 18	8.7	0.180	0.007	0.042	1.225	1.107	2554	3250	0.165	0.194
Knows any contraceptive method	-	0.962	0.004	0.004	1.566	1.251	3172	4055	0.955	0.970
Comprehensive knowledge about HIV prevention among young people	9.2	0.279	0.015	0.053	1.572	1.254	1133	1469	0.249	0.308
Knowledge of mother- to-child transmission of HIV	9.3	0.560	0.011	0.020	1.993	1.412	3172	4055	0.538	0.582
Accepting attitudes towards people living with HIV	9.4	0.080	0.005	0.069	1.457	1.207	2817	3570	0.069	0.091
Men who have been tested for HIV and know the results	9.6	0.012	0.002	0.164	1.301	1.141	3172	4055	0.008	0.016
Sexually active young men who have been tested for HIV and know the results	9.7	0.013	0.004	0.307	1.054	1.026	623	826	0.005	0.022
Sex before age 15 among young men	9.11	0.046	0.006	0.130	1.195	1.093	1133	1469	0.034	0.058
UNDER-5s										
Underweight prevalence	2.1a	0.262	0.008	0.032	1.507	1.228	3452	4165	0.245	0.278
Stunting prevalence	2.2a	0.514	0.011	0.021	1.947	1.395	3387	4076	0.492	0.536
Wasting prevalence	2.3a	0.053	0.004	0.076	1.322	1.150	3415	4117	0.045	0.061
Exclusive breastfeeding under 6 months	2.6	0.605	0.028	0.046	1.386	1.177	355	429	0.549	0.660
Age-appropriate breastfeeding	2.14	0.414	0.014	0.033	1.319	1.148	1396	1681	0.387	0.442
Tuberculosis immunization coverage	-	0.789	0.019	0.024	1.878	1.370	695	842	0.750	0.827
Received polio immunization	-	0.555	0.025	0.044	2.059	1.435	693	839	0.506	0.604
Received DPT-HepB-Hib immunization	-	0.562	0.025	0.044	2.126	1.458	694	841	0.512	0.611
Received measles immunization	-	0.621	0.022	0.036	1.733	1.317	689	833	0.577	0.665
Diarrhoea in the previous 2 weeks	-	0.153	0.008	0.049	1.846	1.359	3502	4226	0.138	0.168
Illness with a cough in the previous 2 weeks	-	0.024	0.003	0.114	1.371	1.171	3502	4226	0.019	0.030
Fever in last two weeks	-	0.169	0.009	0.054	2.460	1.569	3502	4226	0.151	0.187
Oral rehydration therapy with continued feeding	3.8	0.614	0.023	0.038	1.525	1.235	537	656	0.567	0.661
Antibiotic treatment of suspected pneumonia	3.10	0.599	0.048	0.080	1.042	1.021	86	110	0.503	0.695
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.502	0.019	0.037	5.813	2.411	3401	4111	0.465	0.540
Anti-malarial treatment of children under age 5	3.18	0.013	0.005	0.345	1.139	1.067	590	702	0.004	0.023
Support for learning	6.1	0.624	0.018	0.028	2.294	1.515	1418	1710	0.588	0.659
Attendance to early childhood education	6.7	0.210	0.016	0.076	2.649	1.627	1418	1710	0.178	0.242
Birth registration	8.1	0.673	0.015	0.022	4.238	2.059	3502	4226	0.643	0.703

Table SE.8: Sampling errors: Central region

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.797	0.012	0.015	5.878	2.424	9167	7031	0.773	0.820
Household availability of insecticide-treated nets (ITNs)	3.12	0.410	0.014	0.033	5.462	2.337	9247	7082	0.383	0.438
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.647	0.016	0.024	7.521	2.742	46919	7082	0.616	0.678
Use of improved sanitation	4.3	0.646	0.014	0.022	6.234	2.497	46919	7082	0.618	0.675
Secondary school net attendance ratio (adjusted)	7.5	0.507	0.014	0.027	4.407	2.099	7577	5950	0.480	0.534
Prevalence of children with one or both parents dead	9.18	0.047	0.003	0.064	2.972	1.724	19117	14911	0.041	0.053
Violent discipline	8.5	0.755	0.009	0.012	2.250	1.500	14093	5229	0.738	0.773
WOMEN										
Literacy rate among young women	7.1	0.763	0.014	0.019	3.267	1.807	3918	2957	0.735	0.791
Currently married/in union	-	0.710	0.007	0.010	1.969	1.403	11255	8393	0.696	0.724
Marriage before age 18	8.7	0.334	0.009	0.026	2.333	1.527	9130	6752	0.317	0.352
Children ever born	-	2.278	0.041	0.018	2.487	1.577	11255	8393	2.195	2.361
Children living	-	1.969	0.033	0.017	2.410	1.552	11255	8393	1.902	2.036
Children ever born to women age 40-49	-	4.456	0.082	0.019	1.708	1.307	2399	1763	4.291	4.621
Early childbearing	5.2	0.128	0.011	0.087	1.471	1.213	1792	1316	0.106	0.151
Pregnant women	-	0.049	0.003	0.056	1.360	1.166	11255	8393	0.043	0.054
Want no more children	-	0.536	0.009	0.016	1.745	1.321	7987	6005	0.519	0.553
Want to delay birth at least 2 years	-	0.205	0.006	0.029	1.314	1.146	7987	6005	0.193	0.217
Knows any contraceptive method	-	0.941	0.006	0.006	4.902	2.214	11255	8393	0.930	0.952
Contraceptive prevalence	5.3	0.478	0.010	0.020	2.296	1.515	7987	6005	0.459	0.498
Unmet need	5.4	0.206	0.007	0.032	1.634	1.278	7987	6005	0.192	0.219
Antenatal care coverage - at least once by skilled personnel	5.5a	0.633	0.020	0.031	2.589	1.609	1989	1525	0.593	0.672
Antenatal care coverage – at least four times by any provider	5.5b	0.465	0.019	0.040	2.166	1.472	1989	1525	0.428	0.503
Skilled attendant at delivery	5.7	0.528	0.019	0.036	2.175	1.475	1989	1525	0.490	0.566
Institutional deliveries	5.8	0.500	0.019	0.037	2.135	1.461	1989	1525	0.463	0.538
Caesarean section	5.9	0.051	0.006	0.121	1.210	1.100	1989	1525	0.039	0.064
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.327	0.030	0.092	1.529	1.237	521	372	0.267	0.387
Comprehensive knowledge about HIV prevention among young people	9.2	0.262	0.010	0.039	1.559	1.249	3918	2957	0.242	0.283
Knowledge of mother- to-child transmission of HIV	9.3	0.575	0.010	0.018	3.722	1.929	11255	8393	0.554	0.596
Accepting attitudes towards people living with HIV	9.4	0.219	0.008	0.037	2.909	1.706	9995	7495	0.203	0.235
Women who have been tested for HIV and know the results	9.6	0.035	0.003	0.077	1.796	1.340	11255	8393	0.030	0.040
Sexually active young women who have been tested for HIV and know the results	9.7	0.066	0.009	0.136	1.679	1.296	1668	1283	0.048	0.084
Sex before age 15 among young women	9.11	0.045	0.004	0.098	1.347	1.160	3918	2957	0.036	0.054
Total fertility rate	-	2.91	0.10	0.034	2.843	1.686	31673	23484	2.71	3.11
Adolescent birth rates (ASFR 15-19)	5.1	0.079	0.006	0.074	1.918	1.385	5945	4494	0.067	0.091
Neonatal mortality	1.3	26.1	3.4	0.131	1.343	1.159	5028	3824	19.3	33.0
Post-neonatal mortality	1.4	37.0	3.9	0.107	1.493	1.222	5041	3833	29.1	44.9
Infant mortality	1.2	63.1	5.2	0.082	1.409	1.187	5042	3834	52.8	73.5
Child mortality	1.5	9.9	1.8	0.187	1.414	1.189	5054	3844	6.2	13.5
Under five mortality	1.1	72.3	5.5	0.076	1.395	1.181	5069	3855	61.4	83.3

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.794	0.016	0.020	2.159	1.469	1866	1392	0.762	0.826
Currently married/in union	-	0.635	0.010	0.015	1.463	1.209	4990	3711	0.616	0.654
Marriage before age 18	8.7	0.133	0.008	0.062	1.679	1.296	3888	2872	0.116	0.149
Knows any contraceptive method	-	0.955	0.006	0.006	2.871	1.694	4990	3711	0.944	0.967
Comprehensive knowledge about HIV prevention among young people	9.2	0.293	0.016	0.055	1.737	1.318	1866	1392	0.261	0.325
Knowledge of mother- to-child transmission of HIV	9.3	0.570	0.012	0.021	2.110	1.453	4990	3711	0.546	0.594
Accepting attitudes towards people living with HIV	9.4	0.188	0.008	0.045	1.638	1.280	4668	3525	0.171	0.205
Men who have been tested for HIV and know the results	9.6	0.031	0.003	0.112	1.477	1.215	4990	3711	0.024	0.038
Sexually active young men who have been tested for HIV and know the results	9.7	0.033	0.008	0.249	1.093	1.045	692	513	0.017	0.050
Sex before age 15 among young men	9.11	0.021	0.005	0.230	1.560	1.249	1866	1392	0.011	0.030
UNDER-5s										
Underweight prevalence	2.1a	0.231	0.011	0.046	2.342	1.530	5023	3745	0.209	0.252
Stunting prevalence	2.2a	0.381	0.013	0.033	2.478	1.574	4934	3686	0.356	0.406
Wasting prevalence	2.3a	0.054	0.004	0.077	1.245	1.116	4941	3688	0.046	0.063
Exclusive breastfeeding under 6 months	2.6	0.329	0.025	0.077	1.187	1.089	557	409	0.278	0.379
Age-appropriate breastfeeding	2.14	0.343	0.017	0.049	1.941	1.393	2078	1560	0.310	0.377
Tuberculosis immunization coverage	-	0.729	0.022	0.030	1.777	1.333	983	751	0.686	0.773
Received polio immunization	-	0.485	0.022	0.045	1.454	1.206	984	752	0.441	0.529
Received DPT-HepB-Hib immunization	-	0.526	0.022	0.043	1.520	1.233	982	750	0.481	0.571
Received measles immunization	-	0.595	0.023	0.039	1.646	1.283	984	752	0.549	0.641
Diarrhoea in the previous 2 weeks	-	0.074	0.005	0.067	1.356	1.165	5154	3833	0.064	0.084
Illness with a cough in the previous 2 weeks	-	0.030	0.003	0.111	1.484	1.218	5154	3833	0.023	0.037
Fever in last two weeks	-	0.162	0.008	0.050	1.866	1.366	5154	3833	0.146	0.178
Oral rehydration therapy with continued feeding	3.8	0.534	0.037	0.070	1.600	1.265	381	285	0.459	0.608
Antibiotic treatment of suspected pneumonia	3.10	0.653	0.055	0.085	1.274	1.129	156	95	0.542	0.764
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.328	0.016	0.049	4.211	2.052	4799	3599	0.295	0.360
Anti-malarial treatment of children under age 5	3.18	0.010	0.005	0.485	1.362	1.167	834	596	0.000	0.019
Support for learning	6.1	0.571	0.019	0.033	2.170	1.473	2055	1529	0.534	0.608
Attendance to early childhood education	6.7	0.297	0.016	0.055	1.924	1.387	2055	1529	0.264	0.329
Birth registration	8.1	0.790	0.012	0.015	3.329	1.825	5154	3833	0.766	0.814

Table SE.9: Sampling errors: South region

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.741	0.015	0.020	4.931	2.221	3479	4298	0.712	0.771
Household availability of insecticide-treated nets (ITNs)	3.12	0.601	0.022	0.037	8.815	2.969	3531	4353	0.557	0.645
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.670	0.029	0.043	16.248	4.031	19192	4353	0.613	0.728
Use of improved sanitation	4.3	0.335	0.023	0.068	10.029	3.167	19192	4353	0.290	0.380
Secondary school net attendance ratio (adjusted)	7.5	0.329	0.017	0.052	5.593	2.365	3326	4245	0.295	0.363
Prevalence of children with one or both parents dead	9.18	0.064	0.004	0.066	3.432	1.853	8888	11404	0.055	0.072
Violent discipline	8.5	0.702	0.013	0.018	2.681	1.637	6749	3502	0.676	0.727
WOMEN										
Literacy rate among young women	7.1	0.553	0.024	0.044	4.797	2.190	1541	1978	0.504	0.602
Currently married/in union	-	0.705	0.009	0.013	2.107	1.452	4164	5290	0.687	0.723
Marriage before age 18	8.7	0.338	0.011	0.032	2.146	1.465	3277	4132	0.316	0.359
Children ever born	-	2.714	0.059	0.022	2.362	1.537	4164	5290	2.597	2.831
Children living	-	2.263	0.042	0.018	1.849	1.360	4164	5290	2.179	2.346
Children ever born to women age 40-49	-	5.283	0.157	0.030	2.926	1.711	899	1079	4.969	5.596
Early childbearing	5.2	0.188	0.021	0.109	2.263	1.504	654	820	0.147	0.229
Pregnant women	-	0.066	0.004	0.060	1.334	1.155	4164	5290	0.058	0.074
Want no more children	-	0.595	0.009	0.015	1.300	1.140	2935	3767	0.577	0.614
Want to delay birth at least 2 years	-	0.197	0.009	0.046	1.940	1.393	2935	3767	0.179	0.215
Knows any contraceptive method	-	0.939	0.011	0.011	10.187	3.192	4164	5290	0.918	0.960
Contraceptive prevalence	5.3	0.416	0.017	0.042	4.624	2.150	2935	3767	0.382	0.451
Unmet need	5.4	0.241	0.014	0.057	3.829	1.957	2935	3767	0.214	0.268
Antenatal care coverage - at least once by skilled personnel	5.5a	0.486	0.028	0.057	3.654	1.912	940	1195	0.430	0.541
Antenatal care coverage – at least four times by any provider	5.5b	0.283	0.024	0.085	3.414	1.848	940	1195	0.235	0.332
Skilled attendant at delivery	5.7	0.331	0.026	0.079	3.702	1.924	940	1195	0.279	0.384
Institutional deliveries	5.8	0.254	0.022	0.088	3.174	1.782	940	1195	0.209	0.299
Caesarean section	5.9	0.027	0.006	0.220	1.576	1.256	940	1195	0.015	0.038
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.577	0.031	0.054	1.361	1.167	264	349	0.515	0.639
Comprehensive knowledge about HIV prevention among young people	9.2	0.178	0.015	0.084	3.036	1.742	1541	1978	0.148	0.208
Knowledge of mother- to-child transmission of HIV	9.3	0.514	0.018	0.034	6.526	2.555	4164	5290	0.479	0.549
Accepting attitudes towards people living with HIV	9.4	0.095	0.010	0.109	5.000	2.236	3293	4015	0.074	0.115
Women who have been tested for HIV and know the results	9.6	0.013	0.003	0.193	2.686	1.639	4164	5290	0.008	0.019
Sexually active young women who have been tested for HIV and know the results	9.7	0.020	0.006	0.299	1.562	1.250	662	868	0.008	0.032
Sex before age 15 among young women	9.11	0.062	0.011	0.176	4.068	2.017	1541	1978	0.041	0.084
Total fertility rate	-	3.89	0.16	0.042	3.877	1.969	11712	14683	3.57	4.22
Adolescent birth rates (ASFR 15-19)	5.1	0.090	0.009	0.095	2.605	1.627	2545	3175	0.073	0.107
Neonatal mortality	1.3	36.5	4.1	0.113	1.263	1.124	2362	3066	28.2	44.8
Post-neonatal mortality	1.4	51.2	8.2	0.159	3.287	1.813	2366	3071	34.9	67.5
Infant mortality	1.2	87.7	9.3	0.106	2.547	1.596	2366	3071	69.2	106.3
Child mortality	1.5	14.7	2.5	0.174	1.214	1.102	2377	3091	9.6	19.7
Under five mortality	1.1	101.1	9.1	0.090	2.193	1.481	2381	3096	83.0	119.2

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.697	0.026	0.037	2.532	1.591	677	821	0.646	0.748
Currently married/in union	-	0.663	0.013	0.020	1.706	1.306	1789	2185	0.636	0.689
Marriage before age 18	8.7	0.120	0.010	0.084	1.616	1.271	1390	1678	0.100	0.140
Knows any contraceptive method	-	0.930	0.012	0.012	4.457	2.111	1789	2185	0.907	0.953
Comprehensive knowledge about HIV prevention among young people	9.2	0.226	0.017	0.074	1.298	1.139	677	821	0.193	0.259
Knowledge of mother- to-child transmission of HIV	9.3	0.590	0.019	0.032	3.139	1.772	1789	2185	0.552	0.627
Accepting attitudes towards people living with HIV	9.4	0.117	0.011	0.093	2.300	1.516	1617	1989	0.095	0.139
Men who have been tested for HIV and know the results	9.6	0.015	0.003	0.224	1.720	1.312	1789	2185	0.009	0.022
Sexually active young men who have been tested for HIV and know the results	9.7	0.037	0.015	0.398	1.628	1.276	220	270	0.007	0.066
Sex before age 15 among young men	9.11	0.013	0.004	0.305	0.996	0.998	677	821	0.005	0.021
UNDER-5s										
Underweight prevalence	2.1a	0.347	0.023	0.066	6.691	2.587	2339	2904	0.302	0.393
Stunting prevalence	2.2a	0.466	0.017	0.037	3.481	1.866	2297	2851	0.431	0.501
Wasting prevalence	2.3a	0.079	0.009	0.114	3.178	1.783	2315	2878	0.061	0.097
Exclusive breastfeeding under 6 months	2.6	0.297	0.028	0.093	1.205	1.098	270	330	0.242	0.353
Age-appropriate breastfeeding	2.14	0.351	0.020	0.058	2.175	1.475	974	1192	0.310	0.392
Tuberculosis immunization coverage	-	0.889	0.016	0.018	1.462	1.209	457	573	0.858	0.921
Received polio immunization	-	0.570	0.041	0.072	3.918	1.979	459	574	0.488	0.651
Received DPT-HepB-Hib immunization	-	0.606	0.042	0.069	4.183	2.045	457	572	0.523	0.690
Received measles immunization	-	0.751	0.023	0.030	1.600	1.265	460	576	0.705	0.797
Diarrhoea in the previous 2 weeks	-	0.079	0.007	0.094	2.280	1.510	2411	3008	0.065	0.094
Illness with a cough in the previous 2 weeks	-	0.050	0.009	0.187	5.578	2.362	2411	3008	0.031	0.069
Fever in last two weeks	-	0.059	0.006	0.103	2.016	1.420	2411	3008	0.047	0.071
Oral rehydration therapy with continued feeding	3.8	0.541	0.042	0.077	1.579	1.257	191	228	0.458	0.624
Antibiotic treatment of suspected pneumonia	3.10	0.456	0.077	0.170	3.894	1.973	121	162	0.301	0.611
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.548	0.024	0.044	6.926	2.632	2291	2888	0.499	0.597
Anti-malarial treatment of children under age 5	3.18	0.015	0.010	0.653	1.667	1.291	143	253	0.000	0.035
Support for learning	6.1	0.508	0.035	0.069	6.024	2.454	953	1237	0.438	0.577
Attendance to early childhood education	6.7	0.117	0.014	0.123	2.478	1.574	953	1237	0.088	0.146
Birth registration	8.1	0.765	0.019	0.025	6.050	2.460	2411	3008	0.727	0.803

Table SE.10: Sampling errors: Vientiane Capital

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.892	0.011	0.012	1.651	1.285	2467	1350	0.871	0.914
Household availability of insecticide-treated nets (ITNs)	3.12	0.250	0.025	0.100	4.585	2.141	2497	1366	0.200	0.300
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.881	0.021	0.024	5.938	2.437	11694	1366	0.839	0.924
Use of improved sanitation	4.3	0.941	0.008	0.008	1.462	1.209	11694	1366	0.926	0.957
Secondary school net attendance ratio (adjusted)	7.5	0.764	0.025	0.033	2.932	1.712	1514	821	0.713	0.815
Prevalence of children with one or both parents dead	9.18	0.044	0.006	0.137	1.730	1.315	3703	2027	0.032	0.056
Violent discipline	8.5	0.766	0.020	0.026	1.940	1.393	2655	865	0.726	0.807
WOMEN										
Literacy rate among young women	7.1	0.929	0.016	0.018	2.319	1.523	1110	574	0.896	0.961
Currently married/in union	-	0.644	0.015	0.023	1.667	1.291	3288	1740	0.614	0.673
Marriage before age 18	8.7	0.199	0.014	0.072	1.865	1.366	2760	1464	0.171	0.228
Children ever born	-	1.478	0.052	0.035	1.722	1.312	3288	1740	1.375	1.582
Children living	-	1.407	0.048	0.034	1.687	1.299	3288	1740	1.312	1.503
Children ever born to women age 40-49	-	3.093	0.119	0.038	1.479	1.216	705	379	2.855	3.330
Early childbearing	5.2	0.038	0.011	0.298	1.043	1.021	583	298	0.015	0.061
Pregnant women	-	0.038	0.005	0.137	1.307	1.143	3288	1740	0.028	0.049
Want no more children	-	0.558	0.017	0.030	1.272	1.128	2116	1127	0.524	0.591
Want to delay birth at least 2 years	-	0.201	0.011	0.055	0.870	0.933	2116	1127	0.179	0.224
Knows any contraceptive method	-	0.978	0.006	0.006	2.502	1.582	3288	1740	0.967	0.989
Contraceptive prevalence	5.3	0.489	0.022	0.044	2.105	1.451	2116	1127	0.446	0.532
Unmet need	5.4	0.230	0.015	0.066	1.458	1.207	2116	1127	0.200	0.260
Antenatal care coverage - at least once by skilled personnel	5.5a	0.898	0.037	0.041	3.334	1.826	415	223	0.823	0.972
Antenatal care coverage – at least four times by any provider	5.5b	0.820	0.042	0.051	2.651	1.628	415	223	0.736	0.904
Skilled attendant at delivery	5.7	0.854	0.037	0.043	2.413	1.553	415	223	0.780	0.927
Institutional deliveries	5.8	0.839	0.038	0.045	2.363	1.537	415	223	0.763	0.915
Caesarean section	5.9	0.150	0.024	0.162	1.030	1.015	415	223	0.102	0.199
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.165	0.051	0.307	1.234	1.111	126	67	0.064	0.267
Comprehensive knowledge about HIV prevention among young people	9.2	0.404	0.021	0.053	1.077	1.038	1110	574	0.361	0.447
Knowledge of mother- to-child transmission of HIV	9.3	0.633	0.020	0.032	2.987	1.728	3288	1740	0.593	0.673
Accepting attitudes towards people living with HIV	9.4	0.253	0.017	0.066	2.535	1.592	3211	1700	0.219	0.286
Women who have been tested for HIV and know the results	9.6	0.064	0.007	0.107	1.371	1.171	3288	1740	0.051	0.078
Sexually active young women who have been tested for HIV and know the results	9.7	0.134	0.027	0.200	1.157	1.076	363	188	0.081	0.188
Sex before age 15 among young women	9.11	0.022	0.006	0.273	0.975	0.988	1110	574	0.010	0.035
Total fertility rate	-	2.03	0.14	0.067	1.583	1.258	9371	4983	1.76	2.31
Adolescent birth rates (ASFR 15-19)	5.1	0.037	0.007	0.196	1.367	1.169	1649	851	0.022	0.051
Neonatal mortality	1.3	15.3	4.9	0.321	0.865	0.930	1012	538	5.5	25.2
Post-neonatal mortality	1.4	(11.6)	(4.6)	(0.402)	(1.051)	(1.025)	1012	538	(2.3)	(20.8)
Infant mortality	1.2	(26.9)	(6.3)	(0.233)	(0.835)	(0.914)	1012	538	(14.4)	(39.4)
Child mortality	1.5	(4.8)	(4.9)	(1.008)	(2.369)	(1.539)	1014	539	(0.0)	(14.5)
Under five mortality	1.1	(31.6)	(8.7)	(0.277)	(1.339)	(1.157)	1014	539	(14.1)	(49.1)

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.952	0.017	0.018	1.660	1.288	504	273	0.919	0.985
Currently married/in union	-	0.589	0.022	0.037	1.432	1.197	1379	734	0.545	0.632
Marriage before age 18	8.7	0.076	0.012	0.156	1.195	1.093	1130	603	0.052	0.099
Knows any contraceptive method	-	0.982	0.006	0.006	1.391	1.179	1379	734	0.970	0.994
Comprehensive knowledge about HIV prevention among young people	9.2	0.421	0.039	0.092	1.672	1.293	504	273	0.344	0.498
Knowledge of mother- to-child transmission of HIV	9.3	0.586	0.026	0.045	2.117	1.455	1379	734	0.533	0.639
Accepting attitudes towards people living with HIV	9.4	0.210	0.017	0.082	1.297	1.139	1343	717	0.176	0.245
Men who have been tested for HIV and know the results	9.6	0.054	0.010	0.184	1.402	1.184	1379	734	0.034	0.073
Sexually active young men who have been tested for HIV and know the results	9.7	0.024	0.013	0.525	0.850	0.922	230	124	0.000	0.050
Sex before age 15 among young men	9.11	0.015	0.008	0.564	1.282	1.132	504	273	0.000	0.031
UNDER-5s										
Underweight prevalence	2.1a	0.163	0.017	0.103	1.085	1.041	1003	528	0.129	0.196
Stunting prevalence	2.2a	0.193	0.018	0.092	1.050	1.025	980	515	0.158	0.229
Wasting prevalence	2.3a	0.072	0.011	0.157	0.986	0.993	982	516	0.050	0.095
Exclusive breastfeeding under 6 months	2.6	0.305	0.064	0.210	1.184	1.088	119	62	0.176	0.433
Age-appropriate breastfeeding	2.14	0.251	0.033	0.134	1.344	1.159	424	226	0.184	0.318
Tuberculosis immunization coverage	-	0.861	0.055	0.064	2.345	1.531	179	94	0.750	0.971
Received polio immunization	-	0.654	0.054	0.083	1.204	1.097	179	94	0.545	0.762
Received DPT-HepB-Hib immunization	-	0.665	0.066	0.099	1.809	1.345	179	94	0.533	0.797
Received measles immunization	-	0.713	0.064	0.090	1.883	1.372	179	94	0.585	0.842
Diarrhoea in the previous 2 weeks	-	0.053	0.012	0.232	1.656	1.287	1058	556	0.028	0.077
Illness with a cough in the previous 2 weeks	-	0.021	0.008	0.357	1.532	1.238	1058	556	0.006	0.036
Fever in last two weeks	-	0.222	0.023	0.103	1.681	1.297	1058	556	0.176	0.267
Oral rehydration therapy with continued feeding	3.8	(0.768)	(0.077)	(0.100)	(0.853)	(0.924)	56	27	(0.615)	(0.921)
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	22	12	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.207	0.028	0.136	2.619	1.618	1032	544	0.150	0.263
Anti-malarial treatment of children under age 5	3.18	0.025	0.014	0.545	0.940	0.970	234	125	0.000	0.052
Support for learning	6.1	0.853	0.026	0.030	1.177	1.085	419	222	0.801	0.904
Attendance to early childhood education	6.7	0.696	0.034	0.049	1.197	1.094	419	222	0.628	0.764
Birth registration	8.1	0.852	0.027	0.032	3.209	1.791	1058	556	0.798	0.906

Table SE.11: Sampling errors: Phongsaly

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.913	0.031	0.034	11.188	3.345	570	942	0.852	0.975
Household availability of insecticide-treated nets (ITNs)	3.12	0.510	0.042	0.083	6.813	2.610	578	956	0.425	0.594
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.747	0.059	0.078	17.397	4.171	3122	956	0.630	0.865
Use of improved sanitation	4.3	0.329	0.052	0.158	11.710	3.422	3122	956	0.225	0.433
Secondary school net attendance ratio (adjusted)	7.5	0.343	0.036	0.106	5.032	2.243	519	854	0.270	0.416
Prevalence of children with one or both parents dead	9.18	0.067	0.009	0.133	2.904	1.704	1399	2297	0.049	0.084
Violent discipline	8.5	0.632	0.021	0.033	1.422	1.193	1059	753	0.591	0.674
WOMEN										
Literacy rate among young women	7.1	0.527	0.061	0.116	5.685	2.384	241	383	0.405	0.649
Currently married/in union	-	0.812	0.017	0.021	2.076	1.441	666	1080	0.778	0.846
Marriage before age 18	8.7	0.403	0.025	0.063	2.342	1.530	542	880	0.352	0.454
Children ever born	-	2.721	0.105	0.039	2.077	1.441	666	1080	2.511	2.931
Children living	-	2.245	0.088	0.039	2.161	1.470	666	1080	2.069	2.421
Children ever born to women age 40-49	-	5.049	0.217	0.043	1.448	1.203	127	211	4.616	5.483
Early childbearing	5.2	0.257	0.035	0.138	1.197	1.094	116	183	0.186	0.328
Pregnant women	-	0.052	0.008	0.150	1.327	1.152	666	1080	0.037	0.068
Want no more children	-	0.641	0.028	0.044	3.022	1.738	541	878	0.584	0.697
Want to delay birth at least 2 years	-	0.156	0.017	0.112	2.024	1.423	541	878	0.121	0.191
Knows any contraceptive method	-	0.748	0.045	0.060	11.484	3.389	666	1080	0.658	0.837
Contraceptive prevalence	5.3	0.447	0.037	0.083	4.925	2.219	541	878	0.373	0.522
Unmet need	5.4	0.222	0.022	0.100	2.516	1.586	541	878	0.178	0.267
Antenatal care coverage - at least once by skilled personnel	5.5a	0.252	0.040	0.159	2.007	1.417	148	235	0.172	0.333
Antenatal care coverage – at least four times by any provider	5.5b	0.094	0.023	0.248	1.490	1.221	148	235	0.047	0.140
Skilled attendant at delivery	5.7	0.187	0.032	0.169	1.538	1.240	148	235	0.124	0.251
Institutional deliveries	5.8	0.181	0.030	0.164	1.396	1.182	148	235	0.122	0.241
Caesarean section	5.9	0.004	0.004	1.004	0.997	0.999	148	235	0.000	0.013
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.397	0.072	0.180	1.198	1.095	35	57	0.254	0.540
Comprehensive knowledge about HIV prevention among young people	9.2	0.123	0.021	0.169	1.533	1.238	241	383	0.082	0.165
Knowledge of mother- to-child transmission of HIV	9.3	0.342	0.034	0.098	5.384	2.320	666	1080	0.275	0.409
Accepting attitudes towards people living with HIV	9.4	0.045	0.013	0.279	2.124	1.457	356	575	0.020	0.071
Women who have been tested for HIV and know the results	9.6	0.008	0.003	0.395	1.312	1.145	666	1080	0.002	0.014
Sexually active young women who have been tested for HIV and know the results	9.7	0.014	0.011	0.765	1.923	1.387	145	231	0.000	0.036
Sex before age 15 among young women	9.11	0.051	0.012	0.243	1.210	1.100	241	383	0.026	0.076
Total fertility rate	-	3.66	0.31	0.085	2.739	1.655	1878	3065	3.04	4.29
Adolescent birth rates (ASFR 15-19)	5.1	0.145	0.019	0.129	1.588	1.260	372	597	0.107	0.182
Neonatal mortality	1.3	61.7	11.7	0.190	0.906	0.952	395	634	38.3	85.1
Post-neonatal mortality	1.4	58.3	8.6	0.147	0.746	0.864	396	635	41.1	75.4
Infant mortality	1.2	120.0	15.3	0.128	0.925	0.962	396	635	89.3	150.6
Child mortality	1.5	35.6	9.0	0.254	1.228	1.108	402	646	17.5	53.7
Under five mortality	1.1	151.3	15.9	0.105	0.931	0.965	403	647	119.6	183.0

	MICS Indicator	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*
MEN										
Literacy rate among young men	7.1	0.511	0.051	0.099	2.175	1.475	130	213	0.409	0.612
Currently married/in union	-	0.715	0.020	0.028	1.007	1.004	318	522	0.675	0.755
Marriage before age 18	8.7	0.277	0.029	0.103	1.637	1.280	245	402	0.220	0.335
Knows any contraceptive method	-	0.950	0.015	0.016	2.598	1.612	318	522	0.919	0.980
Comprehensive knowledge about HIV prevention among young people	9.2	0.296	0.047	0.157	2.205	1.485	130	213	0.202	0.389
Knowledge of mother- to-child transmission of HIV	9.3	0.506	0.038	0.076	3.056	1.748	318	522	0.430	0.583
Accepting attitudes towards people living with HIV	9.4	0.023	0.011	0.507	2.126	1.458	218	359	0.000	0.046
Men who have been tested for HIV and know the results	9.6	0.014	0.006	0.440	1.463	1.210	318	522	0.002	0.027
Sexually active young men who have been tested for HIV and know the results	9.7	0.007	0.007	0.978	0.998	0.999	90	146	0.000	0.021
Sex before age 15 among young men	9.11	0.038	0.014	0.367	1.125	1.061	130	213	0.010	0.066
UNDER-5s										
Underweight prevalence	2.1a	0.341	0.028	0.082	1.901	1.379	359	554	0.285	0.396
Stunting prevalence	2.2a	0.611	0.028	0.046	1.736	1.318	340	527	0.555	0.667
Wasting prevalence	2.3a	0.051	0.012	0.229	1.538	1.240	349	541	0.028	0.075
Exclusive breastfeeding under 6 months	2.6	0.597	0.081	0.135	1.576	1.255	38	59	0.436	0.759
Age-appropriate breastfeeding	2.14	0.443	0.039	0.088	1.370	1.171	144	221	0.365	0.522
Tuberculosis immunization coverage	-	0.519	0.074	0.143	2.349	1.533	69	107	0.371	0.668
Received polio immunization	-	0.284	0.046	0.164	1.124	1.060	70	107	0.191	0.377
Received DPT-HepB-Hib immunization	-	0.238	0.041	0.173	1.006	1.003	71	109	0.156	0.320
Received measles immunization	-	0.424	0.071	0.167	2.126	1.458	68	105	0.283	0.565
Diarrhoea in the previous 2 weeks	-	0.160	0.020	0.127	1.760	1.327	368	569	0.119	0.201
Illness with a cough in the previous 2 weeks	-	0.059	0.014	0.232	1.918	1.385	368	569	0.032	0.087
Fever in last two weeks	-	0.150	0.021	0.140	1.964	1.402	368	569	0.108	0.192
Oral rehydration therapy with continued feeding	3.8	0.356	0.051	0.143	0.965	0.983	59	87	0.254	0.457
Antibiotic treatment of suspected pneumonia	3.10	(0.464)	(0.117)	(0.252)	(1.753)	(1.324)	22	33	(0.230)	(0.697)
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.335	0.050	0.149	6.263	2.503	364	563	0.236	0.435
Anti-malarial treatment of children under age 5	3.18	0.010	0.011	1.022	0.942	0.970	55	87	0.000	0.032
Support for learning	6.1	0.392	0.058	0.149	3.365	1.834	152	236	0.275	0.509
Attendance to early childhood education	6.7	0.100	0.025	0.246	1.574	1.254	152	236	0.051	0.149
Birth registration	8.1	0.441	0.042	0.095	4.039	2.010	368	569	0.357	0.525

Table SE.12: Sampling errors: Luangnamtha

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.992	0.003	0.003	1.107	1.052	543	968	0.986	0.998
Household availability of insecticide-treated nets (ITNs)	3.12	0.455	0.046	0.100	8.122	2.850	544	970	0.364	0.547
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.976	0.015	0.015	9.460	3.076	2707	970	0.946	1.000
Use of improved sanitation	4.3	0.668	0.048	0.071	9.922	3.150	2707	970	0.572	0.763
Secondary school net attendance ratio (adjusted)	7.5	0.423	0.041	0.097	5.891	2.427	469	852	0.340	0.505
Prevalence of children with one or both parents dead	9.18	0.071	0.009	0.125	2.482	1.576	1154	2087	0.053	0.089
Violent discipline	8.5	0.756	0.022	0.029	2.047	1.431	896	765	0.712	0.801
WOMEN										
Literacy rate among young women	7.1	0.575	0.053	0.092	5.030	2.243	237	440	0.469	0.681
Currently married/in union	-	0.759	0.015	0.020	1.420	1.192	627	1157	0.729	0.789
Marriage before age 18	8.7	0.393	0.023	0.058	2.000	1.414	505	926	0.348	0.439
Children ever born	-	2.191	0.060	0.027	1.057	1.028	627	1157	2.071	2.310
Children living	-	1.906	0.050	0.026	1.088	1.043	627	1157	1.806	2.006
Children ever born to women age 40-49	-	3.997	0.172	0.043	1.651	1.285	132	241	3.654	4.340
Early childbearing	5.2	0.248	0.030	0.123	1.035	1.017	114	209	0.187	0.309
Pregnant women	-	0.047	0.006	0.136	1.062	1.030	627	1157	0.034	0.060
Want no more children	-	0.614	0.018	0.029	1.212	1.101	477	876	0.578	0.651
Want to delay birth at least 2 years	-	0.173	0.016	0.090	1.485	1.218	477	876	0.141	0.204
Knows any contraceptive method	-	0.950	0.009	0.010	1.999	1.414	627	1157	0.931	0.968
Contraceptive prevalence	5.3	0.565	0.024	0.042	2.046	1.430	477	876	0.517	0.613
Unmet need	5.4	0.211	0.015	0.070	1.130	1.063	477	876	0.181	0.240
Antenatal care coverage - at least once by skilled personnel	5.5a	0.623	0.054	0.087	2.234	1.495	99	180	0.515	0.732
Antenatal care coverage – at least four times by any provider	5.5b	0.346	0.057	0.165	2.568	1.603	99	180	0.232	0.460
Skilled attendant at delivery	5.7	0.444	0.061	0.137	2.676	1.636	99	180	0.322	0.565
Institutional deliveries	5.8	0.423	0.059	0.140	2.572	1.604	99	180	0.304	0.541
Caesarean section	5.9	0.012	0.008	0.699	1.046	1.023	99	180	0.000	0.028
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.469	0.077	0.165	1.324	1.151	30	56	0.315	0.624
Comprehensive knowledge about HIV prevention among young people	9.2	0.281	0.034	0.120	2.470	1.571	237	440	0.214	0.349
Knowledge of mother- to-child transmission of HIV	9.3	0.427	0.035	0.082	5.846	2.418	627	1157	0.357	0.498
Accepting attitudes towards people living with HIV	9.4	0.188	0.024	0.126	3.201	1.789	471	871	0.141	0.236
Women who have been tested for HIV and know the results	9.6	0.014	0.004	0.268	1.135	1.065	627	1157	0.006	0.021
Sexually active young women who have been tested for HIV and know the results	9.7	0.021	0.009	0.439	1.091	1.045	141	260	0.003	0.040
Sex before age 15 among young women	9.11	0.137	0.020	0.143	1.432	1.197	237	440	0.098	0.176
Total fertility rate	-	2.61	0.20	0.078	1.997	1.413	1780	3267	2.20	3.02
Adolescent birth rates (ASFR 15-19)	5.1	0.124	0.015	0.119	1.234	1.111	364	677	0.095	0.154
Neonatal mortality	1.3	28.4	8.1	0.286	1.111	1.054	284	527	12.1	44.7
Post-neonatal mortality	1.4	25.4	7.5	0.294	1.192	1.092	284	527	10.4	40.3
Infant mortality	1.2	53.8	11.5	0.214	1.234	1.111	285	528	30.7	76.9
Child mortality	1.5	7.9	3.5	0.437	0.837	0.915	284	528	1.0	14.8
Under five mortality	1.1	61.3	12.1	0.197	1.257	1.121	286	530	37.1	85.5

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.701	0.063	0.090	3.314	1.820	94	175	0.575	0.827
Currently married/in union	-	0.733	0.020	0.027	0.989	0.995	266	497	0.694	0.773
Marriage before age 18	8.7	0.183	0.021	0.117	1.236	1.112	216	405	0.140	0.225
Knows any contraceptive method	-	0.908	0.015	0.017	1.372	1.171	266	497	0.878	0.939
Comprehensive knowledge about HIV prevention among young people	9.2	0.283	0.041	0.146	1.462	1.209	94	175	0.200	0.365
Knowledge of mother- to-child transmission of HIV	9.3	0.469	0.041	0.087	3.317	1.821	266	497	0.387	0.551
Accepting attitudes towards people living with HIV	9.4	0.061	0.012	0.196	1.057	1.028	228	423	0.037	0.085
Men who have been tested for HIV and know the results	9.6	0.012	0.005	0.385	0.923	0.961	266	497	0.003	0.022
Sexually active young men who have been tested for HIV and know the results	9.7	0.009	0.009	1.007	0.951	0.975	57	107	0.000	0.026
Sex before age 15 among young men	9.11	0.061	0.021	0.351	1.382	1.176	94	175	0.018	0.103
UNDER-5s										
Underweight prevalence	2.1a	0.404	0.037	0.091	2.833	1.683	280	502	0.330	0.477
Stunting prevalence	2.2a	0.532	0.033	0.061	2.035	1.426	268	478	0.466	0.597
Wasting prevalence	2.3a	0.212	0.029	0.138	2.482	1.575	273	489	0.153	0.270
Exclusive breastfeeding under 6 months	2.6	(0.738)	(0.051)	(0.069)	(0.577)	(0.760)	25	44	(0.636)	(0.840)
Age-appropriate breastfeeding	2.14	0.534	0.046	0.087	1.484	1.218	99	174	0.442	0.626
Tuberculosis immunization coverage	-	0.932	0.027	0.029	1.034	1.017	52	93	0.879	0.985
Received polio immunization	-	0.724	0.054	0.074	1.330	1.153	52	93	0.617	0.832
Received DPT-HepB-Hib immunization	-	0.679	0.052	0.077	1.152	1.073	52	93	0.575	0.784
Received measles immunization	-	0.780	0.052	0.067	1.442	1.201	52	92	0.675	0.884
Diarrhoea in the previous 2 weeks	-	0.100	0.015	0.146	1.177	1.085	280	502	0.071	0.129
Illness with a cough in the previous 2 weeks	-	0.004	0.003	0.701	0.999	0.999	280	502	0.000	0.010
Fever in last two weeks	-	0.051	0.014	0.269	1.963	1.401	280	502	0.024	0.079
Oral rehydration therapy with continued feeding	3.8	0.721	0.056	0.078	0.837	0.915	28	54	0.609	0.834
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	1	2	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.386	0.052	0.135	5.692	2.386	279	501	0.282	0.490
Anti-malarial treatment of children under age 5	3.18	*	*	*	*	*	14	24	*	*
Support for learning	6.1	0.534	0.043	0.080	1.520	1.233	114	207	0.448	0.620
Attendance to early childhood education	6.7	0.284	0.041	0.143	1.675	1.294	114	207	0.203	0.366
Birth registration	8.1	0.969	0.008	0.009	1.147	1.071	280	502	0.952	0.985

Table SE.13: Sampling errors: Oudomxay

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.946	0.015	0.016	4.574	2.139	912	1051	0.916	0.976
Household availability of insecticide-treated nets (ITNs)	3.12	0.863	0.023	0.027	4.654	2.157	913	1053	0.817	0.909
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.782	0.054	0.069	18.140	4.259	5181	1053	0.674	0.891
Use of improved sanitation	4.3	0.435	0.047	0.107	9.304	3.050	5181	1053	0.341	0.528
Secondary school net attendance ratio (adjusted)	7.5	0.355	0.030	0.084	4.151	2.037	936	1081	0.295	0.414
Prevalence of children with one or both parents dead	9.18	0.043	0.005	0.125	2.033	1.426	2543	2924	0.032	0.054
Violent discipline	8.5	0.815	0.017	0.021	1.697	1.303	1912	893	0.782	0.849
WOMEN										
Literacy rate among young women	7.1	0.506	0.040	0.079	3.689	1.921	479	572	0.426	0.586
Currently married/in union	-	0.748	0.016	0.021	1.885	1.373	1182	1430	0.716	0.779
Marriage before age 18	8.7	0.456	0.020	0.044	1.819	1.349	911	1106	0.416	0.496
Children ever born	-	2.717	0.080	0.030	1.346	1.160	1182	1430	2.557	2.878
Children living	-	2.296	0.071	0.031	1.542	1.242	1182	1430	2.154	2.439
Children ever born to women age 40-49	-	5.709	0.190	0.033	1.461	1.209	223	271	5.329	6.088
Early childbearing	5.2	0.277	0.036	0.128	1.560	1.249	208	248	0.206	0.348
Pregnant women	-	0.039	0.006	0.156	1.420	1.192	1182	1430	0.027	0.052
Want no more children	-	0.679	0.016	0.024	1.324	1.151	884	1068	0.646	0.712
Want to delay birth at least 2 years	-	0.114	0.011	0.092	1.167	1.080	884	1068	0.093	0.135
Knows any contraceptive method	-	0.961	0.009	0.010	3.341	1.828	1182	1430	0.942	0.980
Contraceptive prevalence	5.3	0.614	0.021	0.035	2.041	1.429	884	1068	0.571	0.656
Unmet need	5.4	0.126	0.012	0.097	1.430	1.196	884	1068	0.101	0.150
Antenatal care coverage - at least once by skilled personnel	5.5a	0.349	0.039	0.111	2.124	1.457	266	321	0.272	0.427
Antenatal care coverage – at least four times by any provider	5.5b	0.134	0.025	0.188	1.765	1.328	266	321	0.084	0.185
Skilled attendant at delivery	5.7	0.222	0.028	0.124	1.405	1.185	266	321	0.167	0.277
Institutional deliveries	5.8	0.208	0.025	0.118	1.176	1.085	266	321	0.159	0.257
Caesarean section	5.9	0.011	0.006	0.512	0.966	0.983	266	321	0.000	0.023
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.829	0.050	0.060	0.965	0.982	46	56	0.729	0.928
Comprehensive knowledge about HIV prevention among young people	9.2	0.096	0.016	0.172	1.788	1.337	479	572	0.063	0.128
Knowledge of mother- to-child transmission of HIV	9.3	0.392	0.026	0.066	3.973	1.993	1182	1430	0.341	0.444
Accepting attitudes towards people living with HIV	9.4	0.059	0.017	0.287	4.078	2.019	654	789	0.025	0.093
Women who have been tested for HIV and know the results	9.6	0.005	0.002	0.444	1.306	1.143	1182	1430	0.001	0.009
Sexually active young women who have been tested for HIV and know the results	9.7	0.011	0.006	0.568	1.047	1.023	248	294	0.000	0.023
Sex before age 15 among young women	9.11	0.094	0.016	0.169	1.691	1.301	479	572	0.063	0.126
Total fertility rate	-	3.62	0.26	0.071	2.335	1.528	3276	3980	3.11	4.13
Adolescent birth rates (ASFR 15-19)	5.1	0.138	0.016	0.118	1.869	1.367	748	893	0.105	0.170
Neonatal mortality	1.3	58.3	10.3	0.176	1.281	1.132	677	815	37.8	78.8
Post-neonatal mortality	1.4	28.6	5.6	0.196	0.974	0.987	678	816	17.4	39.8
Infant mortality	1.2	86.9	11.1	0.128	1.080	1.039	678	816	64.7	109.1
Child mortality	1.5	14.7	5.1	0.344	1.621	1.273	684	824	4.6	24.9
Under five mortality	1.1	100.4	12.9	0.129	1.341	1.158	685	825	74.5	126.2

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.764	0.033	0.043	1.575	1.255	204	263	0.698	0.829
Currently married/in union	-	0.702	0.022	0.032	1.598	1.264	530	674	0.657	0.747
Marriage before age 18	8.7	0.211	0.021	0.101	1.426	1.194	414	524	0.168	0.253
Knows any contraceptive method	-	0.936	0.012	0.013	1.566	1.251	530	674	0.912	0.960
Comprehensive knowledge about HIV prevention among young people	9.2	0.185	0.030	0.162	1.558	1.248	204	263	0.125	0.244
Knowledge of mother- to-child transmission of HIV	9.3	0.582	0.026	0.045	1.903	1.379	530	674	0.530	0.635
Accepting attitudes towards people living with HIV	9.4	0.090	0.016	0.180	1.757	1.325	428	545	0.058	0.123
Men who have been tested for HIV and know the results	9.6	0.007	0.003	0.491	1.135	1.066	530	674	0.000	0.014
Sexually active young men who have been tested for HIV and know the results	9.7	0.011	0.008	0.741	0.777	0.881	102	129	0.000	0.027
Sex before age 15 among young men	9.11	0.045	0.016	0.359	1.587	1.260	204	263	0.013	0.077
UNDER-5s										
Underweight prevalence	2.1a	0.287	0.019	0.066	1.313	1.146	667	748	0.249	0.324
Stunting prevalence	2.2a	0.549	0.028	0.051	2.302	1.517	660	739	0.493	0.604
Wasting prevalence	2.3a	0.046	0.008	0.166	0.998	0.999	666	746	0.031	0.062
Exclusive breastfeeding under 6 months	2.6	0.617	0.064	0.103	1.528	1.236	79	90	0.489	0.744
Age-appropriate breastfeeding	2.14	0.354	0.032	0.092	1.462	1.209	284	318	0.289	0.419
Tuberculosis immunization coverage	-	0.824	0.026	0.032	0.739	0.860	145	160	0.772	0.876
Received polio immunization	-	0.507	0.059	0.115	2.163	1.471	144	159	0.390	0.624
Received DPT-HepB-Hib immunization	-	0.544	0.060	0.111	2.314	1.521	144	159	0.424	0.665
Received measles immunization	-	0.579	0.046	0.080	1.373	1.172	144	159	0.487	0.671
Diarrhoea in the previous 2 weeks	-	0.168	0.017	0.102	1.586	1.259	676	757	0.133	0.202
Illness with a cough in the previous 2 weeks	-	0.010	0.004	0.386	1.166	1.080	676	757	0.002	0.018
Fever in last two weeks	-	0.215	0.018	0.083	1.443	1.201	676	757	0.179	0.251
Oral rehydration therapy with continued feeding	3.8	0.642	0.063	0.098	2.121	1.456	113	125	0.517	0.768
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	7	8	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.800	0.041	0.051	7.681	2.771	657	737	0.718	0.882
Anti-malarial treatment of children under age 5	3.18	0.000	0.000	0.000	na	na	145	162	0.000	0.000
Support for learning	6.1	0.871	0.032	0.036	2.567	1.602	257	291	0.808	0.934
Attendance to early childhood education	6.7	0.134	0.035	0.261	3.062	1.750	257	291	0.064	0.204
Birth registration	8.1	0.975	0.007	0.007	1.422	1.192	676	757	0.961	0.988

Table SE.14: Sampling errors: Bokeo

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.872	0.017	0.019	2.354	1.534	519	959	0.839	0.905
Household availability of insecticide-treated nets (ITNs)	3.12	0.519	0.034	0.065	4.360	2.088	520	960	0.451	0.586
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.766	0.048	0.063	12.549	3.542	2749	960	0.669	0.863
Use of improved sanitation	4.3	0.651	0.049	0.076	10.238	3.200	2749	960	0.552	0.749
Secondary school net attendance ratio (adjusted)	7.5	0.407	0.041	0.101	5.408	2.326	427	777	0.325	0.489
Prevalence of children with one or both parents dead	9.18	0.066	0.008	0.121	2.265	1.505	1213	2199	0.050	0.082
Violent discipline	8.5	0.851	0.025	0.029	3.477	1.865	927	731	0.802	0.900
WOMEN										
Literacy rate among young women	7.1	0.620	0.052	0.083	4.744	2.178	233	420	0.517	0.723
Currently married/in union	-	0.769	0.016	0.021	1.574	1.255	620	1120	0.737	0.800
Marriage before age 18	8.7	0.463	0.023	0.049	1.847	1.359	496	898	0.418	0.508
Children ever born	-	2.719	0.136	0.050	3.023	1.739	620	1120	2.446	2.992
Children living	-	2.169	0.097	0.045	2.565	1.602	620	1120	1.976	2.362
Children ever born to women age 40-49	-	4.992	0.268	0.054	2.012	1.419	124	226	4.456	5.529
Early childbearing	5.2	0.339	0.043	0.128	1.643	1.282	109	198	0.252	0.425
Pregnant women	-	0.049	0.007	0.154	1.361	1.167	620	1120	0.034	0.064
Want no more children	-	0.591	0.023	0.038	1.815	1.347	476	859	0.545	0.636
Want to delay birth at least 2 years	-	0.161	0.015	0.091	1.374	1.172	476	859	0.131	0.190
Knows any contraceptive method	-	0.983	0.005	0.005	1.775	1.332	620	1120	0.972	0.993
Contraceptive prevalence	5.3	0.600	0.038	0.063	5.095	2.257	476	859	0.525	0.676
Unmet need	5.4	0.153	0.024	0.157	3.829	1.957	476	859	0.105	0.201
Antenatal care coverage - at least once by skilled personnel	5.5a	0.379	0.058	0.152	3.521	1.876	141	251	0.263	0.494
Antenatal care coverage – at least four times by any provider	5.5b	0.269	0.052	0.194	3.458	1.859	141	251	0.165	0.374
Skilled attendant at delivery	5.7	0.321	0.054	0.167	3.319	1.822	141	251	0.214	0.429
Institutional deliveries	5.8	0.307	0.053	0.172	3.267	1.807	141	251	0.202	0.413
Caesarean section	5.9	0.043	0.013	0.309	1.078	1.038	141	251	0.016	0.070
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.485	0.100	0.206	1.952	1.397	29	50	0.286	0.685
Comprehensive knowledge about HIV prevention among young people	9.2	0.306	0.027	0.090	1.489	1.220	233	420	0.251	0.361
Knowledge of mother- to-child transmission of HIV	9.3	0.626	0.022	0.035	2.247	1.499	620	1120	0.583	0.670
Accepting attitudes towards people living with HIV	9.4	0.305	0.030	0.098	4.315	2.077	564	1025	0.245	0.365
Women who have been tested for HIV and know the results	9.6	0.025	0.006	0.253	1.839	1.356	620	1120	0.012	0.038
Sexually active young women who have been tested for HIV and know the results	9.7	0.041	0.018	0.436	1.972	1.404	135	243	0.005	0.077
Sex before age 15 among young women	9.11	0.152	0.030	0.199	2.967	1.723	233	420	0.091	0.212
Total fertility rate	-	3.58	0.37	0.103	4.381	2.093	1762	3188	2.84	4.32
Adolescent birth rates (ASFR 15-19)	5.1	0.149	0.021	0.142	2.344	1.531	377	684	0.106	0.191
Neonatal mortality	1.3	41.6	11.6	0.279	2.140	1.463	353	626	18.4	64.8
Post-neonatal mortality	1.4	50.0	11.9	0.239	1.719	1.311	354	628	26.1	73.8
Infant mortality	1.2	91.5	18.5	0.203	2.586	1.608	354	628	54.4	128.6
Child mortality	1.5	20.9	6.8	0.326	1.498	1.224	356	631	7.2	34.5
Under five mortality	1.1	110.5	21.9	0.198	3.077	1.754	357	633	66.7	154.2

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.815	0.050	0.062	2.846	1.687	90	171	0.715	0.916
Currently married/in union	-	0.743	0.022	0.030	1.312	1.145	267	509	0.698	0.787
Marriage before age 18	8.7	0.160	0.020	0.123	1.203	1.097	220	419	0.121	0.200
Knows any contraceptive method	-	0.994	0.003	0.003	0.789	0.889	267	509	0.988	1.000
Comprehensive knowledge about HIV prevention among young people	9.2	0.452	0.051	0.113	1.778	1.333	90	171	0.350	0.554
Knowledge of mother- to-child transmission of HIV	9.3	0.617	0.026	0.043	1.491	1.221	267	509	0.564	0.670
Accepting attitudes towards people living with HIV	9.4	0.248	0.025	0.102	1.703	1.305	263	501	0.198	0.299
Men who have been tested for HIV and know the results	9.6	0.021	0.008	0.373	1.516	1.231	267	509	0.005	0.037
Sexually active young men who have been tested for HIV and know the results	9.7	0.028	0.020	0.722	1.561	1.249	56	106	0.000	0.068
Sex before age 15 among young men	9.11	0.053	0.018	0.346	1.144	1.069	90	171	0.016	0.090
UNDER-5s										
Underweight prevalence	2.1a	0.237	0.028	0.117	2.495	1.579	327	586	0.182	0.293
Stunting prevalence	2.2a	0.460	0.030	0.065	2.121	1.456	325	583	0.400	0.520
Wasting prevalence	2.3a	0.047	0.011	0.224	1.439	1.200	325	583	0.026	0.068
Exclusive breastfeeding under 6 months	2.6	0.418	0.075	0.180	1.416	1.190	35	62	0.267	0.568
Age-appropriate breastfeeding	2.14	0.433	0.041	0.095	1.795	1.340	145	259	0.350	0.515
Tuberculosis immunization coverage	-	0.710	0.071	0.100	3.266	1.807	76	135	0.569	0.852
Received polio immunization	-	0.403	0.076	0.189	3.202	1.790	75	134	0.251	0.556
Received DPT-HepB-Hib immunization	-	0.376	0.073	0.195	3.031	1.741	75	134	0.229	0.522
Received measles immunization	-	0.532	0.063	0.118	2.068	1.438	74	131	0.406	0.658
Diarrhoea in the previous 2 weeks	-	0.238	0.027	0.113	2.404	1.550	335	600	0.184	0.292
Illness with a cough in the previous 2 weeks	-	0.045	0.010	0.212	1.280	1.132	335	600	0.026	0.065
Fever in last two weeks	-	0.204	0.023	0.112	1.942	1.393	335	600	0.158	0.250
Oral rehydration therapy with continued feeding	3.8	0.588	0.045	0.076	1.150	1.072	80	141	0.499	0.677
Antibiotic treatment of suspected pneumonia	3.10	(0.641)	(0.097)	(0.151)	(1.054)	(1.026)	15	27	(0.448)	(0.834)
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.400	0.039	0.098	3.705	1.925	322	576	0.322	0.479
Anti-malarial treatment of children under age 5	3.18	0.000	0.000	0.000	na	na	68	123	0.000	0.000
Support for learning	6.1	0.540	0.045	0.084	1.918	1.385	131	234	0.450	0.631
Attendance to early childhood education	6.7	0.203	0.044	0.216	2.778	1.667	131	234	0.116	0.291
Birth registration	8.1	0.645	0.040	0.062	4.180	2.044	335	600	0.566	0.725

Table SE.15: Sampling errors: Luangprabang

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.952	0.012	0.013	4.044	2.011	1356	1235	0.928	0.977
Household availability of insecticide-treated nets (ITNs)	3.12	0.699	0.033	0.047	6.402	2.530	1371	1249	0.633	0.765
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.811	0.038	0.047	11.895	3.449	6576	1249	0.735	0.888
Use of improved sanitation	4.3	0.567	0.045	0.080	10.476	3.237	6576	1249	0.476	0.658
Secondary school net attendance ratio (adjusted)	7.5	0.421	0.033	0.079	4.167	2.041	988	907	0.354	0.488
Prevalence of children with one or both parents dead	9.18	0.061	0.008	0.128	2.793	1.671	2853	2606	0.046	0.077
Violent discipline	8.5	0.815	0.019	0.024	2.387	1.545	2229	964	0.776	0.854
WOMEN										
Literacy rate among young women	7.1	0.703	0.035	0.049	2.475	1.573	474	435	0.634	0.772
Currently married/in union	-	0.775	0.013	0.016	1.249	1.118	1473	1350	0.749	0.800
Marriage before age 18	8.7	0.422	0.021	0.050	2.044	1.430	1226	1121	0.380	0.464
Children ever born	-	2.741	0.093	0.034	1.743	1.320	1473	1350	2.555	2.928
Children living	-	2.249	0.075	0.033	1.744	1.321	1473	1350	2.100	2.398
Children ever born to women age 40-49	-	5.295	0.226	0.043	1.800	1.342	314	288	4.843	5.747
Early childbearing	5.2	0.179	0.031	0.172	1.322	1.150	226	206	0.117	0.241
Pregnant women	-	0.054	0.007	0.120	1.119	1.058	1473	1350	0.041	0.067
Want no more children	-	0.623	0.018	0.028	1.375	1.172	1141	1045	0.588	0.658
Want to delay birth at least 2 years	-	0.163	0.014	0.088	1.561	1.249	1141	1045	0.134	0.192
Knows any contraceptive method	-	0.938	0.015	0.016	4.989	2.233	1473	1350	0.908	0.967
Contraceptive prevalence	5.3	0.498	0.024	0.048	2.421	1.556	1141	1045	0.450	0.547
Unmet need	5.4	0.207	0.013	0.063	1.075	1.037	1141	1045	0.181	0.233
Antenatal care coverage - at least once by skilled personnel	5.5a	0.460	0.050	0.109	2.642	1.626	280	260	0.359	0.560
Antenatal care coverage – at least four times by any provider	5.5b	0.314	0.044	0.139	2.307	1.519	280	260	0.226	0.402
Skilled attendant at delivery	5.7	0.367	0.047	0.128	2.449	1.565	280	260	0.273	0.461
Institutional deliveries	5.8	0.341	0.045	0.131	2.311	1.520	280	260	0.251	0.430
Caesarean section	5.9	0.028	0.011	0.382	1.085	1.042	280	260	0.007	0.049
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.515	0.068	0.133	1.350	1.162	80	73	0.378	0.652
Comprehensive knowledge about HIV prevention among young people	9.2	0.277	0.031	0.111	2.066	1.437	474	435	0.216	0.339
Knowledge of mother- to-child transmission of HIV	9.3	0.440	0.031	0.071	5.346	2.312	1473	1350	0.377	0.502
Accepting attitudes towards people living with HIV	9.4	0.171	0.024	0.139	4.621	2.150	1260	1154	0.124	0.219
Women who have been tested for HIV and know the results	9.6	0.014	0.003	0.222	0.955	0.977	1473	1350	0.008	0.020
Sexually active young women who have been tested for HIV and know the results	9.7	0.010	0.007	0.706	1.081	1.040	242	220	0.000	0.024
Sex before age 15 among young women	9.11	0.065	0.014	0.218	1.440	1.200	474	435	0.037	0.094
Total fertility rate	-	3.10	0.21	0.066	2.079	1.442	4200	3849	2.69	3.51
Adolescent birth rates (ASFR 15-19)	5.1	0.095	0.014	0.146	1.447	1.203	723	669	0.067	0.123
Neonatal mortality	1.3	34.8	7.8	0.225	1.130	1.063	766	703	19.1	50.4
Post-neonatal mortality	1.4	49.2	8.5	0.174	0.970	0.985	765	703	32.1	66.3
Infant mortality	1.2	84.0	11.7	0.139	1.022	1.011	766	704	60.6	107.4
Child mortality	1.5	25.7	6.7	0.260	1.094	1.046	770	707	12.3	39.0
Under five mortality	1.1	107.5	12.4	0.116	0.988	0.994	772	709	82.6	132.4

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.827	0.039	0.047	2.029	1.425	197	192	0.749	0.905
Currently married/in union	-	0.705	0.020	0.028	1.185	1.089	644	613	0.665	0.745
Marriage before age 18	8.7	0.125	0.015	0.120	1.038	1.019	540	511	0.095	0.154
Knows any contraceptive method	-	0.964	0.009	0.009	1.461	1.209	644	613	0.946	0.983
Comprehensive knowledge about HIV prevention among young people	9.2	0.221	0.039	0.177	1.700	1.304	197	192	0.143	0.299
Knowledge of mother- to-child transmission of HIV	9.3	0.295	0.027	0.093	2.218	1.489	644	613	0.240	0.350
Accepting attitudes towards people living with HIV	9.4	0.036	0.010	0.287	1.708	1.307	577	549	0.016	0.057
Men who have been tested for HIV and know the results	9.6	0.019	0.006	0.322	1.193	1.092	644	613	0.007	0.030
Sexually active young men who have been tested for HIV and know the results	9.7	0.022	0.016	0.702	0.952	0.976	88	85	0.000	0.054
Sex before age 15 among young men	9.11	0.016	0.009	0.588	1.081	1.040	197	192	0.000	0.035
UNDER-5s										
Underweight prevalence	2.1a	0.198	0.017	0.087	1.236	1.112	742	656	0.164	0.233
Stunting prevalence	2.2a	0.456	0.024	0.053	1.536	1.239	739	652	0.407	0.504
Wasting prevalence	2.3a	0.031	0.007	0.224	1.037	1.019	738	653	0.017	0.045
Exclusive breastfeeding under 6 months	2.6	(0.450)	(0.077)	(0.172)	(1.164)	(1.079)	56	49	(0.295)	(0.604)
Age-appropriate breastfeeding	2.14	0.442	0.030	0.069	0.925	0.962	278	248	0.381	0.502
Tuberculosis immunization coverage	-	0.852	0.040	0.047	1.549	1.245	138	125	0.772	0.931
Received polio immunization	-	0.595	0.059	0.099	1.803	1.343	138	125	0.477	0.713
Received DPT-HepB-Hib immunization	-	0.591	0.062	0.105	1.983	1.408	138	125	0.466	0.715
Received measles immunization	-	0.646	0.055	0.086	1.658	1.288	138	125	0.535	0.756
Diarrhoea in the previous 2 weeks	-	0.177	0.020	0.115	1.878	1.370	752	664	0.137	0.218
Illness with a cough in the previous 2 weeks	-	0.034	0.009	0.254	1.494	1.222	752	664	0.017	0.051
Fever in last two weeks	-	0.162	0.025	0.152	2.971	1.724	752	664	0.112	0.211
Oral rehydration therapy with continued feeding	3.8	0.707	0.048	0.067	1.312	1.146	133	121	0.612	0.802
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	25	23	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.573	0.043	0.075	5.008	2.238	741	656	0.487	0.660
Anti-malarial treatment of children under age 5	3.18	0.049	0.020	0.399	0.893	0.945	122	110	0.010	0.088
Support for learning	6.1	0.579	0.044	0.075	2.231	1.494	329	288	0.492	0.666
Attendance to early childhood education	6.7	0.275	0.045	0.162	2.868	1.693	329	288	0.185	0.364
Birth registration	8.1	0.771	0.023	0.030	2.048	1.431	752	664	0.724	0.818

Table SE.16: Sampling errors: Huaphanh

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.219	0.033	0.149	6.251	2.500	867	1011	0.154	0.284
Household availability of insecticide-treated nets (ITNs)	3.12	0.387	0.051	0.132	11.087	3.330	869	1014	0.285	0.489
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.869	0.033	0.038	9.478	3.079	5163	1014	0.803	0.934
Use of improved sanitation	4.3	0.578	0.048	0.084	9.745	3.122	5163	1014	0.482	0.675
Secondary school net attendance ratio (adjusted)	7.5	0.510	0.035	0.068	5.848	2.418	1032	1211	0.441	0.580
Prevalence of children with one or both parents dead	9.18	0.046	0.006	0.134	2.594	1.611	2541	2969	0.034	0.059
Violent discipline	8.5	0.841	0.016	0.019	1.608	1.268	1900	834	0.809	0.873
WOMEN										
Literacy rate among young women	7.1	0.673	0.045	0.067	4.357	2.087	408	476	0.583	0.763
Currently married/in union	-	0.765	0.013	0.018	1.289	1.135	1086	1273	0.738	0.792
Marriage before age 18	8.7	0.483	0.019	0.040	1.464	1.210	840	983	0.445	0.522
Children ever born	-	3.155	0.104	0.033	1.643	1.282	1086	1273	2.947	3.363
Children living	-	2.595	0.079	0.031	1.498	1.224	1086	1273	2.437	2.754
Children ever born to women age 40-49	-	5.942	0.224	0.038	1.633	1.278	239	281	5.494	6.390
Early childbearing	5.2	0.352	0.044	0.126	1.606	1.267	162	186	0.263	0.441
Pregnant women	-	0.059	0.008	0.133	1.405	1.185	1086	1273	0.043	0.075
Want no more children	-	0.678	0.016	0.024	1.193	1.092	831	973	0.646	0.711
Want to delay birth at least 2 years	-	0.177	0.015	0.085	1.493	1.222	831	973	0.147	0.207
Knows any contraceptive method	-	0.967	0.009	0.009	3.040	1.744	1086	1273	0.950	0.984
Contraceptive prevalence	5.3	0.518	0.028	0.055	3.157	1.777	831	973	0.461	0.575
Unmet need	5.4	0.162	0.017	0.103	1.981	1.408	831	973	0.129	0.196
Antenatal care coverage - at least once by skilled personnel	5.5a	0.421	0.047	0.111	2.477	1.574	237	276	0.327	0.515
Antenatal care coverage – at least four times by any provider	5.5b	0.243	0.040	0.165	2.397	1.548	237	276	0.162	0.323
Skilled attendant at delivery	5.7	0.245	0.044	0.182	2.943	1.716	237	276	0.156	0.334
Institutional deliveries	5.8	0.214	0.039	0.185	2.555	1.598	237	276	0.135	0.293
Caesarean section	5.9	0.018	0.008	0.456	1.043	1.021	237	276	0.002	0.034
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.247	0.076	0.306	2.119	1.456	61	70	0.096	0.398
Comprehensive knowledge about HIV prevention among young people	9.2	0.168	0.021	0.126	1.525	1.235	408	476	0.125	0.210
Knowledge of mother- to-child transmission of HIV	9.3	0.648	0.019	0.030	2.066	1.437	1086	1273	0.609	0.686
Accepting attitudes towards people living with HIV	9.4	0.063	0.011	0.177	2.351	1.533	959	1125	0.041	0.085
Women who have been tested for HIV and know the results	9.6	0.008	0.003	0.326	1.091	1.045	1086	1273	0.003	0.013
Sexually active young women who have been tested for HIV and know the results	9.7	0.015	0.008	0.504	0.980	0.990	213	247	0.000	0.031
Sex before age 15 among young women	9.11	0.150	0.023	0.155	2.020	1.421	408	476	0.104	0.197
Total fertility rate	-	3.77	0.28	0.074	3.112	1.764	3004	3518	3.22	4.33
Adolescent birth rates (ASFR 15-19)	5.1	0.137	0.019	0.142	1.949	1.432	625	734	0.098	0.176
Neonatal mortality	1.3	61.5	9.5	0.155	0.982	0.991	636	738	42.4	80.6
Post-neonatal mortality	1.4	38.1	7.1	0.187	0.978	0.989	635	737	23.8	52.3
Infant mortality	1.2	99.6	11.7	0.117	1.053	1.026	636	738	76.3	122.9
Child mortality	1.5	19.9	5.1	0.258	1.042	1.021	640	743	9.6	30.2
Under five mortality	1.1	117.5	11.7	0.100	1.004	1.002	641	744	94.1	141.0

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.866	0.030	0.034	1.794	1.340	198	238	0.806	0.925
Currently married/in union	-	0.692	0.022	0.031	1.351	1.162	511	614	0.648	0.735
Marriage before age 18	8.7	0.218	0.021	0.094	1.124	1.060	380	457	0.177	0.259
Knows any contraceptive method	-	0.985	0.005	0.005	1.115	1.056	511	614	0.975	0.995
Comprehensive knowledge about HIV prevention among young people	9.2	0.217	0.031	0.142	1.324	1.151	198	238	0.155	0.278
Knowledge of mother- to-child transmission of HIV	9.3	0.713	0.020	0.028	1.165	1.079	511	614	0.673	0.752
Accepting attitudes towards people living with HIV	9.4	0.072	0.012	0.162	1.203	1.097	489	588	0.049	0.096
Men who have been tested for HIV and know the results	9.6	0.012	0.005	0.445	1.433	1.197	511	614	0.001	0.022
Sexually active young men who have been tested for HIV and know the results	9.7	0.022	0.012	0.546	0.917	0.958	118	141	0.000	0.045
Sex before age 15 among young men	9.11	0.117	0.022	0.190	1.131	1.063	198	238	0.072	0.161
UNDER-5s										
Underweight prevalence	2.1a	0.235	0.016	0.070	1.016	1.008	597	675	0.202	0.268
Stunting prevalence	2.2a	0.611	0.027	0.045	2.105	1.451	590	667	0.556	0.666
Wasting prevalence	2.3a	0.019	0.005	0.260	0.866	0.931	591	668	0.009	0.029
Exclusive breastfeeding under 6 months	2.6	0.772	0.048	0.063	0.908	0.953	62	69	0.675	0.869
Age-appropriate breastfeeding	2.14	0.404	0.032	0.080	1.141	1.068	236	266	0.340	0.469
Tuberculosis immunization coverage	-	0.673	0.057	0.085	2.031	1.425	121	137	0.558	0.787
Received polio immunization	-	0.526	0.069	0.131	2.581	1.607	121	136	0.388	0.664
Received DPT-HepB-Hib immunization	-	0.529	0.070	0.132	2.639	1.625	121	136	0.389	0.668
Received measles immunization	-	0.539	0.060	0.112	1.972	1.404	120	136	0.419	0.660
Diarrhoea in the previous 2 weeks	-	0.121	0.014	0.118	1.316	1.147	606	685	0.092	0.149
Illness with a cough in the previous 2 weeks	-	0.021	0.005	0.223	0.736	0.858	606	685	0.012	0.031
Fever in last two weeks	-	0.204	0.028	0.139	3.412	1.847	606	685	0.147	0.261
Oral rehydration therapy with continued feeding	3.8	0.550	0.067	0.121	1.453	1.206	73	82	0.417	0.684
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	13	15	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.278	0.052	0.187	8.573	2.928	561	638	0.174	0.382
Anti-malarial treatment of children under age 5	3.18	0.007	0.006	0.935	0.816	0.903	124	140	0.000	0.019
Support for learning	6.1	0.444	0.036	0.080	1.471	1.213	253	286	0.372	0.515
Attendance to early childhood education	6.7	0.219	0.037	0.170	2.316	1.522	253	286	0.144	0.293
Birth registration	8.1	0.060	0.016	0.272	3.230	1.797	606	685	0.027	0.093

Table SE.17: Sampling errors: Xayabury

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.883	0.020	0.023	4.663	2.159	1261	1198	0.843	0.923
Household availability of insecticide-treated nets (ITNs)	3.12	0.506	0.041	0.081	8.105	2.847	1269	1206	0.424	0.588
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.672	0.045	0.067	10.917	3.304	5813	1206	0.582	0.761
Use of improved sanitation	4.3	0.879	0.023	0.026	5.754	2.399	5813	1206	0.834	0.924
Secondary school net attendance ratio (adjusted)	7.5	0.515	0.035	0.068	3.921	1.980	852	806	0.445	0.585
Prevalence of children with one or both parents dead	9.18	0.046	0.007	0.154	2.270	1.507	2131	2014	0.032	0.060
Violent discipline	8.5	0.785	0.019	0.024	1.880	1.371	1604	876	0.747	0.823
WOMEN										
Literacy rate among young women	7.1	0.840	0.026	0.031	2.411	1.553	502	495	0.789	0.891
Currently married/in union	-	0.781	0.011	0.015	1.070	1.034	1402	1383	0.758	0.804
Marriage before age 18	8.7	0.466	0.017	0.036	1.256	1.121	1136	1120	0.433	0.500
Children ever born	-	1.999	0.073	0.037	1.976	1.406	1402	1383	1.853	2.145
Children living	-	1.774	0.057	0.032	1.678	1.295	1402	1383	1.660	1.888
Children ever born to women age 40-49	-	3.755	0.198	0.053	2.009	1.417	265	262	3.360	4.150
Early childbearing	5.2	0.233	0.026	0.110	0.847	0.921	236	232	0.182	0.284
Pregnant women	-	0.038	0.005	0.140	1.077	1.038	1402	1383	0.027	0.049
Want no more children	-	0.604	0.016	0.027	1.193	1.092	1096	1079	0.571	0.636
Want to delay birth at least 2 years	-	0.253	0.015	0.059	1.279	1.131	1096	1079	0.223	0.283
Knows any contraceptive method	-	0.961	0.007	0.007	1.926	1.388	1402	1383	0.947	0.976
Contraceptive prevalence	5.3	0.698	0.018	0.026	1.691	1.300	1096	1079	0.662	0.734
Unmet need	5.4	0.124	0.012	0.093	1.333	1.155	1096	1079	0.101	0.147
Antenatal care coverage - at least once by skilled personnel	5.5a	0.709	0.049	0.069	2.320	1.523	205	201	0.611	0.807
Antenatal care coverage – at least four times by any provider	5.5b	0.625	0.054	0.086	2.486	1.577	205	201	0.517	0.733
Skilled attendant at delivery	5.7	0.440	0.050	0.114	2.026	1.423	205	201	0.340	0.540
Institutional deliveries	5.8	0.331	0.042	0.128	1.618	1.272	205	201	0.246	0.416
Caesarean section	5.9	0.040	0.015	0.367	1.130	1.063	205	201	0.011	0.070
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.459	0.078	0.171	1.287	1.134	53	53	0.302	0.616
Comprehensive knowledge about HIV prevention among young people	9.2	0.419	0.028	0.066	1.542	1.242	502	495	0.364	0.474
Knowledge of mother- to-child transmission of HIV	9.3	0.812	0.021	0.026	4.012	2.003	1402	1383	0.769	0.854
Accepting attitudes towards people living with HIV	9.4	0.084	0.011	0.137	2.254	1.501	1333	1317	0.061	0.107
Women who have been tested for HIV and know the results	9.6	0.004	0.002	0.502	1.530	1.237	1402	1383	0.000	0.009
Sexually active young women who have been tested for HIV and know the results	9.7	0.004	0.004	1.010	0.983	0.991	278	273	0.000	0.011
Sex before age 15 among young women	9.11	0.048	0.009	0.190	0.897	0.947	502	495	0.030	0.066
Total fertility rate	-	2.21	0.18	0.080	1.921	1.386	3996	3944	1.85	2.56
Adolescent birth rates (ASFR 15-19)	5.1	0.083	0.010	0.121	1.006	1.003	776	765	0.063	0.104
Neonatal mortality	1.3	(45.2)	(11.2)	(0.248)	(1.223)	(1.106)	481	470	(22.8)	(67.6)
Post-neonatal mortality	1.4	(14.0)	(5.5)	(0.393)	(1.153)	(1.074)	482	471	(3.0)	(25.0)
Infant mortality	1.2	(59.2)	(14.8)	(0.250)	(1.510)	(1.229)	482	471	(29.7)	(88.8)
Child mortality	1.5	(6.6)	(3.3)	(0.491)	(0.767)	(0.876)	483	473	(0.1)	(13.2)
Under five mortality	1.1	(65.5)	(16.7)	(0.255)	(1.719)	(1.311)	484	474	(32.0)	(98.9)

	MICS Indicator	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*
MEN										
Literacy rate among young men	7.1	0.892	0.025	0.028	1.370	1.170	219	217	0.843	0.942
Currently married/in union	-	0.720	0.021	0.030	1.404	1.185	635	626	0.677	0.762
Marriage before age 18	8.7	0.146	0.015	0.102	0.937	0.968	539	532	0.116	0.175
Knows any contraceptive method	-	0.978	0.006	0.007	1.226	1.107	635	626	0.965	0.991
Comprehensive knowledge about HIV prevention among young people	9.2	0.393	0.038	0.096	1.278	1.130	219	217	0.317	0.468
Knowledge of mother- to-child transmission of HIV	9.3	0.727	0.024	0.034	1.889	1.374	635	626	0.678	0.776
Accepting attitudes towards people living with HIV	9.4	0.073	0.012	0.162	1.257	1.121	614	605	0.050	0.097
Men who have been tested for HIV and know the results	9.6	0.003	0.002	0.684	1.017	1.008	635	626	0.000	0.008
Sexually active young men who have been tested for HIV and know the results	9.7	0.000	0.000	0.000	na	na	112	112	0.000	0.000
Sex before age 15 among young men	9.11	0.005	0.005	0.988	0.991	0.995	219	217	0.000	0.014
UNDER-5s										
Underweight prevalence	2.1a	0.232	0.020	0.087	1.015	1.007	481	444	0.192	0.272
Stunting prevalence	2.2a	0.390	0.022	0.056	0.851	0.923	466	430	0.346	0.433
Wasting prevalence	2.3a	0.055	0.010	0.178	0.808	0.899	473	437	0.036	0.075
Exclusive breastfeeding under 6 months	2.6	0.617	0.082	0.133	1.570	1.253	59	56	0.453	0.781
Age-appropriate breastfeeding	2.14	0.383	0.036	0.095	1.081	1.039	210	195	0.310	0.455
Tuberculosis immunization coverage	-	0.978	0.015	0.016	0.906	0.952	93	85	0.948	1.000
Received polio immunization	-	0.838	0.031	0.038	0.612	0.782	93	85	0.775	0.901
Received DPT-HepB-Hib immunization	-	0.918	0.023	0.025	0.595	0.772	93	85	0.872	0.965
Received measles immunization	-	0.882	0.028	0.032	0.623	0.789	93	85	0.826	0.937
Diarrhoea in the previous 2 weeks	-	0.104	0.016	0.156	1.267	1.126	486	449	0.072	0.137
Illness with a cough in the previous 2 weeks	-	0.004	0.003	0.694	0.965	0.983	486	449	0.000	0.011
Fever in last two weeks	-	0.127	0.015	0.122	0.964	0.982	486	449	0.096	0.158
Oral rehydration therapy with continued feeding	3.8	(0.682)	(0.066)	(0.096)	(0.895)	(0.946)	51	46	(0.551)	(0.814)
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	2	2	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.509	0.048	0.094	4.028	2.007	476	440	0.413	0.604
Anti-malarial treatment of children under age 5	3.18	0.000	0.000	0.000	na	na	62	56	0.000	0.000
Support for learning	6.1	0.916	0.019	0.021	0.819	0.905	182	168	0.878	0.955
Attendance to early childhood education	6.7	0.241	0.042	0.176	1.640	1.281	182	168	0.156	0.326
Birth registration	8.1	0.891	0.016	0.017	1.116	1.056	486	449	0.860	0.922

Table SE.18: Sampling errors: Xiengkhuang

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.466	0.048	0.102	8.503	2.916	759	936	0.371	0.562
Household availability of insecticide-treated nets (ITNs)	3.12	0.279	0.030	0.109	4.338	2.083	762	941	0.218	0.340
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.758	0.049	0.064	12.097	3.478	4198	941	0.661	0.855
Use of improved sanitation	4.3	0.530	0.047	0.088	8.184	2.861	4198	941	0.437	0.623
Secondary school net attendance ratio (adjusted)	7.5	0.585	0.036	0.061	5.370	2.317	831	1022	0.513	0.656
Prevalence of children with one or both parents dead	9.18	0.050	0.007	0.146	2.836	1.684	2041	2511	0.036	0.065
Violent discipline	8.5	0.799	0.027	0.034	3.527	1.878	1467	750	0.744	0.854
WOMEN										
Literacy rate among young women	7.1	0.775	0.030	0.039	2.427	1.558	389	471	0.716	0.835
Currently married/in union	-	0.712	0.013	0.018	0.880	0.938	930	1134	0.687	0.738
Marriage before age 18	8.7	0.413	0.023	0.055	1.781	1.335	679	828	0.367	0.459
Children ever born	-	2.583	0.102	0.040	1.642	1.281	930	1134	2.379	2.787
Children living	-	2.283	0.087	0.038	1.630	1.277	930	1134	2.108	2.458
Children ever born to women age 40-49	-	6.073	0.230	0.038	1.455	1.206	146	183	5.612	6.534
Early childbearing	5.2	0.225	0.033	0.146	1.010	1.005	137	165	0.159	0.290
Pregnant women	-	0.045	0.007	0.147	1.153	1.074	930	1134	0.032	0.058
Want no more children	-	0.559	0.022	0.040	1.597	1.264	663	809	0.515	0.603
Want to delay birth at least 2 years	-	0.269	0.018	0.066	1.312	1.145	663	809	0.234	0.305
Knows any contraceptive method	-	0.923	0.011	0.012	1.977	1.406	930	1134	0.901	0.945
Contraceptive prevalence	5.3	0.623	0.019	0.030	1.193	1.092	663	809	0.586	0.660
Unmet need	5.4	0.104	0.011	0.109	1.119	1.058	663	809	0.081	0.126
Antenatal care coverage - at least once by skilled personnel	5.5a	0.503	0.053	0.105	2.703	1.644	200	241	0.397	0.610
Antenatal care coverage – at least four times by any provider	5.5b	0.329	0.048	0.147	2.549	1.597	200	241	0.233	0.426
Skilled attendant at delivery	5.7	0.367	0.049	0.132	2.435	1.560	200	241	0.270	0.464
Institutional deliveries	5.8	0.347	0.047	0.137	2.388	1.545	200	241	0.252	0.442
Caesarean section	5.9	0.023	0.009	0.390	0.858	0.926	200	241	0.005	0.041
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.188	0.078	0.417	1.770	1.330	37	45	0.031	0.344
Comprehensive knowledge about HIV prevention among young people	9.2	0.221	0.025	0.111	1.648	1.284	389	471	0.172	0.270
Knowledge of mother- to-child transmission of HIV	9.3	0.647	0.017	0.027	1.462	1.209	930	1134	0.612	0.681
Accepting attitudes towards people living with HIV	9.4	0.116	0.013	0.114	1.683	1.297	804	982	0.090	0.143
Women who have been tested for HIV and know the results	9.6	0.002	0.001	0.588	0.861	0.928	930	1134	0.000	0.005
Sexually active young women who have been tested for HIV and know the results	9.7	0.003	0.003	1.007	0.596	0.772	167	201	0.000	0.009
Sex before age 15 among young women	9.11	0.078	0.017	0.213	1.810	1.345	389	471	0.045	0.112
Total fertility rate	-	3.59	0.32	0.089	2.719	1.649	2515	3079	2.95	4.22
Adolescent birth rates (ASFR 15-19)	5.1	0.101	0.013	0.133	1.348	1.161	603	730	0.074	0.128
Neonatal mortality	1.3	21.3	5.7	0.269	1.036	1.018	522	628	9.8	32.8
Post-neonatal mortality	1.4	31.2	7.5	0.241	1.069	1.034	523	629	16.1	46.2
Infant mortality	1.2	52.5	9.5	0.180	1.113	1.055	523	629	33.6	71.4
Child mortality	1.5	14.8	5.1	0.342	1.030	1.015	528	635	4.7	24.9
Under five mortality	1.1	66.5	11.7	0.176	1.179	1.086	529	636	43.1	90.0

	MICS Indicator	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*
MEN										
Literacy rate among young men	7.1	0.878	0.022	0.025	0.993	0.997	194	223	0.834	0.922
Currently married/in union	-	0.663	0.021	0.032	1.028	1.014	442	513	0.620	0.705
Marriage before age 18	8.7	0.159	0.021	0.129	1.146	1.071	311	363	0.118	0.201
Knows any contraceptive method	-	0.976	0.008	0.008	1.360	1.166	442	513	0.961	0.992
Comprehensive knowledge about HIV prevention among young people	9.2	0.242	0.033	0.136	1.309	1.144	194	223	0.176	0.307
Knowledge of mother- to-child transmission of HIV	9.3	0.633	0.019	0.030	0.819	0.905	442	513	0.594	0.671
Accepting attitudes towards people living with HIV	9.4	0.115	0.017	0.150	1.444	1.202	424	493	0.080	0.149
Men who have been tested for HIV and know the results	9.6	0.013	0.005	0.380	0.942	0.970	442	513	0.003	0.022
Sexually active young men who have been tested for HIV and know the results	9.7	0.030	0.017	0.547	0.933	0.966	87	101	0.000	0.063
Sex before age 15 among young men	9.11	0.030	0.011	0.369	0.922	0.960	194	223	0.008	0.051
UNDER-5s										
Underweight prevalence	2.1a	0.199	0.019	0.097	1.415	1.189	529	607	0.160	0.237
Stunting prevalence	2.2a	0.529	0.031	0.059	2.294	1.514	520	597	0.467	0.591
Wasting prevalence	2.3a	0.020	0.007	0.358	1.573	1.254	523	601	0.006	0.034
Exclusive breastfeeding under 6 months	2.6	0.738	0.056	0.076	1.048	1.024	59	66	0.626	0.849
Age-appropriate breastfeeding	2.14	0.423	0.029	0.067	0.811	0.900	215	244	0.366	0.481
Tuberculosis immunization coverage	-	0.701	0.058	0.082	1.885	1.373	105	119	0.585	0.817
Received polio immunization	-	0.418	0.049	0.118	1.188	1.090	106	120	0.319	0.516
Received DPT-HepB-Hib immunization	-	0.365	0.050	0.136	1.271	1.127	106	120	0.265	0.464
Received measles immunization	-	0.486	0.060	0.123	1.701	1.304	106	120	0.367	0.606
Diarrhoea in the previous 2 weeks	-	0.123	0.015	0.121	1.280	1.131	540	619	0.093	0.153
Illness with a cough in the previous 2 weeks	-	0.002	0.002	0.972	1.034	1.017	540	619	0.000	0.005
Fever in last two weeks	-	0.117	0.014	0.121	1.210	1.100	540	619	0.089	0.146
Oral rehydration therapy with continued feeding	3.8	0.415	0.073	0.176	1.669	1.292	67	77	0.269	0.561
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	1	1	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.203	0.039	0.191	5.266	2.295	496	570	0.126	0.280
Anti-malarial treatment of children under age 5	3.18	0.000	0.000	0.000	na	na	63	77	0.000	0.000
Support for learning	6.1	0.510	0.040	0.079	1.668	1.292	225	261	0.430	0.590
Attendance to early childhood education	6.7	0.167	0.027	0.160	1.325	1.151	225	261	0.114	0.220
Birth registration	8.1	0.806	0.020	0.025	1.612	1.269	540	619	0.766	0.847

Table SE.19: Sampling errors: Vientiane

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.763	0.020	0.026	2.560	1.600	1431	1215	0.724	0.802
Household availability of insecticide-treated nets (ITNs)	3.12	0.328	0.038	0.116	8.048	2.837	1447	1227	0.252	0.404
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.613	0.037	0.060	7.027	2.651	7079	1227	0.539	0.687
Use of improved sanitation	4.3	0.850	0.020	0.024	4.024	2.006	7079	1227	0.810	0.891
Secondary school net attendance ratio (adjusted)	7.5	0.595	0.033	0.055	4.335	2.082	1140	976	0.529	0.660
Prevalence of children with one or both parents dead	9.18	0.026	0.006	0.231	3.562	1.887	2905	2455	0.014	0.039
Violent discipline	8.5	0.845	0.020	0.024	2.957	1.720	2152	926	0.804	0.886
WOMEN										
Literacy rate among young women	7.1	0.841	0.024	0.028	1.922	1.386	542	463	0.794	0.888
Currently married/in union	-	0.768	0.013	0.018	1.460	1.208	1677	1428	0.741	0.795
Marriage before age 18	8.7	0.389	0.021	0.055	2.280	1.510	1393	1188	0.346	0.432
Children ever born	-	2.243	0.090	0.040	2.560	1.600	1677	1428	2.063	2.423
Children living	-	2.052	0.077	0.038	2.420	1.556	1677	1428	1.897	2.207
Children ever born to women age 40-49	-	4.083	0.196	0.048	2.094	1.447	350	299	3.691	4.476
Early childbearing	5.2	0.144	0.033	0.227	1.921	1.386	258	223	0.079	0.210
Pregnant women	-	0.050	0.006	0.114	0.983	0.991	1677	1428	0.039	0.062
Want no more children	-	0.495	0.018	0.036	1.359	1.166	1288	1097	0.460	0.530
Want to delay birth at least 2 years	-	0.137	0.010	0.077	1.020	1.010	1288	1097	0.116	0.158
Knows any contraceptive method	-	0.962	0.012	0.012	5.504	2.346	1677	1428	0.938	0.986
Contraceptive prevalence	5.3	0.463	0.025	0.054	2.763	1.662	1288	1097	0.413	0.513
Unmet need	5.4	0.251	0.019	0.076	2.133	1.460	1288	1097	0.212	0.289
Antenatal care coverage - at least once by skilled personnel	5.5a	0.741	0.040	0.054	2.101	1.449	295	250	0.661	0.822
Antenatal care coverage – at least four times by any provider	5.5b	0.548	0.042	0.077	1.791	1.338	295	250	0.463	0.632
Skilled attendant at delivery	5.7	0.544	0.051	0.094	2.607	1.614	295	250	0.442	0.646
Institutional deliveries	5.8	0.533	0.051	0.096	2.637	1.624	295	250	0.430	0.636
Caesarean section	5.9	0.031	0.010	0.327	0.846	0.920	295	250	0.011	0.051
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.263	0.061	0.231	1.354	1.164	82	72	0.142	0.385
Comprehensive knowledge about HIV prevention among young people	9.2	0.200	0.022	0.108	1.354	1.163	542	463	0.157	0.243
Knowledge of mother- to-child transmission of HIV	9.3	0.571	0.021	0.036	2.458	1.568	1677	1428	0.530	0.612
Accepting attitudes towards people living with HIV	9.4	0.263	0.024	0.092	4.041	2.010	1561	1325	0.214	0.312
Women who have been tested for HIV and know the results	9.6	0.015	0.004	0.279	1.638	1.280	1677	1428	0.006	0.023
Sexually active young women who have been tested for HIV and know the results	9.7	0.023	0.010	0.428	0.989	0.994	272	232	0.003	0.042
Sex before age 15 among young women	9.11	0.044	0.012	0.264	1.496	1.223	542	463	0.021	0.068
Total fertility rate	-	2.65	0.17	0.064	2.053	1.431	4765	4057	2.31	2.99
Adolescent birth rates (ASFR 15-19)	5.1	0.086	0.013	0.152	1.538	1.241	795	682	0.060	0.112
Neonatal mortality	1.3	10.3	4.7	0.453	1.339	1.157	721	606	1.0	19.6
Post-neonatal mortality	1.4	20.4	7.6	0.374	1.610	1.269	721	606	5.1	35.7
Infant mortality	1.2	30.7	8.8	0.286	1.515	1.231	721	606	13.2	48.2
Child mortality	1.5	6.7	3.1	0.467	1.024	1.012	723	608	0.4	12.9
Under five mortality	1.1	37.2	8.9	0.239	1.395	1.181	723	608	19.4	54.9

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.904	0.018	0.019	0.783	0.885	250	223	0.869	0.939
Currently married/in union	-	0.662	0.022	0.033	1.326	1.151	721	633	0.619	0.706
Marriage before age 18	8.7	0.108	0.016	0.147	1.285	1.133	566	492	0.076	0.139
Knows any contraceptive method	-	0.980	0.010	0.011	3.561	1.887	721	633	0.960	1.000
Comprehensive knowledge about HIV prevention among young people	9.2	0.264	0.037	0.141	1.576	1.255	250	223	0.190	0.339
Knowledge of mother- to-child transmission of HIV	9.3	0.590	0.022	0.038	1.302	1.141	721	633	0.545	0.635
Accepting attitudes towards people living with HIV	9.4	0.137	0.015	0.109	1.143	1.069	696	612	0.107	0.166
Men who have been tested for HIV and know the results	9.6	0.013	0.006	0.495	2.049	1.432	721	633	0.000	0.026
Sexually active young men who have been tested for HIV and know the results	9.7	0.036	0.021	0.568	0.986	0.993	94	82	0.000	0.078
Sex before age 15 among young men	9.11	0.013	0.007	0.570	0.934	0.966	250	223	0.000	0.027
UNDER-5s										
Underweight prevalence	2.1a	0.189	0.016	0.085	1.026	1.013	744	609	0.157	0.222
Stunting prevalence	2.2a	0.426	0.032	0.075	2.536	1.592	738	604	0.362	0.490
Wasting prevalence	2.3a	0.046	0.008	0.164	0.774	0.880	729	596	0.031	0.061
Exclusive breastfeeding under 6 months	2.6	0.560	0.064	0.115	1.035	1.017	76	63	0.432	0.688
Age-appropriate breastfeeding	2.14	0.496	0.039	0.078	1.567	1.252	322	265	0.419	0.573
Tuberculosis immunization coverage	-	0.868	0.033	0.038	1.222	1.106	160	132	0.802	0.933
Received polio immunization	-	0.571	0.048	0.085	1.256	1.121	160	132	0.474	0.668
Received DPT-HepB-Hib immunization	-	0.687	0.050	0.073	1.519	1.232	160	132	0.587	0.787
Received measles immunization	-	0.748	0.043	0.057	1.279	1.131	160	132	0.662	0.833
Diarrhoea in the previous 2 weeks	-	0.043	0.007	0.168	0.797	0.893	767	629	0.029	0.058
Illness with a cough in the previous 2 weeks	-	0.016	0.005	0.289	0.873	0.934	767	629	0.007	0.026
Fever in last two weeks	-	0.115	0.014	0.124	1.251	1.119	767	629	0.087	0.144
Oral rehydration therapy with continued feeding	3.8	(0.333)	(0.104)	(0.313)	(1.268)	(1.126)	33	27	(0.125)	(0.541)
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	13	10	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.184	0.039	0.214	6.185	2.487	732	600	0.105	0.263
Anti-malarial treatment of children under age 5	3.18	0.000	0.000	0.000	na	na	88	71	0.000	0.000
Support for learning	6.1	0.650	0.045	0.070	2.301	1.517	312	254	0.559	0.741
Attendance to early childhood education	6.7	0.302	0.042	0.141	2.166	1.472	312	254	0.217	0.387
Birth registration	8.1	0.773	0.030	0.039	3.281	1.811	767	629	0.713	0.834

Table SE.20: Sampling errors: Borikhamxay

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.934	0.020	0.022	6.275	2.505	803	945	0.893	0.974
Household availability of insecticide-treated nets (ITNs)	3.12	0.670	0.031	0.046	4.071	2.018	804	946	0.608	0.732
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.618	0.036	0.058	5.135	2.266	3864	946	0.547	0.690
Use of improved sanitation	4.3	0.831	0.026	0.031	4.585	2.141	3864	946	0.779	0.883
Secondary school net attendance ratio (adjusted)	7.5	0.529	0.037	0.070	4.270	2.066	655	778	0.455	0.603
Prevalence of children with one or both parents dead	9.18	0.027	0.006	0.221	2.624	1.620	1609	1916	0.015	0.039
Violent discipline	8.5	0.353	0.039	0.109	4.576	2.139	1188	702	0.276	0.430
WOMEN										
Literacy rate among young women	7.1	0.787	0.033	0.043	2.644	1.626	322	397	0.720	0.854
Currently married/in union	-	0.737	0.015	0.021	1.307	1.143	901	1109	0.707	0.767
Marriage before age 18	8.7	0.431	0.022	0.052	1.809	1.345	717	882	0.386	0.476
Children ever born	-	2.290	0.078	0.034	1.426	1.194	901	1109	2.134	2.447
Children living	-	2.090	0.069	0.033	1.403	1.184	901	1109	1.952	2.228
Children ever born to women age 40-49	-	4.446	0.199	0.045	1.706	1.306	192	236	4.047	4.845
Early childbearing	5.2	0.194	0.031	0.159	1.022	1.011	138	170	0.132	0.255
Pregnant women	-	0.039	0.006	0.148	0.982	0.991	901	1109	0.028	0.051
Want no more children	-	0.537	0.022	0.040	1.543	1.242	664	816	0.493	0.580
Want to delay birth at least 2 years	-	0.227	0.019	0.085	1.735	1.317	664	816	0.188	0.266
Knows any contraceptive method	-	0.949	0.015	0.015	4.893	2.212	901	1109	0.920	0.978
Contraceptive prevalence	5.3	0.531	0.026	0.048	2.148	1.465	664	816	0.480	0.583
Unmet need	5.4	0.139	0.016	0.115	1.757	1.325	664	816	0.107	0.171
Antenatal care coverage - at least once by skilled personnel	5.5a	0.607	0.051	0.084	2.182	1.477	162	202	0.505	0.709
Antenatal care coverage – at least four times by any provider	5.5b	0.469	0.049	0.104	1.907	1.381	162	202	0.372	0.566
Skilled attendant at delivery	5.7	0.563	0.042	0.075	1.456	1.207	162	202	0.478	0.647
Institutional deliveries	5.8	0.522	0.040	0.077	1.288	1.135	162	202	0.442	0.602
Caesarean section	5.9	0.030	0.012	0.387	0.934	0.967	162	202	0.007	0.053
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	(0.575)	(0.095)	(0.165)	(1.518)	(1.232)	35	42	(0.000)	(0.765)
Comprehensive knowledge about HIV prevention among young people	9.2	0.263	0.028	0.108	1.650	1.284	322	397	0.206	0.320
Knowledge of mother- to-child transmission of HIV	9.3	0.501	0.030	0.060	4.015	2.004	901	1109	0.441	0.561
Accepting attitudes towards people living with HIV	9.4	0.316	0.020	0.064	1.797	1.341	774	953	0.276	0.356
Women who have been tested for HIV and know the results	9.6	0.010	0.004	0.357	1.464	1.210	901	1109	0.003	0.018
Sexually active young women who have been tested for HIV and know the results	9.7	0.028	0.012	0.443	1.021	1.011	149	183	0.003	0.052
Sex before age 15 among young women	9.11	0.042	0.011	0.263	1.209	1.099	322	397	0.020	0.065
Total fertility rate	-	2.80	0.19	0.066	1.573	1.254	2530	3110	2.43	3.17
Adolescent birth rates (ASFR 15-19)	5.1	0.079	0.012	0.149	1.121	1.059	501	615	0.055	0.102
Neonatal mortality	1.3	(23.8)	(8.8)	(0.371)	(1.376)	(1.173)	385	479	(6.2)	(41.5)
Post-neonatal mortality	1.4	(21.4)	(5.5)	(0.259)	(0.729)	(0.854)	386	480	(10.3)	(32.5)
Infant mortality	1.2	(45.3)	(9.4)	(0.207)	(0.927)	(0.963)	386	480	(26.6)	(64.0)
Child mortality	1.5	(6.9)	(3.9)	(0.565)	(1.061)	(1.030)	387	481	0.0	(14.7)
Under five mortality	1.1	(51.9)	(9.5)	(0.183)	(0.848)	(0.921)	387	482	(32.9)	(70.8)

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.884	0.032	0.036	1.599	1.264	128	163	0.820	0.947
Currently married/in union	-	0.669	0.023	0.034	1.123	1.060	390	488	0.624	0.715
Marriage before age 18	8.7	0.132	0.018	0.138	1.123	1.060	311	388	0.096	0.169
Knows any contraceptive method	-	0.980	0.006	0.006	0.974	0.987	390	488	0.968	0.993
Comprehensive knowledge about HIV prevention among young people	9.2	0.430	0.045	0.105	1.353	1.163	128	163	0.340	0.521
Knowledge of mother- to-child transmission of HIV	9.3	0.732	0.030	0.041	2.201	1.484	390	488	0.672	0.791
Accepting attitudes towards people living with HIV	9.4	0.139	0.020	0.141	1.531	1.237	382	478	0.100	0.178
Men who have been tested for HIV and know the results	9.6	0.008	0.005	0.582	1.294	1.137	390	488	0.000	0.017
Sexually active young men who have been tested for HIV and know the results	9.7	0.000	0.000	0.000	na	na	45	58	0.000	0.000
Sex before age 15 among young men	9.11	0.000	0.000	0.000	na	na	128	163	0.000	0.000
UNDER-5s										
Underweight prevalence	2.1a	0.198	0.019	0.094	1.014	1.007	395	466	0.161	0.236
Stunting prevalence	2.2a	0.408	0.032	0.078	1.931	1.390	391	461	0.344	0.471
Wasting prevalence	2.3a	0.062	0.011	0.176	0.934	0.967	385	454	0.040	0.084
Exclusive breastfeeding under 6 months	2.6	0.450	0.073	0.163	1.124	1.060	45	53	0.304	0.596
Age-appropriate breastfeeding	2.14	0.432	0.039	0.090	1.248	1.117	171	202	0.354	0.510
Tuberculosis immunization coverage	-	0.925	0.027	0.029	1.180	1.086	94	111	0.871	0.980
Received polio immunization	-	0.612	0.053	0.086	1.290	1.136	94	111	0.507	0.718
Received DPT-HepB-Hib immunization	-	0.656	0.056	0.085	1.490	1.221	94	110	0.545	0.767
Received measles immunization	-	0.751	0.053	0.071	1.674	1.294	94	111	0.644	0.858
Diarrhoea in the previous 2 weeks	-	0.069	0.012	0.172	1.045	1.022	402	474	0.045	0.093
Illness with a cough in the previous 2 weeks	-	0.012	0.006	0.467	1.246	1.116	402	474	0.001	0.023
Fever in last two weeks	-	0.051	0.013	0.261	1.728	1.314	402	474	0.024	0.078
Oral rehydration therapy with continued feeding	3.8	(0.714)	(0.088)	(0.123)	(1.176)	(1.085)	28	32	(0.539)	(0.890)
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	5	6	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.623	0.041	0.066	3.362	1.833	395	466	0.541	0.705
Anti-malarial treatment of children under age 5	3.18	(0.000)	(0.000)	(0.000)	na	na	20	25	(0.000)	(0.000)
Support for learning	6.1	0.572	0.043	0.075	1.389	1.178	157	184	0.485	0.658
Attendance to early childhood education	6.7	0.161	0.034	0.213	1.604	1.267	157	184	0.093	0.230
Birth registration	8.1	0.906	0.014	0.016	1.115	1.056	402	474	0.877	0.934

Table SE.21: Sampling errors: Khammuane

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.760	0.031	0.040	6.117	2.473	1076	1197	0.699	0.822
Household availability of insecticide-treated nets (ITNs)	3.12	0.518	0.027	0.053	3.626	1.904	1078	1199	0.463	0.573
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.569	0.035	0.061	5.944	2.438	5129	1199	0.500	0.639
Use of improved sanitation	4.3	0.398	0.038	0.096	7.220	2.687	5129	1199	0.322	0.474
Secondary school net attendance ratio (adjusted)	7.5	0.380	0.032	0.083	4.259	2.064	888	1003	0.317	0.444
Prevalence of children with one or both parents dead	9.18	0.058	0.008	0.134	2.799	1.673	2323	2561	0.042	0.073
Violent discipline	8.5	0.805	0.015	0.019	1.240	1.113	1762	878	0.775	0.835
WOMEN										
Literacy rate among young women	7.1	0.680	0.040	0.058	3.260	1.806	378	454	0.601	0.759
Currently married/in union	-	0.725	0.015	0.021	1.470	1.213	1082	1279	0.694	0.755
Marriage before age 18	8.7	0.373	0.020	0.053	1.688	1.299	876	1028	0.334	0.413
Children ever born	-	2.693	0.097	0.036	1.809	1.345	1082	1279	2.499	2.887
Children living	-	2.187	0.074	0.034	1.711	1.308	1082	1279	2.039	2.336
Children ever born to women age 40-49	-	4.903	0.240	0.049	2.124	1.457	241	277	4.423	5.382
Early childbearing	5.2	0.184	0.031	0.168	1.284	1.133	171	203	0.122	0.246
Pregnant women	-	0.045	0.007	0.147	1.285	1.134	1082	1279	0.032	0.058
Want no more children	-	0.559	0.019	0.034	1.374	1.172	784	919	0.521	0.598
Want to delay birth at least 2 years	-	0.203	0.017	0.083	1.626	1.275	784	919	0.169	0.237
Knows any contraceptive method	-	0.964	0.012	0.013	5.323	2.307	1082	1279	0.940	0.988
Contraceptive prevalence	5.3	0.506	0.022	0.043	1.736	1.318	784	919	0.463	0.550
Unmet need	5.4	0.185	0.017	0.091	1.748	1.322	784	919	0.151	0.219
Antenatal care coverage - at least once by skilled personnel	5.5a	0.475	0.051	0.107	2.752	1.659	233	267	0.374	0.577
Antenatal care coverage – at least four times by any provider	5.5b	0.282	0.039	0.137	1.962	1.401	233	267	0.205	0.359
Skilled attendant at delivery	5.7	0.351	0.051	0.147	3.092	1.758	233	267	0.248	0.453
Institutional deliveries	5.8	0.296	0.047	0.158	2.797	1.672	233	267	0.202	0.389
Caesarean section	5.9	0.025	0.010	0.413	1.153	1.074	233	267	0.004	0.045
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.485	0.089	0.183	1.648	1.284	47	53	0.308	0.663
Comprehensive knowledge about HIV prevention among young people	9.2	0.214	0.022	0.102	1.282	1.132	378	454	0.171	0.258
Knowledge of mother- to-child transmission of HIV	9.3	0.642	0.023	0.036	3.020	1.738	1082	1279	0.595	0.688
Accepting attitudes towards people living with HIV	9.4	0.111	0.017	0.154	3.537	1.881	1001	1188	0.077	0.145
Women who have been tested for HIV and know the results	9.6	0.016	0.004	0.260	1.433	1.197	1082	1279	0.008	0.025
Sexually active young women who have been tested for HIV and know the results	9.7	0.036	0.013	0.360	1.018	1.009	181	210	0.010	0.062
Sex before age 15 among young women	9.11	0.060	0.013	0.216	1.361	1.167	378	454	0.034	0.086
Total fertility rate	-	3.72	0.27	0.071	2.673	1.635	3045	3578	3.19	4.26
Adolescent birth rates (ASFR 15-19)	5.1	0.108	0.013	0.123	0.964	0.982	573	694	0.082	0.135
Neonatal mortality	1.3	62.1	11.3	0.182	1.047	1.023	598	685	39.5	84.8
Post-neonatal mortality	1.4	68.8	11.8	0.172	1.462	1.209	602	689	45.1	92.5
Infant mortality	1.2	130.9	17.1	0.131	1.353	1.163	603	690	96.7	165.2
Child mortality	1.5	8.2	3.4	0.420	1.014	1.007	600	687	1.3	15.1
Under five mortality	1.1	138.1	17.0	0.123	1.286	1.134	605	693	104.1	172.0

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.741	0.048	0.064	2.533	1.592	183	216	0.645	0.836
Currently married/in union	-	0.635	0.025	0.039	1.527	1.236	503	589	0.586	0.684
Marriage before age 18	8.7	0.146	0.020	0.134	1.373	1.172	388	451	0.107	0.185
Knows any contraceptive method	-	0.975	0.011	0.012	3.111	1.764	503	589	0.952	0.997
Comprehensive knowledge about HIV prevention among young people	9.2	0.300	0.044	0.146	1.972	1.404	183	216	0.212	0.388
Knowledge of mother- to-child transmission of HIV	9.3	0.621	0.022	0.035	1.163	1.078	503	589	0.578	0.664
Accepting attitudes towards people living with HIV	9.4	0.195	0.022	0.114	1.828	1.352	492	577	0.150	0.240
Men who have been tested for HIV and know the results	9.6	0.028	0.007	0.235	0.951	0.975	503	589	0.015	0.042
Sexually active young men who have been tested for HIV and know the results	9.7	0.071	0.034	0.484	0.987	0.993	47	56	0.002	0.140
Sex before age 15 among young men	9.11	0.017	0.011	0.670	1.682	1.297	183	216	0.000	0.040
UNDER-5s										
Underweight prevalence	2.1a	0.294	0.025	0.086	1.973	1.405	599	646	0.244	0.345
Stunting prevalence	2.2a	0.408	0.028	0.069	2.100	1.449	595	641	0.351	0.464
Wasting prevalence	2.3a	0.071	0.010	0.148	1.073	1.036	600	647	0.050	0.092
Exclusive breastfeeding under 6 months	2.6	0.134	0.052	0.386	1.431	1.196	58	63	0.031	0.238
Age-appropriate breastfeeding	2.14	0.475	0.034	0.071	1.236	1.112	249	269	0.407	0.543
Tuberculosis immunization coverage	-	0.848	0.034	0.040	1.106	1.052	114	126	0.781	0.916
Received polio immunization	-	0.587	0.053	0.089	1.421	1.192	114	126	0.482	0.692
Received DPT-HepB-Hib immunization	-	0.666	0.054	0.081	1.634	1.278	112	125	0.558	0.774
Received measles immunization	-	0.727	0.040	0.056	1.031	1.016	114	126	0.646	0.808
Diarrhoea in the previous 2 weeks	-	0.065	0.012	0.184	1.531	1.237	603	650	0.041	0.090
Illness with a cough in the previous 2 weeks	-	0.028	0.007	0.246	1.129	1.063	603	650	0.014	0.042
Fever in last two weeks	-	0.230	0.025	0.109	2.314	1.521	603	650	0.180	0.281
Oral rehydration therapy with continued feeding	3.8	(0.552)	(0.087)	(0.158)	(1.255)	(1.120)	39	42	(0.378)	(0.726)
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	17	17	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.423	0.038	0.089	3.685	1.920	591	635	0.348	0.498
Anti-malarial treatment of children under age 5	3.18	0.000	0.000	0.000	na	na	139	150	0.000	0.000
Support for learning	6.1	0.436	0.036	0.082	1.279	1.131	226	244	0.364	0.508
Attendance to early childhood education	6.7	0.163	0.034	0.207	2.021	1.421	226	244	0.095	0.230
Birth registration	8.1	0.761	0.024	0.031	2.015	1.420	603	650	0.713	0.809

Table SE.22: Sampling errors: Savannakhet

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.794	0.032	0.041	8.868	2.978	2631	1388	0.729	0.858
Household availability of insecticide-treated nets (ITNs)	3.12	0.521	0.030	0.058	5.162	2.272	2659	1403	0.461	0.582
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.484	0.036	0.075	7.357	2.712	14954	1403	0.411	0.556
Use of improved sanitation	4.3	0.390	0.034	0.088	6.867	2.621	14954	1403	0.322	0.458
Secondary school net attendance ratio (adjusted)	7.5	0.328	0.027	0.083	4.482	2.117	2550	1350	0.273	0.382
Prevalence of children with one or both parents dead	9.18	0.057	0.007	0.115	2.751	1.659	6536	3441	0.044	0.070
Violent discipline	8.5	0.777	0.014	0.018	1.320	1.149	4870	1108	0.748	0.806
WOMEN										
Literacy rate among young women	7.1	0.586	0.036	0.061	3.178	1.783	1177	598	0.515	0.658
Currently married/in union	-	0.732	0.014	0.019	1.681	1.296	3376	1703	0.704	0.760
Marriage before age 18	8.7	0.386	0.020	0.051	2.215	1.488	2705	1362	0.347	0.426
Children ever born	-	2.853	0.106	0.037	2.370	1.540	3376	1703	2.642	3.064
Children living	-	2.286	0.081	0.035	2.333	1.527	3376	1703	2.125	2.447
Children ever born to women age 40-49	-	5.435	0.175	0.032	1.500	1.225	766	389	5.085	5.784
Early childbearing	5.2	0.161	0.027	0.166	1.349	1.162	505	257	0.108	0.214
Pregnant women	-	0.063	0.006	0.097	1.075	1.037	3376	1703	0.051	0.075
Want no more children	-	0.524	0.019	0.036	1.794	1.339	2472	1237	0.486	0.562
Want to delay birth at least 2 years	-	0.222	0.013	0.059	1.213	1.101	2472	1237	0.196	0.249
Knows any contraceptive method	-	0.890	0.016	0.018	4.494	2.120	3376	1703	0.858	0.923
Contraceptive prevalence	5.3	0.415	0.019	0.045	1.794	1.339	2472	1237	0.377	0.453
Unmet need	5.4	0.213	0.012	0.055	1.023	1.011	2472	1237	0.190	0.237
Antenatal care coverage - at least once by skilled personnel	5.5a	0.522	0.038	0.073	2.011	1.418	683	342	0.445	0.599
Antenatal care coverage – at least four times by any provider	5.5b	0.315	0.034	0.109	1.849	1.360	683	342	0.247	0.384
Skilled attendant at delivery	5.7	0.422	0.034	0.080	1.576	1.255	683	342	0.355	0.489
Institutional deliveries	5.8	0.389	0.033	0.086	1.602	1.266	683	342	0.322	0.456
Caesarean section	5.9	0.023	0.008	0.342	0.934	0.967	683	342	0.007	0.039
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.402	0.058	0.144	1.274	1.129	193	93	0.286	0.517
Comprehensive knowledge about HIV prevention among young people	9.2	0.187	0.022	0.116	1.847	1.359	1177	598	0.143	0.230
Knowledge of mother- to-child transmission of HIV	9.3	0.500	0.024	0.049	4.035	2.009	3376	1703	0.451	0.549
Accepting attitudes towards people living with HIV	9.4	0.196	0.015	0.076	1.883	1.372	2644	1347	0.166	0.225
Women who have been tested for HIV and know the results	9.6	0.038	0.005	0.143	1.378	1.174	3376	1703	0.027	0.049
Sexually active young women who have been tested for HIV and know the results	9.7	0.083	0.019	0.232	1.311	1.145	535	269	0.044	0.122
Sex before age 15 among young women	9.11	0.052	0.010	0.193	1.220	1.105	1177	598	0.032	0.072
Total fertility rate	-	3.54	0.22	0.063	2.541	1.594	9447	4767	3.09	3.98
Adolescent birth rates (ASFR 15-19)	5.1	0.099	0.014	0.147	1.927	1.388	1825	922	0.070	0.128
Neonatal mortality	1.3	28.5	7.6	0.266	1.407	1.186	1790	888	13.3	43.6
Post-neonatal mortality	1.4	52.3	8.7	0.166	1.248	1.117	1798	891	35.0	69.7
Infant mortality	1.2	80.8	10.4	0.129	1.115	1.056	1798	891	60.0	101.6
Child mortality	1.5	13.8	3.8	0.278	1.179	1.086	1803	894	6.1	21.5
Under five mortality	1.1	93.5	10.7	0.114	1.069	1.034	1810	897	72.1	114.8

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.588	0.040	0.068	1.945	1.395	607	294	0.508	0.668
Currently married/in union	-	0.647	0.018	0.028	1.093	1.045	1556	754	0.610	0.683
Marriage before age 18	8.7	0.188	0.021	0.113	1.678	1.295	1182	575	0.145	0.230
Knows any contraceptive method	-	0.901	0.016	0.018	2.215	1.488	1556	754	0.869	0.933
Comprehensive knowledge about HIV prevention among young people	9.2	0.183	0.026	0.144	1.357	1.165	607	294	0.131	0.236
Knowledge of mother- to-child transmission of HIV	9.3	0.472	0.025	0.054	1.937	1.392	1556	754	0.421	0.522
Accepting attitudes towards people living with HIV	9.4	0.227	0.019	0.085	1.384	1.176	1331	648	0.188	0.265
Men who have been tested for HIV and know the results	9.6	0.030	0.005	0.179	0.761	0.872	1556	754	0.020	0.041
Sexually active young men who have been tested for HIV and know the results	9.7	0.043	0.021	0.490	0.980	0.990	188	92	0.001	0.085
Sex before age 15 among young men	9.11	0.032	0.012	0.367	1.299	1.140	607	294	0.009	0.055
UNDER-5s										
Underweight prevalence	2.1a	0.282	0.023	0.083	2.409	1.552	1752	889	0.235	0.329
Stunting prevalence	2.2a	0.408	0.026	0.063	2.360	1.536	1710	868	0.357	0.460
Wasting prevalence	2.3a	0.050	0.008	0.160	1.185	1.088	1722	874	0.034	0.066
Exclusive breastfeeding under 6 months	2.6	0.165	0.035	0.211	0.885	0.941	201	102	0.095	0.234
Age-appropriate breastfeeding	2.14	0.236	0.034	0.144	2.267	1.506	697	354	0.168	0.304
Tuberculosis immunization coverage	-	0.504	0.044	0.087	1.305	1.142	331	169	0.416	0.592
Received polio immunization	-	0.302	0.044	0.144	1.511	1.229	331	169	0.215	0.389
Received DPT-HepB-Hib immunization	-	0.340	0.041	0.120	1.251	1.118	331	169	0.258	0.421
Received measles immunization	-	0.404	0.043	0.108	1.314	1.146	331	169	0.317	0.490
Diarrhoea in the previous 2 weeks	-	0.089	0.010	0.107	1.015	1.008	1784	905	0.070	0.108
Illness with a cough in the previous 2 weeks	-	0.055	0.008	0.144	1.087	1.043	1784	905	0.039	0.071
Fever in last two weeks	-	0.162	0.015	0.092	1.466	1.211	1784	905	0.132	0.191
Oral rehydration therapy with continued feeding	3.8	0.507	0.073	0.144	1.685	1.298	158	80	0.360	0.653
Antibiotic treatment of suspected pneumonia	3.10	(0.595)	(0.079)	(0.134)	(1.258)	(1.122)	98	49	(0.436)	(0.754)
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.404	0.033	0.081	3.505	1.872	1553	784	0.338	0.470
Anti-malarial treatment of children under age 5	3.18	0.008	0.007	0.958	1.039	1.019	288	148	0.000	0.022
Support for learning	6.1	0.433	0.037	0.085	1.990	1.411	716	364	0.360	0.507
Attendance to early childhood education	6.7	0.173	0.025	0.146	1.618	1.272	716	364	0.122	0.223
Birth registration	8.1	0.740	0.024	0.033	2.754	1.659	1784	905	0.691	0.788

Table SE.23: Sampling errors: Saravane

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.831	0.028	0.034	6.730	2.594	1118	1167	0.774	0.888
Household availability of insecticide-treated nets (ITNs)	3.12	0.731	0.034	0.046	6.859	2.619	1123	1173	0.663	0.799
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.590	0.058	0.098	16.266	4.033	6760	1173	0.474	0.706
Use of improved sanitation	4.3	0.212	0.035	0.165	8.588	2.931	6760	1173	0.142	0.282
Secondary school net attendance ratio (adjusted)	7.5	0.223	0.030	0.136	6.198	2.490	1128	1172	0.162	0.283
Prevalence of children with one or both parents dead	9.18	0.061	0.007	0.117	2.855	1.690	3249	3208	0.047	0.075
Violent discipline	8.5	0.613	0.022	0.036	1.996	1.413	2488	964	0.569	0.658
WOMEN										
Literacy rate among young women	7.1	0.386	0.040	0.104	3.939	1.985	564	576	0.305	0.467
Currently married/in union	-	0.717	0.016	0.022	1.813	1.347	1456	1501	0.685	0.748
Marriage before age 18	8.7	0.405	0.015	0.038	1.142	1.068	1148	1178	0.375	0.436
Children ever born	-	2.956	0.091	0.031	1.429	1.195	1456	1501	2.774	3.138
Children living	-	2.367	0.061	0.026	1.078	1.038	1456	1501	2.245	2.490
Children ever born to women age 40-49	-	5.964	0.332	0.056	3.356	1.832	291	309	5.301	6.628
Early childbearing	5.2	0.230	0.033	0.141	1.505	1.227	256	253	0.165	0.295
Pregnant women	-	0.075	0.006	0.079	0.757	0.870	1456	1501	0.063	0.087
Want no more children	-	0.558	0.014	0.026	0.901	0.949	1044	1085	0.530	0.587
Want to delay birth at least 2 years	-	0.188	0.017	0.088	1.964	1.402	1044	1085	0.155	0.221
Knows any contraceptive method	-	0.861	0.023	0.027	6.637	2.576	1456	1501	0.815	0.907
Contraceptive prevalence	5.3	0.436	0.038	0.087	6.362	2.522	1044	1085	0.360	0.512
Unmet need	5.4	0.229	0.031	0.136	5.965	2.442	1044	1085	0.167	0.291
Antenatal care coverage - at least once by skilled personnel	5.5a	0.478	0.055	0.115	4.221	2.054	361	351	0.368	0.588
Antenatal care coverage – at least four times by any provider	5.5b	0.232	0.042	0.179	3.380	1.838	361	351	0.149	0.315
Skilled attendant at delivery	5.7	0.311	0.049	0.157	3.915	1.979	361	351	0.213	0.409
Institutional deliveries	5.8	0.267	0.043	0.162	3.327	1.824	361	351	0.181	0.353
Caesarean section	5.9	0.014	0.007	0.492	1.219	1.104	361	351	0.000	0.028
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.644	0.049	0.077	1.138	1.067	109	108	0.545	0.742
Comprehensive knowledge about HIV prevention among young people	9.2	0.102	0.021	0.204	2.722	1.650	564	576	0.060	0.144
Knowledge of mother- to-child transmission of HIV	9.3	0.389	0.031	0.079	5.928	2.435	1456	1501	0.327	0.450
Accepting attitudes towards people living with HIV	9.4	0.116	0.018	0.153	3.098	1.760	905	1005	0.080	0.152
Women who have been tested for HIV and know the results	9.6	0.004	0.002	0.399	1.034	1.017	1456	1501	0.001	0.008
Sexually active young women who have been tested for HIV and know the results	9.7	0.006	0.004	0.719	0.894	0.945	272	284	0.000	0.015
Sex before age 15 among young women	9.11	0.106	0.026	0.242	4.003	2.001	564	576	0.055	0.158
Total fertility rate	-	4.27	0.33	0.078	4.072	2.018	4098	4247	3.61	4.93
Adolescent birth rates (ASFR 15-19)	5.1	0.106	0.016	0.147	2.403	1.550	940	951	0.075	0.138
Neonatal mortality	1.3	35.4	6.3	0.179	1.153	1.074	953	905	22.7	48.0
Post-neonatal mortality	1.4	62.7	13.3	0.212	2.657	1.630	955	907	36.1	89.3
Infant mortality	1.2	98.0	12.3	0.126	1.573	1.254	955	907	73.4	122.7
Child mortality	1.5	16.5	5.1	0.311	1.318	1.148	957	908	6.2	26.7
Under five mortality	1.1	112.9	10.9	0.097	1.136	1.066	959	910	91.0	134.8

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.628	0.036	0.057	1.373	1.172	223	250	0.556	0.700
Currently married/in union	-	0.713	0.017	0.023	0.887	0.942	597	648	0.680	0.747
Marriage before age 18	8.7	0.154	0.021	0.140	1.761	1.327	467	498	0.111	0.197
Knows any contraceptive method	-	0.953	0.010	0.011	1.520	1.233	597	648	0.932	0.973
Comprehensive knowledge about HIV prevention among young people	9.2	0.191	0.024	0.123	0.893	0.945	223	250	0.144	0.238
Knowledge of mother- to-child transmission of HIV	9.3	0.554	0.028	0.051	2.053	1.433	597	648	0.498	0.610
Accepting attitudes towards people living with HIV	9.4	0.058	0.012	0.200	1.498	1.224	562	607	0.035	0.082
Men who have been tested for HIV and know the results	9.6	0.009	0.004	0.435	1.125	1.061	597	648	0.001	0.017
Sexually active young men who have been tested for HIV and know the results	9.7	0.000	0.000	0.000	na	na	80	87	0.000	0.000
Sex before age 15 among young men	9.11	0.029	0.010	0.366	0.982	0.991	223	250	0.008	0.050
UNDER-5s										
Underweight prevalence	2.1a	0.412	0.046	0.111	7.104	2.665	906	828	0.321	0.504
Stunting prevalence	2.2a	0.544	0.026	0.048	2.201	1.484	882	807	0.492	0.596
Wasting prevalence	2.3a	0.086	0.020	0.226	3.908	1.977	887	809	0.047	0.125
Exclusive breastfeeding under 6 months	2.6	0.280	0.045	0.159	0.874	0.935	102	90	0.191	0.370
Age-appropriate breastfeeding	2.14	0.429	0.038	0.090	2.057	1.434	365	341	0.352	0.506
Tuberculosis immunization coverage	-	0.924	0.022	0.024	1.170	1.082	181	168	0.879	0.968
Received polio immunization	-	0.651	0.094	0.144	6.465	2.543	181	168	0.463	0.838
Received DPT-HepB-Hib immunization	-	0.676	0.096	0.143	7.003	2.646	180	166	0.484	0.869
Received measles immunization	-	0.810	0.039	0.048	1.666	1.291	182	169	0.732	0.889
Diarrhoea in the previous 2 weeks	-	0.104	0.014	0.131	1.672	1.293	923	845	0.077	0.131
Illness with a cough in the previous 2 weeks	-	0.086	0.021	0.242	4.695	2.167	923	845	0.045	0.128
Fever in last two weeks	-	0.041	0.009	0.228	1.878	1.370	923	845	0.022	0.060
Oral rehydration therapy with continued feeding	3.8	0.508	0.062	0.123	1.212	1.101	96	79	0.384	0.633
Antibiotic treatment of suspected pneumonia	3.10	0.467	0.116	0.248	3.326	1.824	80	63	0.236	0.698
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.637	0.046	0.073	7.810	2.795	921	841	0.544	0.730
Anti-malarial treatment of children under age 5	3.18	(0.000)	(0.000)	(0.000)	na	na	38	39	(0.000)	(0.000)
Support for learning	6.1	0.408	0.066	0.162	5.993	2.448	365	332	0.276	0.540
Attendance to early childhood education	6.7	0.043	0.015	0.336	1.692	1.301	365	332	0.014	0.072
Birth registration	8.1	0.827	0.035	0.042	7.024	2.650	923	845	0.758	0.896

Table SE.24: Sampling errors: Sekong

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.720	0.029	0.040	3.915	1.979	282	961	0.662	0.777
Household availability of insecticide-treated nets (ITNs)	3.12	0.765	0.027	0.036	4.030	2.008	283	965	0.710	0.819
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.752	0.048	0.064	11.774	3.431	1806	965	0.656	0.847
Use of improved sanitation	4.3	0.352	0.042	0.118	7.321	2.706	1806	965	0.269	0.435
Secondary school net attendance ratio (adjusted)	7.5	0.364	0.032	0.088	4.813	2.194	325	1096	0.300	0.427
Prevalence of children with one or both parents dead	9.18	0.083	0.008	0.097	2.676	1.636	933	3169	0.067	0.099
Violent discipline	8.5	0.851	0.016	0.019	1.723	1.313	707	827	0.818	0.883
WOMEN										
Literacy rate among young women	7.1	0.612	0.036	0.059	2.851	1.688	154	521	0.540	0.684
Currently married/in union	-	0.704	0.013	0.019	1.080	1.039	388	1316	0.678	0.730
Marriage before age 18	8.7	0.410	0.022	0.053	1.906	1.381	295	995	0.367	0.453
Children ever born	-	2.811	0.070	0.025	0.781	0.884	388	1316	2.670	2.952
Children living	-	2.379	0.059	0.025	0.829	0.911	388	1316	2.261	2.498
Children ever born to women age 40-49	-	5.900	0.165	0.028	0.615	0.784	62	214	5.570	6.229
Early childbearing	5.2	0.244	0.034	0.138	1.231	1.110	60	200	0.176	0.312
Pregnant women	-	0.069	0.007	0.105	1.084	1.041	388	1316	0.055	0.084
Want no more children	-	0.551	0.019	0.035	1.381	1.175	273	923	0.513	0.590
Want to delay birth at least 2 years	-	0.193	0.016	0.084	1.549	1.245	273	923	0.161	0.226
Knows any contraceptive method	-	0.982	0.005	0.005	2.013	1.419	388	1316	0.971	0.992
Contraceptive prevalence	5.3	0.318	0.019	0.060	1.555	1.247	273	923	0.280	0.357
Unmet need	5.4	0.248	0.014	0.057	0.981	0.990	273	923	0.220	0.277
Antenatal care coverage - at least once by skilled personnel	5.5a	0.404	0.037	0.090	1.811	1.346	99	328	0.331	0.477
Antenatal care coverage – at least four times by any provider	5.5b	0.253	0.029	0.113	1.425	1.194	99	328	0.196	0.310
Skilled attendant at delivery	5.7	0.246	0.029	0.117	1.457	1.207	99	328	0.189	0.304
Institutional deliveries	5.8	0.256	0.032	0.125	1.756	1.325	99	328	0.192	0.320
Caesarean section	5.9	0.005	0.004	0.744	0.925	0.962	99	328	0.000	0.013
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.657	0.059	0.089	1.361	1.167	27	90	0.539	0.774
Comprehensive knowledge about HIV prevention among young people	9.2	0.092	0.015	0.165	1.449	1.204	154	521	0.062	0.123
Knowledge of mother- to-child transmission of HIV	9.3	0.567	0.022	0.038	2.489	1.578	388	1316	0.524	0.610
Accepting attitudes towards people living with HIV	9.4	0.009	0.006	0.636	3.124	1.768	249	845	0.000	0.021
Women who have been tested for HIV and know the results	9.6	0.004	0.002	0.409	0.881	0.939	388	1316	0.001	0.007
Sexually active young women who have been tested for HIV and know the results	9.7	0.005	0.005	1.002	1.039	1.019	63	211	0.000	0.015
Sex before age 15 among young women	9.11	0.086	0.015	0.174	1.476	1.215	154	521	0.056	0.116
Total fertility rate	-	4.47	0.31	0.069	2.538	1.593	1066	3617	3.85	5.09
Adolescent birth rates (ASFR 15-19)	5.1	0.107	0.015	0.145	1.888	1.374	242	821	0.076	0.138
Neonatal mortality	1.3	43.8	6.6	0.151	0.865	0.930	269	905	30.6	57.0
Post-neonatal mortality	1.4	27.2	6.6	0.241	1.533	1.238	269	906	14.1	40.4
Infant mortality	1.2	71.0	9.5	0.133	1.151	1.073	269	906	52.1	90.0
Child mortality	1.5	24.2	6.3	0.260	1.385	1.177	272	916	11.6	36.8
Under five mortality	1.1	93.5	12.5	0.134	1.545	1.243	272	917	68.4	118.6

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.763	0.035	0.047	1.452	1.205	62	210	0.692	0.834
Currently married/in union	-	0.650	0.021	0.032	1.021	1.010	162	543	0.609	0.691
Marriage before age 18	8.7	0.118	0.018	0.156	1.332	1.154	121	408	0.081	0.155
Knows any contraceptive method	-	0.963	0.008	0.008	0.971	0.986	162	543	0.948	0.979
Comprehensive knowledge about HIV prevention among young people	9.2	0.195	0.032	0.163	1.352	1.163	62	210	0.131	0.259
Knowledge of mother- to-child transmission of HIV	9.3	0.624	0.031	0.050	2.240	1.497	162	543	0.562	0.686
Accepting attitudes towards people living with HIV	9.4	0.155	0.023	0.147	1.884	1.373	141	475	0.110	0.201
Men who have been tested for HIV and know the results	9.6	0.003	0.002	0.708	0.814	0.902	162	543	0.000	0.007
Sexually active young men who have been tested for HIV and know the results	9.7	0.000	0.000	0.000	na	na	19	62	0.000	0.000
Sex before age 15 among young men	9.11	0.015	0.008	0.543	0.967	0.983	62	210	0.000	0.032
UNDER-5s										
Underweight prevalence	2.1a	0.460	0.021	0.046	1.554	1.247	258	849	0.417	0.503
Stunting prevalence	2.2a	0.627	0.020	0.032	1.461	1.209	252	828	0.587	0.668
Wasting prevalence	2.3a	0.073	0.011	0.145	1.385	1.177	257	844	0.052	0.094
Exclusive breastfeeding under 6 months	2.6	0.623	0.062	0.099	1.406	1.186	27	88	0.500	0.746
Age-appropriate breastfeeding	2.14	0.365	0.026	0.072	0.980	0.990	101	328	0.312	0.418
Tuberculosis immunization coverage	-	0.923	0.018	0.020	0.772	0.879	52	167	0.887	0.960
Received polio immunization	-	0.491	0.047	0.095	1.437	1.199	52	167	0.398	0.584
Received DPT-HepB-Hib immunization	-	0.403	0.043	0.107	1.272	1.128	52	167	0.317	0.489
Received measles immunization	-	0.748	0.033	0.044	0.935	0.967	52	167	0.683	0.814
Diarrhoea in the previous 2 weeks	-	0.122	0.020	0.167	3.395	1.843	269	881	0.081	0.162
Illness with a cough in the previous 2 weeks	-	0.105	0.011	0.108	1.193	1.092	269	881	0.082	0.127
Fever in last two weeks	-	0.125	0.015	0.121	1.844	1.358	269	881	0.095	0.156
Oral rehydration therapy with continued feeding	3.8	0.400	0.055	0.138	1.249	1.117	33	100	0.290	0.510
Antibiotic treatment of suspected pneumonia	3.10	0.358	0.054	0.151	1.101	1.049	28	87	0.250	0.466
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.701	0.033	0.047	4.356	2.087	261	857	0.635	0.766
Anti-malarial treatment of children under age 5	3.18	0.000	0.000	0.000	na	na	34	107	0.000	0.000
Support for learning	6.1	0.544	0.033	0.060	1.693	1.301	118	393	0.479	0.609
Attendance to early childhood education	6.7	0.153	0.022	0.144	1.457	1.207	118	393	0.109	0.197
Birth registration	8.1	0.700	0.032	0.045	4.172	2.043	269	881	0.637	0.763

Table SE.25: Sampling errors: Champasack

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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										
Iodized salt consumption	2.16	0.675	0.023	0.034	3.071	1.752	1749	1283	0.629	0.720
Household availability of insecticide-treated nets (ITNs)	3.12	0.448	0.035	0.079	6.621	2.573	1789	1315	0.377	0.518
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.728	0.039	0.054	10.229	3.198	8877	1315	0.649	0.806
Use of improved sanitation	4.3	0.419	0.036	0.085	6.869	2.621	8877	1315	0.348	0.491
Secondary school net attendance ratio (adjusted)	7.5	0.397	0.026	0.065	3.145	1.773	1558	1145	0.346	0.449
Prevalence of children with one or both parents dead	9.18	0.064	0.007	0.113	2.471	1.572	3887	2851	0.049	0.078
Violent discipline	8.5	0.787	0.017	0.022	1.772	1.331	2929	985	0.752	0.822
WOMEN										
Literacy rate among young women	7.1	0.651	0.032	0.049	2.219	1.490	682	496	0.587	0.715
Currently married/in union	-	0.689	0.015	0.022	1.541	1.241	1943	1440	0.658	0.719
Marriage before age 18	8.7	0.266	0.017	0.065	1.756	1.325	1541	1149	0.231	0.300
Children ever born	-	2.513	0.098	0.039	2.034	1.426	1943	1440	2.317	2.709
Children living	-	2.159	0.071	0.033	1.550	1.245	1943	1440	2.016	2.301
Children ever born to women age 40-49	-	4.710	0.200	0.042	1.835	1.355	471	355	4.310	5.109
Early childbearing	5.2	0.126	0.032	0.256	1.928	1.388	280	205	0.062	0.191
Pregnant women	-	0.057	0.007	0.114	1.139	1.067	1943	1440	0.044	0.071
Want no more children	-	0.611	0.016	0.026	1.060	1.030	1338	993	0.580	0.643
Want to delay birth at least 2 years	-	0.225	0.014	0.062	1.107	1.052	1338	993	0.198	0.253
Knows any contraceptive method	-	0.985	0.006	0.006	3.921	1.980	1943	1440	0.973	0.998
Contraceptive prevalence	5.3	0.407	0.024	0.058	2.308	1.519	1338	993	0.359	0.454
Unmet need	5.4	0.254	0.018	0.069	1.615	1.271	1338	993	0.219	0.289
Antenatal care coverage - at least once by skilled personnel	5.5a	0.511	0.039	0.077	1.786	1.337	397	293	0.433	0.589
Antenatal care coverage – at least four times by any provider	5.5b	0.327	0.036	0.110	1.703	1.305	397	293	0.255	0.398
Skilled attendant at delivery	5.7	0.399	0.040	0.101	1.967	1.403	397	293	0.319	0.480
Institutional deliveries	5.8	0.255	0.035	0.139	1.934	1.391	397	293	0.184	0.326
Caesarean section	5.9	0.043	0.012	0.267	0.942	0.971	397	293	0.020	0.067
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.423	0.055	0.131	0.956	0.978	103	77	0.312	0.534
Comprehensive knowledge about HIV prevention among young people	9.2	0.265	0.024	0.090	1.450	1.204	682	496	0.217	0.313
Knowledge of mother- to-child transmission of HIV	9.3	0.592	0.021	0.036	2.729	1.652	1943	1440	0.549	0.635
Accepting attitudes towards people living with HIV	9.4	0.099	0.016	0.162	3.957	1.989	1849	1370	0.067	0.131
Women who have been tested for HIV and know the results	9.6	0.024	0.005	0.218	1.678	1.296	1943	1440	0.014	0.034
Sexually active young women who have been tested for HIV and know the results	9.7	0.041	0.014	0.350	0.991	0.996	259	189	0.012	0.070
Sex before age 15 among young women	9.11	0.016	0.006	0.354	1.003	1.002	682	496	0.005	0.027
Total fertility rate	-	3.57	0.21	0.060	1.817	1.348	5506	4091	3.14	3.99
Adolescent birth rates (ASFR 15-19)	5.1	0.070	0.013	0.179	1.769	1.330	1152	827	0.045	0.096
Neonatal mortality	1.3	37.7	8.1	0.216	0.976	0.988	925	674	21.4	54.0
Post-neonatal mortality	1.4	51.3	15.4	0.301	2.313	1.521	927	675	20.4	82.1
Infant mortality	1.2	89.0	19.6	0.220	2.190	1.480	927	675	49.8	128.2
Child mortality	1.5	8.3	3.4	0.408	1.034	1.017	931	678	1.5	15.0
Under five mortality	1.1	96.5	19.6	0.203	2.053	1.433	933	679	57.3	135.7

	MICS Indicator	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*	*r* + 2*se*
MEN										
Literacy rate among young men	7.1	0.710	0.045	0.063	2.314	1.521	340	241	0.620	0.799
Currently married/in union	-	0.620	0.022	0.035	1.252	1.119	873	627	0.576	0.663
Marriage before age 18	8.7	0.098	0.014	0.147	1.122	1.059	676	480	0.069	0.126
Knows any contraceptive method	-	0.897	0.021	0.023	2.923	1.710	873	627	0.855	0.938
Comprehensive knowledge about HIV prevention among young people	9.2	0.264	0.026	0.100	0.867	0.931	340	241	0.211	0.317
Knowledge of mother- to-child transmission of HIV	9.3	0.609	0.032	0.053	2.732	1.653	873	627	0.545	0.674
Accepting attitudes towards people living with HIV	9.4	0.147	0.020	0.136	1.785	1.336	765	559	0.107	0.187
Men who have been tested for HIV and know the results	9.6	0.020	0.006	0.315	1.279	1.131	873	627	0.007	0.033
Sexually active young men who have been tested for HIV and know the results	9.7	0.079	0.031	0.392	0.974	0.987	103	75	0.017	0.141
Sex before age 15 among young men	9.11	0.003	0.003	1.005	0.786	0.887	340	241	0.000	0.010
UNDER-5s										
Underweight prevalence	2.1a	0.263	0.023	0.088	1.929	1.389	970	693	0.216	0.309
Stunting prevalence	2.2a	0.367	0.029	0.080	2.534	1.592	960	686	0.308	0.425
Wasting prevalence	2.3a	0.068	0.010	0.141	0.998	0.999	966	690	0.049	0.087
Exclusive breastfeeding under 6 months	2.6	0.201	0.046	0.231	1.029	1.014	111	78	0.108	0.293
Age-appropriate breastfeeding	2.14	0.285	0.025	0.088	0.953	0.976	425	307	0.235	0.336
Tuberculosis immunization coverage	-	0.874	0.030	0.035	1.140	1.068	186	138	0.814	0.935
Received polio immunization	-	0.546	0.047	0.086	1.212	1.101	187	139	0.452	0.639
Received DPT-HepB-Hib immunization	-	0.618	0.047	0.076	1.297	1.139	187	139	0.524	0.713
Received measles immunization	-	0.728	0.038	0.052	0.999	1.000	188	140	0.652	0.803
Diarrhoea in the previous 2 weeks	-	0.060	0.009	0.150	1.037	1.018	1003	717	0.042	0.079
Illness with a cough in the previous 2 weeks	-	0.013	0.004	0.289	0.764	0.874	1003	717	0.005	0.020
Fever in last two weeks	-	0.042	0.008	0.190	1.143	1.069	1003	717	0.026	0.059
Oral rehydration therapy with continued feeding	3.8	(0.661)	(0.070)	(0.106)	(0.930)	(0.964)	61	43	(0.521)	(0.802)
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	13	10	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.369	0.041	0.110	4.492	2.119	898	638	0.288	0.450
Anti-malarial treatment of children under age 5	3.18	(0.044)	(0.033)	(0.749)	(0.855)	(0.925)	43	34	(0.000)	(0.110)
Support for learning	6.1	0.551	0.046	0.083	2.272	1.507	377	271	0.460	0.642
Attendance to early childhood education	6.7	0.177	0.029	0.167	1.608	1.268	377	271	0.118	0.236
Birth registration	8.1	0.687	0.025	0.037	2.164	1.471	1003	717	0.636	0.738

Table SE.26: Sampling errors: Attapeu

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Lao PDR 2011-12

	MICS Indicator	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*	*r* + 2*se*
HOUSEHOLDS										
Iodized salt consumption	2.16	0.810	0.029	0.036	4.908	2.215	331	887	0.752	0.869
Household availability of insecticide-treated nets (ITNs)	3.12	0.843	0.025	0.029	4.167	2.041	336	900	0.793	0.893
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.605	0.048	0.079	8.621	2.936	1749	900	0.509	0.701
Use of improved sanitation	4.3	0.366	0.043	0.117	7.079	2.661	1749	900	0.280	0.451
Secondary school net attendance ratio (adjusted)	7.5	0.336	0.030	0.090	3.424	1.850	315	832	0.276	0.397
Prevalence of children with one or both parents dead	9.18	0.053	0.007	0.135	2.223	1.491	818	2176	0.039	0.068
Violent discipline	8.5	0.484	0.030	0.062	2.644	1.626	624	726	0.423	0.544
WOMEN										
Literacy rate among young women	7.1	0.679	0.036	0.052	2.234	1.495	141	385	0.608	0.751
Currently married/in union	-	0.743	0.015	0.020	1.166	1.080	376	1033	0.714	0.772
Marriage before age 18	8.7	0.378	0.022	0.059	1.713	1.309	294	810	0.334	0.423
Children ever born	-	2.715	0.116	0.043	1.873	1.368	376	1033	2.484	2.947
Children living	-	2.278	0.090	0.039	1.727	1.314	376	1033	2.098	2.457
Children ever born to women age 40-49	-	5.732	0.262	0.046	1.551	1.246	74	201	5.209	6.255
Early childbearing	5.2	0.237	0.035	0.150	1.120	1.058	59	162	0.166	0.308
Pregnant women	-	0.068	0.009	0.125	1.178	1.086	376	1033	0.051	0.085
Want no more children	-	0.699	0.018	0.026	1.162	1.078	280	766	0.663	0.735
Want to delay birth at least 2 years	-	0.094	0.011	0.117	1.078	1.038	280	766	0.072	0.115
Knows any contraceptive method	-	0.957	0.008	0.009	1.708	1.307	376	1033	0.940	0.973
Contraceptive prevalence	5.3	0.483	0.029	0.060	2.605	1.614	280	766	0.425	0.541
Unmet need	5.4	0.216	0.020	0.091	1.744	1.321	280	766	0.177	0.255
Antenatal care coverage - at least once by skilled personnel	5.5a	0.496	0.059	0.120	3.141	1.772	83	223	0.377	0.615
Antenatal care coverage – at least four times by any provider	5.5b	0.336	0.048	0.143	2.302	1.517	83	223	0.239	0.432
Skilled attendant at delivery	5.7	0.197	0.036	0.181	1.777	1.333	83	223	0.126	0.268
Institutional deliveries	5.8	0.192	0.034	0.176	1.638	1.280	83	223	0.124	0.260
Caesarean section	5.9	0.026	0.012	0.471	1.321	1.150	83	223	0.001	0.051
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.825	0.070	0.084	2.452	1.566	26	74	0.686	0.964
Comprehensive knowledge about HIV prevention among young people	9.2	0.152	0.022	0.143	1.412	1.188	141	385	0.109	0.196
Knowledge of mother- to-child transmission of HIV	9.3	0.541	0.032	0.059	4.186	2.046	376	1033	0.477	0.604
Accepting attitudes towards people living with HIV	9.4	0.074	0.013	0.169	1.822	1.350	290	795	0.049	0.099
Women who have been tested for HIV and know the results	9.6	0.003	0.003	0.758	1.980	1.407	376	1033	0.000	0.008
Sexually active young women who have been tested for HIV and know the results	9.7	0.006	0.006	0.999	1.191	1.091	68	184	0.000	0.019
Sex before age 15 among young women	9.11	0.087	0.016	0.181	1.203	1.097	141	385	0.056	0.119
Total fertility rate	-	3.61	0.28	0.077	1.929	1.389	1041	2863	3.06	4.17
Adolescent birth rates (ASFR 15-19)	5.1	0.107	0.016	0.153	1.447	1.203	211	576	0.074	0.140
Neonatal mortality	1.3	27.2	7.4	0.272	0.912	0.955	214	582	12.4	42.0
Post-neonatal mortality	1.4	30.6	7.8	0.255	0.955	0.977	215	583	15.0	46.3
Infant mortality	1.2	57.8	11.0	0.191	1.077	1.038	215	583	35.7	79.8
Child mortality	1.5	20.6	5.4	0.264	0.924	0.961	217	589	9.7	31.4
Under five mortality	1.1	77.1	12.5	0.161	1.075	1.037	217	590	52.2	102.0

	MICS Indicator	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*
MEN										
Literacy rate among young men	7.1	0.839	0.037	0.044	1.199	1.095	52	120	0.765	0.913
Currently married/in union	-	0.722	0.025	0.034	1.115	1.056	157	367	0.673	0.771
Marriage before age 18	8.7	0.114	0.020	0.178	1.188	1.090	125	292	0.073	0.154
Knows any contraceptive method	-	0.993	0.005	0.005	1.223	1.106	157	367	0.984	1.000
Comprehensive knowledge about HIV prevention among young people	9.2	0.163	0.038	0.231	1.239	1.113	52	120	0.088	0.238
Knowledge of mother- to-child transmission of HIV	9.3	0.579	0.037	0.064	2.072	1.439	157	367	0.505	0.653
Accepting attitudes towards people living with HIV	9.4	0.151	0.022	0.147	1.340	1.158	149	348	0.107	0.196
Men who have been tested for HIV and know the results	9.6	0.027	0.009	0.316	1.012	1.006	157	367	0.010	0.044
Sexually active young men who have been tested for HIV and know the results	9.7	(0.000)	(0.000)	(0.000)	na	na	19	46	(0.000)	(0.000)
Sex before age 15 among young men	9.11	0.006	0.006	0.986	0.656	0.810	52	120	0.000	0.017
UNDER-5s										
Underweight prevalence	2.1a	0.320	0.023	0.071	1.273	1.128	204	534	0.275	0.366
Stunting prevalence	2.2a	0.397	0.025	0.063	1.363	1.168	203	530	0.347	0.447
Wasting prevalence	2.3a	0.106	0.015	0.145	1.336	1.156	205	535	0.075	0.137
Exclusive breastfeeding under 6 months	2.6	0.425	0.052	0.122	0.806	0.898	29	74	0.321	0.529
Age-appropriate breastfeeding	2.14	0.326	0.032	0.098	0.990	0.995	83	216	0.262	0.390
Tuberculosis immunization coverage	-	0.758	0.050	0.067	1.371	1.171	39	100	0.657	0.859
Received polio immunization	-	0.412	0.062	0.150	1.554	1.247	39	100	0.288	0.535
Received DPT-HepB-Hib immunization	-	0.496	0.070	0.141	1.940	1.393	39	100	0.356	0.636
Received measles immunization	-	0.587	0.066	0.112	1.758	1.326	39	100	0.456	0.718
Diarrhoea in the previous 2 weeks	-	0.010	0.004	0.418	1.004	1.002	216	565	0.002	0.019
Illness with a cough in the previous 2 weeks	-	0.003	0.002	0.709	0.829	0.910	216	565	0.000	0.007
Fever in last two weeks	-	0.133	0.021	0.158	2.158	1.469	216	565	0.091	0.175
Oral rehydration therapy with continued feeding	3.8	*	*	*	*	*	2	6	*	*
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	1	2	*	*
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.735	0.036	0.049	3.701	1.924	211	552	0.663	0.808
Anti-malarial treatment of children under age 5	3.18	0.010	0.010	0.981	0.735	0.857	29	73	0.000	0.031
Support for learning	6.1	0.676	0.049	0.072	2.606	1.614	92	241	0.579	0.774
Attendance to early childhood education	6.7	0.121	0.025	0.208	1.440	1.200	92	241	0.071	0.172
Birth registration	8.1	0.948	0.012	0.013	1.654	1.286	216	565	0.924	0.972

Table SE.27: Sampling errors for adult and maternal mortality rates, Lao PDR 2011-12

Standard errors, coefficients of variation, design effects (deft) and confidence intervals for adult and maternal mortality rates, Lao PDR 2011-12

Rates	Value *(r)*	Standard error *(se)*	Number of cases		Design effect *(deft)*	Relative error *(se/r)*	Confidence limits	
			Unweighted	Weighted			*r - 2se*	*r + 2se*
			WOMEN					
Adult mortality rates								
15-19	1.729	0.335	44,329	43,871	1.609	0.194	1.059	2.399
20-24	1.298	0.254	51,494	51,754	1.581	0.196	0.789	1.807
25-29	1.485	0.205	47,954	48,721	1.159	0.138	1.075	1.896
30-34	1.964	0.258	40,824	41,758	1.192	0.131	1.447	2.480
35-39	2.094	0.285	32,855	34,023	1.123	0.136	1.523	2.664
40-44	3.688	0.471	22,989	24,120	1.175	0.128	2.747	4.630
45-49	5.284	0.718	13,703	14,435	1.170	0.136	3.848	6.720
15-49 (age-adjusted)	2.271	0.132	254,149	258,684	1.272	0.058	2.007	2.536
Adult mortality probabilities								
$_{35}q_{15}$	84	5	254,149	258,684	1.621	0.057	74	94
Maternal mortality rates								
15-19	0.261	0.086	44,329	43,871	1.121	0.331	0.088	0.434
20-24	0.402	0.106	51,494	51,754	1.202	0.263	0.191	0.614
25-29	0.513	0.112	47,954	48,721	1.092	0.218	0.289	0.737
30-34	0.520	0.155	40,824	41,758	1.391	0.298	0.210	0.830
35-39	0.313	0.090	32,855	34,023	0.935	0.287	0.134	0.493
40-44	0.304	0.111	22,989	24,120	0.993	0.367	0.081	0.527
45-49	0.379	0.206	13,703	14,435	1.273	0.545	0.000	0.791
15-49 (age-adjusted)	0.383	0.048	254,149	258,684	1.166	0.126	0.286	0.479
Maternal mortality ratio (MMR)	357	44	254,149	258,684	1.166	0.123	269	446
			MEN					
Adult mortality rates								
15-19	1.166	0.182	47,425	46,996	1.139	0.156	0.802	1.529
20-24	2.056	0.272	53,645	54,237	1.397	0.132	1.513	2.599
25-29	2.241	0.275	49,500	50,449	1.311	0.123	1.690	2.792
30-34	2.599	0.302	43,263	44,609	1.233	0.116	1.995	3.203
35-39	3.287	0.379	34,200	35,252	1.209	0.115	2.529	4.046
40-44	5.371	0.595	23,305	24,064	1.211	0.111	4.181	6.560
45-49	8.158	0.890	14,295	14,948	1.199	0.109	6.378	9.938
15-49 (age-adjusted)	3.126	0.162	265,633	270,557	1.225	0.052	2.803	3.449
Adult mortality probabilities								
$_{35}q_{15}$	117	6	265,633	270,557	1.538	0.051	105	129

Appendix D. Data Quality Tables

Table DQ.1: Age distribution of household population

Single-year age distribution of household population by sex, Lao PDR 2011-12

	Males		Females			Males		Females	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	1,130	2.4	1,124	2.3	45	626	1.3	584	1.2
1	1,090	2.3	1,044	2.1	46	391	0.8	429	0.9
2	1,063	2.2	1,102	2.2	47	452	0.9	522	1.1
3	1,171	2.4	1,130	2.3	48	426	0.9	456	0.9
4	1,072	2.2	1,023	2.1	49	424	0.9	341	0.7
5	1,254	2.6	1,218	2.5	50	455	1.0	623	1.3
6	1,175	2.5	1,178	2.4	51	561	1.2	607	1.2
7	1,171	2.4	1,254	2.5	52	405	0.8	433	0.9
8	1,270	2.7	1,328	2.7	53	344	0.7	433	0.9
9	1,209	2.5	1,109	2.2	54	346	0.7	361	0.7
10	1,149	2.4	1,248	2.5	55	350	0.7	399	0.8
11	1,414	3.0	1,290	2.6	56	365	0.8	326	0.7
12	1,258	2.6	1,283	2.6	57	333	0.7	327	0.7
13	1,246	2.6	1,284	2.6	58	302	0.6	276	0.6
14	1,209	2.5	1,261	2.5	59	242	0.5	226	0.5
15	1,076	2.3	988	2.0	60	260	0.5	306	0.6
16	1,049	2.2	1,013	2.0	61	251	0.5	231	0.5
17	975	2.0	982	2.0	62	198	0.4	209	0.4
18	970	2.0	1,003	2.0	63	190	0.4	200	0.4
19	792	1.7	885	1.8	64	141	0.3	155	0.3
20	825	1.7	836	1.7	65	195	0.4	249	0.5
21	723	1.5	778	1.6	66	205	0.4	172	0.3
22	674	1.4	806	1.6	67	169	0.4	153	0.3
23	738	1.5	793	1.6	68	173	0.4	164	0.3
24	615	1.3	712	1.4	69	134	0.3	148	0.3
25	762	1.6	849	1.7	70	138	0.3	203	0.4
26	703	1.5	791	1.6	71	138	0.3	182	0.4
27	731	1.5	783	1.6	72	82	0.2	104	0.2
28	731	1.5	796	1.6	73	78	0.2	102	0.2
29	709	1.5	663	1.3	74	74	0.2	82	0.2
30	721	1.5	734	1.5	75	104	0.2	108	0.2
31	722	1.5	724	1.5	76	81	0.2	109	0.2
32	600	1.3	605	1.2	77	57	0.1	78	0.2
33	558	1.2	594	1.2	78	81	0.2	64	0.1
34	527	1.1	532	1.1	79	49	0.1	64	0.1
35	644	1.3	709	1.4	80	66	0.1	112	0.2
36	777	1.6	717	1.4	81	40	0.1	66	0.1
37	547	1.1	577	1.2	82	31	0.1	38	0.1
38	649	1.4	649	1.3	83	25	0.1	41	0.1
39	539	1.1	565	1.1	84	23	0.0	37	0.1
40	503	1.1	594	1.2	85+	172	0.4	247	0.5
41	569	1.2	572	1.2	DK/				
42	473	1.0	530	1.1	Missing	1	0.0	19	0.0
43	529	1.1	541	1.1					
44	332	0.7	415	0.8	Total	47,820	100.0	49,601	100.0

Figure DQ.1: Number of household population by single ages, Lao PDR 2011-12

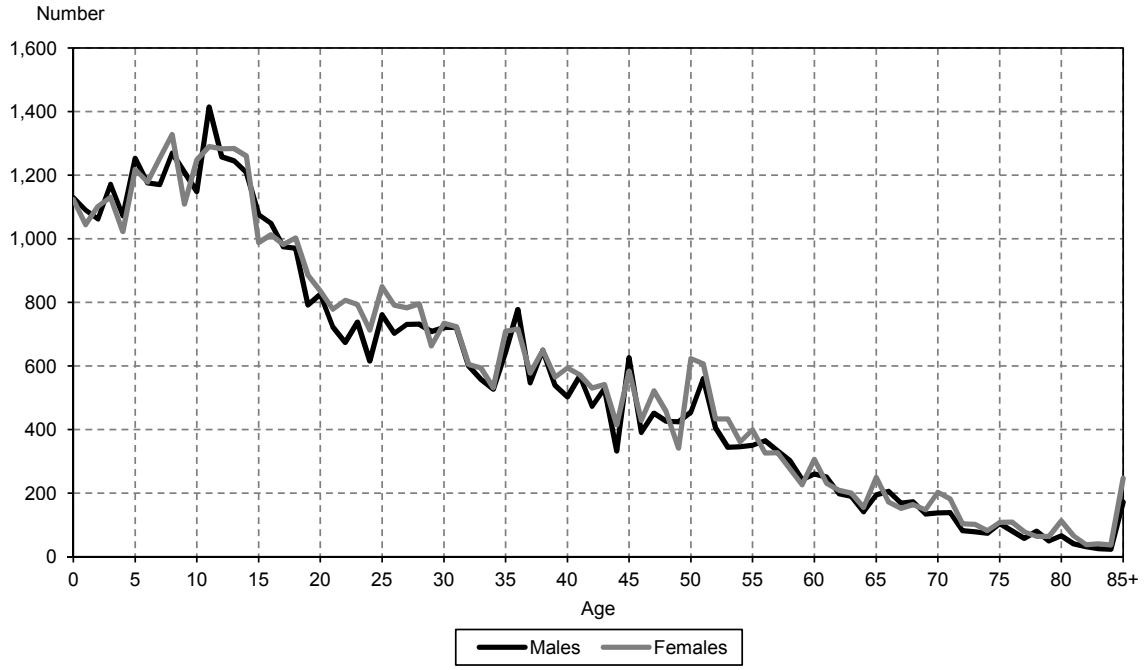


Table DQ.2.1: Age distribution of eligible and interviewed women

Household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed, by five-year age groups, Lao PDR 2011-12

	Household population of women age 10-54 years	Interviewed women age 15-49 years		Percentage of eligible women interviewed (Completion rate)
	Number	Number	Percent	
Age				
10-14	6,366	na	na	na
15-19	4,872	4,422	19.7	90.8
20-24	3,926	3,621	16.1	92.2
25-29	3,883	3,643	16.2	93.8
30-34	3,188	3,011	13.4	94.4
35-39	3,218	3,063	13.6	95.2
40-44	2,652	2,512	11.2	94.7
45-49	2,332	2,211	9.8	94.8
50-54	2,458	na	na	na
Total (15-49)	24,070	22,484	100.0	93.4
Ratio of 50-54 to 45-49	1.05			

na = Not applicable

Table DQ.2.2: Age distribution of eligible and interviewed men

Household population of men age 10-54, interviewed men age 15-49, and percentage of eligible men who were interviewed, by five-year age groups, Lao PDR 2011-12

	Household population of men age 10-54 years	Interviewed men age 15-49 years		Percentage of eligible men interviewed (Completion rate)
	Number	Number	Percent	
Age				
10-14	3,213	na	na	na
15-19	2,348	2,112	21.2	89.9
20-24	1,783	1,560	15.7	87.5
25-29	1,754	1,507	15.1	85.9
30-34	1,454	1,267	12.7	87.2
35-39	1,609	1,442	14.5	89.6
40-44	1,149	1,040	10.5	90.6
45-49	1,122	1,023	10.3	91.2
50-54	1,106	na	na	na
Total (15-49)	11,219	9,951	100.0	88.7
Ratio of 50-54 to 45-49	0.99			

na = Not applicable

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

Household population of children age 0-7, children age 0-4 whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed, by single ages, Lao PDR 2011-12

	Household population of children 0-7 years	Interviewed under-5 children		Percentage of eligible under-5s interviewed (Completion rate)
	Number	Number	Percent	
Age				
0	2,254	2,213	20.6	98.2
1	2,134	2,095	19.5	98.2
2	2,165	2,130	19.8	98.4
3	2,302	2,250	20.9	97.7
4	2,095	2,071	19.3	98.9
5	2,472	na	na	na
6	2,354	na	na	na
7	2,425	na	na	na
Total (0-4)	10,949	10,758	100.0	98.3
Ratio of 5 to 4	1.18			

na = Not applicable

Table DQ.4.1: Women's completion rates by socioeconomic characteristics of households

Household population of women age 15-49, interviewed women age 15-49, and percentage of eligible women who were interviewed, by selected social and economic characteristics of the household, Lao PDR 2011-12

	Household population of women age 15-49 years		Interviewed women age 15-49 years		Percent of eligible women interviewed (Completion rates)
	Number	Percent	Number	Percent	
Region					
North	7,566	31.4	7,169	31.9	94.8
Central	12,046	50.0	11,088	49.3	92.0
South	4,457	18.5	4,226	18.8	94.8
Province					
Vientiane Capital	3,521	14.6	3,187	14.2	90.5
Phongsaly	713	3.0	662	2.9	92.9
Luangnamtha	673	2.8	643	2.9	95.6
Oudomxay	1,266	5.3	1,244	5.5	98.2
Bokeo	665	2.8	609	2.7	91.5
Luangprabang	1,581	6.6	1,471	6.5	93.0
Huaphanh	1,165	4.8	1,090	4.8	93.5
Xayabury	1,503	6.2	1,452	6.5	96.5
Xiengkhuang	997	4.1	919	4.1	92.1
Vientiane	1,792	7.4	1,691	7.5	94.4
Borikhamxay	966	4.0	937	4.2	97.0
Khammuane	1,161	4.8	1,139	5.1	98.1
Savannakhet	3,610	15.0	3,216	14.3	89.1
Saravane	1,552	6.4	1,496	6.7	96.3
Sekong	416	1.7	384	1.7	92.3
Champasack	2,086	8.7	1,962	8.7	94.1
Attapeu	403	1.7	385	1.7	95.4
Residence					
Urban	7,117	29.6	6,617	29.4	93.0
Rural	16,953	70.4	15,867	70.6	93.6
..Rural with road	15,284	90.2	14,325	90.3	93.7
..Rural without road	1,669	9.8	1,542	9.7	92.4
Household size					
1-3	3,053	12.7	2,921	13.0	95.7
4-6	12,767	53.0	12,080	53.7	94.6
7+	8,250	34.3	7,484	33.3	90.7
Education of household head					
None	4,484	18.6	4,107	18.3	91.6
Primary	10,958	45.5	10,249	45.6	93.5
Lower secondary	3,734	15.5	3,554	15.8	95.2
Upper secondary	1,522	6.3	1,423	6.3	93.5
Post secondary non tertiary	1,956	8.1	1,847	8.2	94.4
Higher	1,380	5.7	1,273	5.7	92.3
Missing/DK	36	0.2	30	0.1	(83.9)
Wealth index quintiles					
Poorest	4,093	17.0	3,828	17.0	93.5
Second	4,384	18.2	4,097	18.2	93.4
Middle	4,637	19.3	4,327	19.2	93.3
Fourth	5,019	20.9	4,707	20.9	93.8
Richest	5,936	24.7	5,525	24.6	93.1
Ethno-linguistic group of household head					
Lao-Tai	16,162	67.1	15,125	67.3	93.6
Mon-Khmer	5,271	21.9	4,934	21.9	93.6
Hmong-Mien	1,776	7.4	1,613	7.2	90.8
Chinese-Tibetan	728	3.0	690	3.1	94.8
Other, Missing, DK	133	0.6	122	0.5	91.6
Total	24,070	100.0	22,484	100.0	93.4

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table DQ.4.2: Men's completion rates by socioeconomic characteristics of households

Household population of men age 15-49, interviewed men age 15-49, and percentage of eligible men who were interviewed, by selected social and economic characteristics of the household, Lao PDR 2011-12

	Household population of men age 15-49 years		Interviewed men age 15-49 years		Percent of eligible men interviewed (Completion rates)
	Number	Percent	Number	Percent	
Region					
North	3,577	31.9	3,303	33.2	92.3
Central	5,632	50.2	4,861	48.8	86.3
South	2,010	17.9	1,787	18.0	88.9
Province					
Vientiane Capital	1,560	13.9	1,329	13.4	85.2
Phongsaly	359	3.2	316	3.2	88.1
Luangnamtha	301	2.7	278	2.8	92.6
Oudomxay	598	5.3	582	5.9	97.3
Bokeo	302	2.7	275	2.8	91.2
Luangprabang	724	6.5	665	6.7	91.8
Huaphanh	577	5.1	524	5.3	90.8
Xayabury	717	6.4	663	6.7	92.4
Xiengkhuang	496	4.4	418	4.2	84.1
Vientiane	813	7.2	744	7.5	91.6
Borikhamxay	441	3.9	412	4.1	93.5
Khammuane	568	5.1	530	5.3	93.3
Savannakhet	1,754	15.6	1,428	14.4	81.4
Saravane	670	6.0	614	6.2	91.7
Sekong	183	1.6	159	1.6	86.8
Champasack	978	8.7	877	8.8	89.7
Attapeu	179	1.6	136	1.4	76.2
Residence					
Urban	3,166	28.2	2,777	27.9	87.7
Rural	8,053	71.8	7,174	72.1	89.1
..Rural with road	7,272	90.3	6,497	90.6	89.3
..Rural without road	781	9.7	677	9.4	86.7
Household size					
1-3	1,276	11.4	1,161	11.7	91.0
4-6	6,085	54.2	5,440	54.7	89.4
7+	3,858	34.4	3,350	33.7	86.8
Education of household head					
None	2,124	18.9	1,854	18.6	87.3
Primary	5,179	46.2	4,615	46.4	89.1
Lower secondary	1,789	15.9	1,607	16.2	89.9
Upper secondary	691	6.2	613	6.2	88.7
Post secondary non tertiary	835	7.4	753	7.6	90.2
Higher	586	5.2	495	5.0	84.4
Missing/DK	15	0.1	14	0.1	*
Wealth index quintiles					
Poorest	1,908	17.0	1,710	17.2	89.6
Second	2,159	19.2	1,915	19.2	88.7
Middle	2,307	20.6	2,048	20.6	88.8
Fourth	2,360	21.0	2,085	21.0	88.4
Richest	2,486	22.2	2,192	22.0	88.2
Ethno-linguistic group of household head					
Lao-Tai	7,497	66.8	6,598	66.3	88.0
Mon-Khmer	2,455	21.9	2,213	22.2	90.1
Hmong-Mien	827	7.4	734	7.4	88.8
Chinese-Tibetan	373	3.3	343	3.4	92.0
Other, Missing, DK	68	0.6	62	0.6	91.2
Total	11,219	100.0	9,951	100.0	88.7

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

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

Household population of under-5 children, under-5 questionnaires completed, and percentage of under-5 children for whom interviews were completed, by selected socioeconomic characteristics of the household, Lao PDR 2011-12

	Household population of under-5 children		Interviewed under-5 children		Percent of eligible under-5s with completed under-5 questionnaires (Completion rates)
	Number	Percent	Number	Percent	
Region					
North	3,468	31.7	3,410	31.7	98.3
Central	5,100	46.6	4,992	46.4	97.9
South	2,382	21.8	2,356	21.9	98.9
Province					
Vientiane Capital	1,045	9.5	1,014	9.4	97.0
Phongsaly	363	3.3	352	3.3	96.9
Luangnamtha	277	2.5	277	2.6	100.0
Oudomxay	669	6.1	663	6.2	99.0
Bokeo	331	3.0	329	3.1	99.4
Luangprabang	746	6.8	726	6.7	97.4
Huaphanh	601	5.5	588	5.5	98.0
Xayabury	481	4.4	475	4.4	98.8
Xiengkhuang	533	4.9	509	4.7	95.3
Vientiane	760	6.9	754	7.0	99.3
Borikhamxay	397	3.6	395	3.7	99.4
Khammuane	598	5.5	595	5.5	99.5
Savannakhet	1,765	16.1	1,725	16.0	97.7
Saravane	911	8.3	903	8.4	99.1
Sekong	266	2.4	259	2.4	97.5
Champasack	992	9.1	982	9.1	98.9
Attapeu	213	1.9	212	2.0	99.5
Residence					
Urban	2,293	20.9	2,246	20.9	97.9
Rural	8,656	79.1	8,513	79.1	98.3
..Rural with road	7,580	87.6	7,458	87.6	98.4
..Rural without road	1,076	12.4	1,055	12.4	98.0
Household size					
1-3	627	5.7	618	5.7	98.6
4-6	5,330	48.7	5,278	49.1	99.0
7+	4,993	45.6	4,863	45.2	97.4
Education of household head					
None	2,567	23.4	2,505	23.3	97.6
Primary	5,184	47.3	5,106	47.5	98.5
Lower secondary	1,519	13.9	1,500	13.9	98.8
Upper secondary	625	5.7	615	5.7	98.3
Post secondary non tertiary	651	5.9	640	5.9	98.3
Higher	383	3.5	374	3.5	97.6
Missing/DK	20	0.2	18	0.2	*
Wealth index quintiles					
Poorest	3,184	29.1	3,145	29.2	98.8
Second	2,344	21.4	2,280	21.2	97.3
Middle	1,998	18.3	1,965	18.3	98.3
Fourth	1,781	16.3	1,759	16.3	98.7
Richest	1,642	15.0	1,610	15.0	98.1
Ethno-linguistic group of household head					
Lao-Tai	5,950	54.3	5,865	54.5	98.6
Mon-Khmer	3,147	28.7	3,105	28.9	98.7
Hmong-Mien	1,447	13.2	1,390	12.9	96.1
Chinese-Tibetan	352	3.2	347	3.2	98.7
Other, Missing, DK	54	0.5	51	0.5	95.5
Total	10,949	100.0	10,758	100.0	98.3

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

Table DQ.6: Completeness of reporting

Percentage of observations that are missing information for selected questions and indicators, Lao PDR 2011-12

Questionnaire and type of missing information	Reference group	Percent with missing/incomplete information*	Number of cases
Household			
Age	All household members	0.0	98,440
Salt test result	All households interviewed that have salt	0.6	18,843
Starting time of interview	All households interviewed	0.3	18,843
Ending time of interview	All households interviewed	0.2	18,843
Women			
Woman's date of birth	All women age 15-49		
Only month		2.2	22,476
Both month and year		0.0	22,476
Date of birth of children	All children reported by women		
Only month		1.5	56,802
Both month and year		0.0	56,802
Date of first marriage/union	All ever married women age 15-49		
Only month		7.9	17,445
Both month and year		2.7	17,445
Age at first marriage/union	All ever married women age 15-49 with year of first marriage not known	0.5	17,445
Age at first intercourse	All women age 15-24 who have ever had sex	0.2	3,904
Time since last intercourse	All women age 15-24 who have ever had sex	0.3	3,904
Starting time of interview	All women interviewed	0.4	22,476
Ending time of interview	All women interviewed	0.5	22,476
Men			
Man's date of birth	All men age 15-49		
Only month		1.9	9,951
Both month and year		0.0	9,951
Date of first marriage/union	All ever married men age 15-49		
Only month		7.7	6,788
Both month and year		2.7	6,788
Age at first marriage/union	All ever married men age 15-49 with year of first marriage not known	0.8	6,788
Age at first intercourse	All men age 15-24 who have ever had sex	0.4	1,642
Time since last intercourse	All men age 15-24 who have ever had sex	0.4	1,642
Starting time of interview	All men interviewed	0.5	9,951
Ending time of interview	All men interviewed	0.3	9,951
Under-5			
Date of birth	All under-5 children		
Only month		0.1	11,067
Both month and year		0.0	11,067
Anthropometric measurements	All under-5 children		
Weight		2.0	11,067
Height		2.6	11,067
Both weight and height		2.0	11,067
Starting time of interview	All under-5 children	0.4	11,067
Ending time of interview	All under-5 children	0.4	11,067

** Includes "Don't know" responses*

Table DQ.7: Completeness of information for anthropometric indicators

Distribution of children under 5 by completeness of information for anthropometric indicators, Lao PDR 2011-12

Weight by age

		Reason for exclusion from analysis						
	Valid weight and date of birth	Weight not measured	Incomplete date of birth	Weight not measured, incomplete date of birth	Flagged cases (outliers)	Total	Percent of children excluded from analysis	Number of children under 5
Age								
<6 months	96.32	2.91	0.00	0.00	0.77	100.00	3.68	1,168
6-11 months	98.44	1.10	0.09	0.00	0.37	100.00	1.56	1,092
12-23 months	97.75	2.07	0.05	0.00	0.14	100.00	2.25	2,173
24-35 months	97.73	2.09	0.09	0.00	0.09	100.00	2.27	2,158
36-47 months	98.11	1.72	0.17	0.00	0.00	100.00	1.89	2,332
48-59 months	97.62	2.33	0.05	0.00	0.00	100.00	2.38	2,144
Total	97.71	2.04	0.08	0.00	0.16	100.00	2.29	11,067

Height by age

		Reason for exclusion from analysis						
	Valid height and date of birth	Height not measured	Incomplete date of birth	Height not measured, incomplete date of birth	Flagged cases (outliers)	Total	Percent of children excluded from analysis	Number of children under 5
Age								
<6 months	93.24	4.02	0.00	0.00	2.74	100.00	6.76	1,168
6-11 months	96.89	1.37	0.09	0.00	1.65	100.00	3.11	1,092
12-23 months	95.63	2.35	0.05	0.00	1.98	100.00	4.37	2,173
24-35 months	95.41	2.78	0.09	0.00	1.71	100.00	4.59	2,158
36-47 months	96.83	2.32	0.13	0.04	0.69	100.00	3.17	2,332
48-59 months	96.60	2.57	0.05	0.00	0.79	100.00	3.40	2,144
Total	95.90	2.55	0.07	0.01	1.47	100.00	4.10	11,067

Weight by height

		Reason for exclusion from analysis								
	Valid weight and height	Weight not measured	Height not measured	Weight and height not measured	Incomplete date of birth	Height not measured, incomplete date of birth	Flagged cases (outliers)	Total	Percent of children excluded from analysis	Number of children under 5
Age										
<6 months	91.87	0.00	1.11	2.91	0.00	0.00	4.11	100.00	8.13	1,168
6-11 months	97.99	0.00	0.27	1.10	0.09	0.00	0.55	100.00	2.01	1,092
12-23 months	97.01	0.09	0.37	1.98	0.05	0.00	0.51	100.00	2.99	2,173
24-35 months	96.39	0.00	0.70	2.09	0.09	0.00	0.74	100.00	3.61	2,158
36-47 months	97.21	0.00	0.60	1.72	0.13	0.04	0.30	100.00	2.79	2,332
48-59 months	96.88	0.05	0.28	2.29	0.05	0.00	0.47	100.00	3.13	2,144
Total	96.46	0.03	0.53	2.01	0.07	0.01	0.89	100.00	3.54	11,067

Table DQ.8: Heaping in anthropometric measurements

Distribution of weight and height/length measurements by digits reported for decimals, Lao PDR 2011-12

	Weight		Height or length	
Digits	Number	Percent	Number	Percent
0	1,324	12.2	2,895	26.7
1	977	9.0	700	6.5
2	1,083	10.0	1,185	10.9
3	1,052	9.7	1,083	10.0
4	1,068	9.9	842	7.8
5	1,124	10.4	1,530	14.1
6	1,041	9.6	785	7.2
7	1,064	9.8	581	5.4
8	1,079	10.0	592	5.5
9	1,029	9.5	651	6.0
0 or 5	2,448	22.6	4,425	40.8
Total	10,841	100.0	10,844	100.0

Table DQ.9: Observation of bednets

Percentage of bednets in all households interviewed observed by the interviewer, Lao PDR 2011-12

	Percentage of bednets observed by interviewer	Total number of bednets
Region		
North	93.8	21,219
Central	87.6	22,490
South	86.1	14,259
Province		
Vientiane Capital	76.1	3,554
Phongsaly	98.5	1,982
Luangnamtha	99.8	2,567
Oudomxay	99.8	3,162
Bokeo	98.3	3,061
Luangprabang	94.3	3,533
Huaphanh	99.9	3,432
Xayabury	70.8	3,482
Xiengkhuang	99.4	3,163
Vientiane	98.6	4,413
Borikhamxay	66.9	3,137
Khammuane	92.0	3,445
Savannakhet	88.7	4,778
Saravane	87.2	3,961
Sekong	100.0	3,190
Champasack	78.9	4,480
Attapeu	79.6	2,628
Residence		
Urban	85.0	14,895
Rural	91.1	43,073
..Rural with road	90.6	38,887
..Rural without road	95.2	4,186
Wealth index quintiles		
Poorest	94.7	8,976
Second	92.9	11,181
Middle	91.4	13,295
Fourth	86.0	13,663
Richest	83.9	10,853
Ethno-linguistic group of household head		
Lao-Tai	86.4	37,731
Mon-Khmer	95.6	14,035
Hmong-Mien	94.4	3,992
Chinese-Tibetan	98.9	1,947
Other, Missing, DK	75.3	263
Total	89.5	57,968

Table DQ.10: Observation of women's health cards

Percent distribution of women with a live birth in the last 2 years by presence of a health card, and the percentage of health cards seen by the interviewers, Lao PDR 2011-12

		Woman has health card					
	Woman does not have health card	Seen by the interviewer (1)	Not seen by the interviewer (2)	Missing/DK	Total	Percent of health cards seen by the interviewer (1)/(1+2)*100	Number of women with a live birth in the last two years
Region							
North	32.9	34.9	30.8	1.5	100.0	53.1	1,724
Central	37.1	25.2	35.8	1.9	100.0	41.3	1,525
South	61.0	10.1	26.5	2.3	100.0	27.6	1,195
Province							
Vientiane Capital	24.7	31.4	43.0	0.9	100.0	42.2	223
Phongsaly	49.4	27.7	22.1	0.9	100.0	55.6	235
Luangnamtha	25.0	20.0	53.3	1.7	100.0	27.3	180
Oudomxay	32.4	43.6	23.1	0.9	100.0	65.4	321
Bokeo	22.7	41.0	34.3	2.0	100.0	54.5	251
Luangprabang	38.5	19.6	41.2	0.8	100.0	32.3	260
Huaphanh	31.9	50.0	14.9	3.3	100.0	77.1	276
Xayabury	28.4	33.8	37.3	0.5	100.0	47.6	201
Xiengkhuang	31.1	39.8	25.3	3.7	100.0	61.1	241
Vientiane	30.4	24.4	44.8	0.4	100.0	35.3	250
Borikhamxay	35.1	29.2	35.1	0.5	100.0	45.4	202
Khammuane	40.8	23.2	34.1	1.9	100.0	40.5	267
Savannakhet	52.6	10.5	33.6	3.2	100.0	23.8	342
Saravane	62.1	11.1	23.1	3.7	100.0	32.5	351
Sekong	68.9	6.4	22.6	2.1	100.0	22.1	328
Champasack	54.9	12.6	29.7	2.7	100.0	29.8	293
Attapeu	55.6	10.8	33.6	0.0	100.0	24.2	223
Residence							
Urban	29.2	25.6	43.1	2.0	100.0	37.3	890
Rural	45.1	24.7	28.4	1.8	100.0	46.5	3,554
..Rural with road	43.0	25.5	29.7	1.8	100.0	46.2	3,067
..Rural without road	58.1	19.9	20.3	1.6	100.0	49.5	487
Wealth index quintiles							
Poorest	53.9	22.2	21.7	2.2	100.0	50.5	1,367
Second	46.2	23.7	28.5	1.6	100.0	45.4	1,010
Middle	38.3	26.3	33.5	1.9	100.0	44.0	848
Fourth	33.1	25.3	39.7	1.9	100.0	38.9	668
Richest	20.3	31.2	47.2	1.3	100.0	39.8	551
Ethno-linguistic group of household head							
Lao-Tai	33.7	26.5	38.0	1.7	100.0	41.1	2,142
Mon-Khmer	52.3	19.6	26.2	1.9	100.0	42.8	1,458
Hmong-Mien	45.3	30.0	22.2	2.5	100.0	57.5	590
Chinese-Tibetan	43.1	30.2	25.4	1.3	100.0	54.3	232
Other, Missing, DK	*	*	*	*	*	*	22
Total	41.9	24.9	31.4	1.8	100.0	44.2	4,444

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

Table DQ.11: Observation of under-5s birth certificates

Percent distribution of children under 5 by presence of birth certificates,and percentage of birth calendar seen, Lao PDR 2011-12

	Child has birth certificate						
	Child does not have birth certificate	Seen by the interviewer (1)	Not seen by the interviewer (2)	Don't know/ Missing	Total	Percent of birth certificates seen by the interviewer (1)/(1+2)*100	Number of children under age 5
Region							
North	74.2	16.1	9.0	0.7	100.0	64.1	4,226
Central	60.4	17.1	21.5	1.0	100.0	44.3	3,833
South	75.1	14.3	10.3	0.3	100.0	58.1	3,008
Province							
Vientiane Capital	26.8	30.6	41.9	0.7	100.0	42.2	556
Phongsaly	93.8	2.3	3.2	0.7	100.0	41.9	569
Luangnamtha	57.2	26.3	16.3	0.2	100.0	61.7	502
Oudomxay	44.0	46.1	9.4	0.5	100.0	83.1	757
Bokeo	76.7	10.2	11.2	2.0	100.0	47.7	600
Luangprabang	77.6	6.8	15.2	0.5	100.0	30.8	664
Huaphanh	97.4	1.2	1.0	0.4	100.0	53.3	685
Xayabury	75.3	16.5	8.0	0.2	100.0	67.3	449
Xiengkhuang	75.9	16.8	7.1	0.2	100.0	70.3	619
Vientiane	62.0	20.2	17.3	0.5	100.0	53.8	629
Borikhamxay	43.2	32.5	23.8	0.4	100.0	57.7	474
Khammuane	76.9	6.9	15.1	1.1	100.0	31.5	650
Savannakhet	66.5	6.1	25.0	2.4	100.0	19.6	905
Saravane	58.0	32.1	9.5	0.5	100.0	77.2	845
Sekong	84.0	4.5	11.0	0.5	100.0	29.2	881
Champasack	80.9	8.8	10.0	0.3	100.0	46.7	717
Attapeu	79.6	9.7	10.6	0.0	100.0	47.8	565
Residence							
Urban	43.6	28.1	27.9	0.4	100.0	50.2	2,081
Rural	75.7	13.2	10.4	0.8	100.0	55.9	8,986
..Rural with road	74.0	14.3	11.1	0.7	100.0	56.3	7,749
..Rural without road	86.4	6.2	6.1	1.3	100.0	50.7	1,237
Wealth index quintiles							
Poorest	82.6	11.3	5.1	1.0	100.0	69.0	3,640
Second	79.8	10.4	9.4	0.3	100.0	52.5	2,485
Middle	70.2	15.7	13.5	0.6	100.0	53.7	2,011
Fourth	57.5	20.4	21.4	0.8	100.0	48.8	1,629
Richest	28.6	34.4	36.5	0.5	100.0	48.5	1,302
Ethno-linguistic group of household head							
Lao-Tai	57.9	20.8	20.8	0.5	100.0	50.0	5,116
Mon-Khmer	77.1	13.1	8.9	0.9	100.0	59.4	3,757
Hmong-Mien	86.0	8.9	4.5	0.6	100.0	66.3	1,552
Chinese-Tibetan	83.2	9.3	7.0	0.5	100.0	57.3	589
Other, Missing, DK	52.8	34.0	11.3	1.9	100.0	75.0	53
Child's age							
0	69.5	19.7	10.2	0.5	100.0	66.0	2,233
1	67.1	17.1	14.8	0.9	100.0	53.5	2,182
2	70.1	14.5	14.7	0.7	100.0	49.7	2,158
3	69.6	15.1	14.5	0.9	100.0	51.0	2,337
4	72.0	13.3	14.3	0.5	100.0	48.2	2,157
Total	69.7	16.0	13.7	0.7	100.0	53.8	11,067

Table DQ.12: Observation of vaccination cards

Percent distribution of children under 5 by presence of a vaccination card, and the percentage of vaccination cards seen by the interviewers, Lao PDR 2011-12

	Child does not have vaccination card		Child has vaccination card					
	Had vaccination card previously	Never had vaccination card	Seen by the interviewer (1)	Not seen by the interviewer (2)	Don't know/ Missing	Total	Percent of vaccination cards seen by the interviewer (1)/(1+2)*100	Number of children under age 5
Region								
North	3.8	25.3	46.5	24.5	0.0	100.0	65.5	4,226
Central	8.1	23.7	40.3	27.8	0.0	100.0	59.2	3,833
South	5.5	36.0	24.2	34.3	0.0	100.0	41.4	3,008
Province								
Vientiane Capital	5.2	7.9	53.2	33.6	0.0	100.0	61.3	556
Phongsaly	2.8	52.0	24.3	20.9	0.0	100.0	53.7	569
Luangnamtha	2.8	6.8	44.6	45.8	0.0	100.0	49.3	502
Oudomxay	0.7	22.6	49.5	27.2	0.0	100.0	64.5	757
Bokeo	5.5	31.7	44.0	18.8	0.0	100.0	70.0	600
Luangprabang	5.0	17.6	49.1	28.3	0.0	100.0	63.4	664
Huaphanh	8.0	33.6	52.4	6.0	0.0	100.0	89.8	685
Xayabury	0.7	6.7	61.9	30.7	0.0	100.0	66.8	449
Xiengkhuang	13.6	30.5	38.0	17.8	0.2	100.0	68.1	619
Vientiane	5.2	17.3	51.5	25.9	0.0	100.0	66.5	629
Borikhamxay	5.5	13.5	45.1	35.9	0.0	100.0	55.7	474
Khammuane	7.8	18.5	46.3	27.4	0.0	100.0	62.8	650
Savannakhet	9.7	42.4	19.4	28.4	0.0	100.0	40.6	905
Saravane	4.6	41.9	30.3	23.2	0.0	100.0	56.6	845
Sekong	5.8	41.7	18.7	33.8	0.0	100.0	35.6	881
Champasack	7.1	23.2	26.2	43.5	0.0	100.0	37.6	717
Attapeu	4.4	34.5	21.1	40.0	0.0	100.0	34.5	565
Residence								
Urban	4.2	12.8	49.8	33.2	0.0	100.0	60.0	2,081
Rural	6.1	31.1	35.6	27.2	0.0	100.0	56.7	8,986
..Rural with road	6.0	28.5	37.7	27.8	0.0	100.0	57.5	7,749
..Rural without road	6.6	47.2	22.9	23.3	0.0	100.0	49.6	1,237
Wealth index quintiles								
Poorest	6.8	45.7	26.2	21.3	0.0	100.0	55.1	3,640
Second	4.8	29.8	35.4	30.0	0.0	100.0	54.1	2,485
Middle	5.2	20.2	44.6	30.0	0.0	100.0	59.7	2,011
Fourth	6.3	12.0	48.4	33.4	0.0	100.0	59.2	1,629
Richest	4.7	4.3	55.5	35.6	0.0	100.0	60.9	1,302
Ethno-linguistic group of household head								
Lao-Tai	5.7	14.2	47.9	32.2	0.0	100.0	59.8	5,116
Mon-Khmer	5.6	37.1	30.1	27.2	0.0	100.0	52.5	3,757
Hmong-Mien	7.0	46.3	29.2	17.5	0.1	100.0	62.6	1,552
Chinese-Tibetan	3.4	35.3	31.4	29.9	0.0	100.0	51.2	589
Other, Missing, DK	7.5	28.3	35.8	28.3	0.0	100.0	55.9	53
Child's age								
0	2.4	38.5	48.9	10.2	0.0	100.0	82.8	2,233
1	4.6	24.6	47.8	23.1	0.0	100.0	67.5	2,182
2	6.1	23.1	38.6	32.1	0.0	100.0	54.6	2,158
3	7.8	25.4	29.8	37.0	0.0	100.0	44.6	2,337
4	7.8	26.5	26.6	39.1	0.0	100.0	40.4	2,157
Total	5.7	27.6	38.3	28.3	0.0	100.0	57.5	11,067

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

Distribution of children under five by whether the mother lives in the same household, and the person interviewed for the under-5 questionnaire, Lao PDR 2011-12

	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	Other person interviewed	Total	Number of children under 5
Age										
0	97.7	0.0	0.1	0.0	0.0	2.1	0.1	0.0	100.0	2,254
1	95.3	0.0	0.3	0.1	0.3	4.0	0.0	0.0	100.0	2,134
2	93.1	0.0	0.3	0.0	0.2	6.1	0.2	0.1	100.0	2,165
3	94.2	0.0	0.0	0.0	0.1	5.3	0.3	0.1	100.0	2,302
4	93.3	0.1	0.3	0.0	0.3	6.1	0.1	0.0	100.0	2,095
Total	94.8	0.0	0.2	0.0	0.2	4.7	0.1	0.0	100.0	10,949

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

Percent of households with at least two children age 2-14 years where correct selection of one child for the child discipline module was performed, Lao PDR 2011-12

	Percent of households where correct selection was performed	Number of households with 2 or more children age 2-14 years
Region		
North	93.5	3,762
Central	91.3	3,231
South	96.4	2,473
Province		
Vientiane Capital	90.0	438
Phongsaly	87.0	515
Luangnamtha	91.8	500
Oudomxay	95.4	651
Bokeo	98.1	470
Luangprabang	94.0	599
Huaphanh	96.5	623
Xayabury	90.3	404
Xiengkhuang	93.0	513
Vientiane	96.3	535
Borikhamxay	95.0	420
Khammuane	94.1	572
Savannakhet	83.4	753
Saravane	96.5	695
Sekong	97.5	647
Champasack	94.2	643
Attapeu	97.7	488

	Percent of households where correct selection was performed	Number of households with 2 or more children age 2-14 years
Residence		
Urban	93.3	1,756
Rural	93.6	7,710
..Rural with road	93.8	6,739
..Rural without	92.4	971
Number of children age 2-14 years		
2	94.3	4,585
3	93.6	2,610
4	93.9	1,363
5+	88.9	908
Total	93.5	9,466

Table DQ.15: School attendance by single age

Distribution of household population age 5-24 by educational level and and grade attended in the current (or most recent) school year, Lao PDR 2011-12

		Currently attending																													
	Not attending school		Primary school grade						Lower secondary school grade					Upper secondary school grade				Post secondary non tertiary school grade			Tertiary school grade								Missing /DK	Total	Number of household members
		Preschool	11	12	13	14	15	DK	21	22	23	24	DK	31	32	33	DK	41	42	43	51	52	53	54	55	56	57	DK			
Age at beginning of school year																															
5	46.8	15.4	34.0	3.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,392
6	29.3	3.9	47.6	16.3	2.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,371
7	14.7	1.4	35.2	32.0	14.5	1.9	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,449
8	9.6	0.4	22.3	28.4	24.9	11.6	2.3	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,588
9	7.8	0.1	12.4	19.3	25.6	22.6	10.9	0.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,295
10	8.6	0.1	6.5	13.3	18.3	21.8	20.8	0.0	9.3	1.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,490
11	9.7	0.1	3.9	8.3	12.8	19.0	21.7	0.0	16.2	7.0	1.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,690
12	15.6	0.2	1.7	5.3	8.4	12.6	16.6	0.0	16.0	15.6	6.2	1.3	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,512
13	24.1	0.0	0.9	2.6	4.8	6.6	11.0	0.0	13.7	16.1	12.8	5.5	0.0	0.8	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,463
14	31.8	0.0	0.3	1.2	1.9	3.7	6.6	0.0	9.2	11.6	12.7	13.2	0.0	4.5	2.0	1.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,418
15	38.4	0.0	0.2	0.3	1.1	1.6	2.7	0.0	5.0	7.7	10.6	12.8	0.0	9.0	7.3	3.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,064
16	47.5	0.0	0.2	0.2	0.2	0.6	1.5	0.0	2.1	3.6	6.2	9.8	0.0	7.4	10.1	9.8	0.1	0.4	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,010
17	56.6	0.0	0.0	0.0	0.0	0.2	0.5	0.0	1.0	0.9	2.9	5.5	0.0	6.0	9.4	14.5	0.0	0.8	0.1	0.0	1.1	0.1	0.3	0.0	0.1	0.0	0.0	0.0	0.0	100.0	1,969
18	69.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.8	1.0	2.1	0.0	2.9	5.5	10.8	0.0	0.8	0.5	0.1	3.0	0.7	1.6	0.1	0.0	0.0	0.0	0.0	0.0	100.0	1,929
19	75.6	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.7	0.7	0.0	1.7	3.0	8.1	0.0	0.9	0.6	0.3	2.0	1.4	3.8	0.6	0.1	0.1	0.0	0.0	0.1	100.0	1,651
20	84.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.3	0.0	0.3	0.0	0.4	0.9	3.1	0.0	0.4	0.6	0.3	1.2	0.9	3.1	2.8	0.7	0.1	0.0	0.0	0.0	100.0	1,641
21	84.9	0.0	0.0	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.2	0.2	0.0	0.1	0.5	1.5	0.0	0.3	0.3	0.5	1.2	1.2	2.7	2.7	2.6	0.2	0.5	0.1	0.0	100.0	1,484
22	92.2	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.5	0.0	0.2	0.2	0.2	0.6	1.1	1.3	0.5	2.0	0.1	0.1	0.0	0.0	100.0	1,530
23	93.4	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.1	0.2	0.0	0.3	0.3	0.3	0.7	0.3	1.5	0.6	1.2	0.3	0.1	0.0	0.1	100.0	1,484
24	95.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.6	0.7	0.2	2.0	0.0	0.0	0.0	0.0	100.0	1,358

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

Sex ratio (number of males per 100 females) among children ever born (at birth), children living, and deceased children, by age of women, Lao PDR 2011-12

	Children Ever Born			Children Living			Children Deceased			
	Number of sons ever born	Number of daughters ever born	Sex ratio at birth	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	465.0	422.0	1.1	409.0	385.0	1.1	56.0	37.0	1.5	4,558
20-24	2,005.0	1,971.0	1.0	1,800.0	1,810.0	1.0	205.0	161.0	1.3	3,598
25-29	4,135.0	3,797.0	1.1	3,641.0	3,454.0	1.1	494.0	343.0	1.4	3,668
30-34	4,650.0	4,531.0	1.0	4,002.0	4,006.0	1.0	648.0	525.0	1.2	2,972
35-39	6,213.0	5,906.0	1.1	5,142.0	5,101.0	1.0	1,071.0	805.0	1.3	3,058
40-44	5,893.0	5,509.0	1.1	4,727.0	4,597.0	1.0	1,166.0	912.0	1.3	2,463
45-49	5,785.0	5,520.0	1.0	4,535.0	4,504.0	1.0	1,250.0	1,016.0	1.2	2,159
Total	29,146.0	27,656.0	1.1	24,256.0	23,857.0	1.0	4,890.0	3,799.0	1.3	22,476

Table DQ.17: Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted, imputed), Lao PDR, 2011-12

	Number of births			Percent with complete birth date **			Sex ratio at birth ***			Calendar year ratio ****		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
Year of birth												
2012*	43	4	47	100.0	100.0	100.0	67.5	126.3	71.5	na	na	na
2011*	1,955	95	2,050	100.0	100.0	100.0	102.9	135.8	104.2	na	na	na
2010	2,028	151	2,179	100.0	96.8	99.8	105.1	114.6	105.8	na	na	na
2009	1,965	188	2,153	100.0	97.4	99.8	94.8	153.8	98.8	95.5	115.5	97.0
2008	2,087	174	2,261	100.0	96.2	99.7	104.5	137.7	106.7	105.6	82.5	103.4
2007	1,987	234	2,221	99.8	96.2	99.4	106.7	122.1	108.2	93.9	113.5	95.7
2006	2,144	239	2,383	99.8	95.1	99.3	105.7	99.8	105.1	104.1	96.7	103.3
2005	2,134	260	2,393	99.5	94.7	98.9	99.9	141.6	103.7	100.6	96.8	100.2
2004	2,096	298	2,394	99.7	96.2	99.3	92.6	129.1	96.5	95.6	107.5	96.9
2003	2,252	294	2,546	99.8	95.1	99.3	93.4	150.8	98.7	109.1	93.3	107.0
2002	2,032	332	2,365	99.8	95.2	99.1	108.1	127.2	110.6	96.0	104.9	97.1
2001	1,984	340	2,323	99.5	93.7	98.7	91.3	116.1	94.6	91.7	90.5	91.5
2000	2,293	419	2,711	99.7	93.7	98.8	112.2	107.8	111.5	112.5	113.6	112.6
1999	2,093	398	2,491	99.8	93.2	98.8	94.9	144.5	101.4	97.0	96.2	96.9
1998	2,021	408	2,430	99.6	94.2	98.7	95.3	123.3	99.5	100.0	104.8	100.8
1997	1,949	382	2,330	99.8	96.1	99.2	96.3	135.3	101.8	101.1	97.4	100.5
1996	1,834	375	2,209	99.3	94.1	98.4	114.0	133.2	117.0	97.3	99.1	97.6
1995	1,820	375	2,195	99.6	93.2	98.5	102.5	131.5	106.9	102.9	97.6	102.0
1994	1,703	394	2,097	99.4	95.0	98.6	100.9	119.9	104.2	96.9	108.7	98.9
1993	1,695	350	2,045	99.3	93.9	98.4	94.8	147.3	102.2	107.7	96.6	105.6
1992	1,444	331	1,775	99.3	96.4	98.7	96.9	119.9	100.8	na	na	na
2007-2011*	10,065	847	10,912	99.9	97.0	99.7	102.6	131.7	104.6	na	na	na
2002-2006	10,658	1,422	12,080	99.7	95.3	99.2	99.6	129.3	102.7	na	na	na
1997-2001	10,340	1,946	12,286	99.7	94.2	98.8	98.1	124.6	101.9	na	na	na
1992-1996	8,497	1,825	10,322	99.4	94.5	98.5	101.9	129.8	106.4	na	na	na
<1992	7,395	2,298	9,693	98.8	92.1	97.2	103.7	126.7	108.7	na	na	na
Total	46,956	8,337	55,292	99.5	94.1	98.7	101.0	127.8	104.6	na	na	na

* Interviews were conducted from September 2011 to February 2012.
** Both month and year of birth given.
*** (Bm/Bf) x 100, where Bm and Bf are the numbers of male and female births, respectively.
**** (2 x Bt/(Bt-1 + Bt+1)) x 100, where Bt is the number of births in calendar year t.
na = Not applicable

Table DQ.18: Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0–6 days, by five-year periods preceding the survey (weighted, unimputed), Lao PDR, 2011-12

	Number of years preceding the survey				
	0-4	5-9	10-14	15-19	Total 0-19
Age at death (days)					
0	122	173	173	139	607
1	125	128	165	143	561
2	38	60	55	43	196
3	22	47	62	55	186
4	15	16	16	15	62
5	14	24	29	38	105
6	8	14	13	13	48
7	14	30	45	41	130
8	6	3	10	9	28
9	5	10	12	7	34
10	10	33	29	23	95
11	0	1	4	1	6
12	3	7	9	5	24
13	4	4	6	6	20
14	5	7	8	7	27
15	12	15	11	15	53
16	3	0	1	1	5
17	3	2	3	1	9
18	3	3	2	2	10
19	2	1	2	0	5
20	6	8	20	10	44
21	0	1	2	3	6
22	1	0	4	2	7
23	1	0	1	0	2
24	0	1	0	2	3
25	1	6	2	5	14
26	0	1	1	1	3
27	1	2	2	3	8
28	1	1	1	1	4
29	1	1	0	4	6
30	0	2	0	1	3
Total 0-30	426	601	688	596	2,311
Percent early neonatal*	80.8	76.9	74.6	74.8	76.4

* <7 days / <31 days

Table DQ.19: Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, by five-year periods preceding the survey (weighted, unimputed), Lao PDR, 2011-12

	Number of years preceding the survey				
	0-4	5-9	10-14	15-19	Total 0-19
Age at death (months)					
0	426	601	688	596	2,311
1	135	174	220	183	712
2	98	121	155	110	484
3	66	102	155	125	448
4	22	24	49	48	143
5	18	34	53	39	144
6	28	38	44	46	156
7	10	16	27	27	80
8	12	16	33	37	98
9	15	12	26	28	81
10	6	6	12	11	35
11	3	5	3	12	23
12	4	3	2	6	15
13	0	1	0	1	2
14	1	1	6	0	8
15	0	1	0	2	3
16	0	1	0	1	2
17	0	0	0	1	1
18	0	1	1	2	4
19	0	1	1	0	2
20	0	0	1	0	1
21	0	0	0	1	1
22	0	0	0	1	1
23	0	0	0	0	0
24	0	1	1	2	4
Reported as 1 year	26	107	147	156	436
Total 0-11	818	1,194	1,537	1,349	4,898
Percent neonatal*	50.8	52.3	47.0	47.2	49.0

* <1 month / <1 year

Table DQ.20: Completeness of information on siblings

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings and age at death (AD) and years since death (YSD) of dead siblings, (unweighted), Lao PDR 2011-12

	Sisters		Brothers		Total	
	Number	Percent	Number	Percent	Number	Percent
All siblings	56,520	100.0	60,149	100.0	116,669	100.0
Living	46,004	81.4	47,976	79.8	93,980	80.6
Dead	10,491	18.6	12,144	20.2	22,635	19.4
Survival status unknown	25	0.0	29	0.0	54	0.0
Living siblings	46,004	100.0	47,976	100.0	93,980	100.0
Age reported	45,954	99.9	47,909	99.9	93,863	99.9
Age missing	50	0.1	67	0.1	117	0.1
Dead siblings	10,491	100.0	12,144	100.0	22,635	100.0
AD and YSD reported	10,447	99.6	12,094	99.6	22,541	99.6
Missing only AD	15	0.1	24	0.2	39	0.2
Missing only YSD	18	0.2	20	0.2	38	0.2
Missing AD and YSD	11	0.1	6	0.0	17	0.1

Table DQ.21: Sibship size and sex ratio of siblings

Mean sibship size and sex ratio of siblings at birth, Lao PDR 2011-12

	Mean sibship size*	Sex ratio of siblings at birth**
Age		
15-19	5.6	1.08
20-24	6.0	1.11
25-29	6.3	1.06
30-34	6.5	1.04
35-39	6.5	1.07
40-44	6.4	1.06
45-49	6.3	1.06
Total 15-49	6.2	1.07

* Includes the respondent
** Excludes the respondent

Appendix E. MICS Indicators: Numerators and Denominators

INDICATOR		NUMERATOR	DENOMINATOR
CHILD MORTALITY			
1.1	Under-five mortality rate	Number of deaths before 5 years old per 1,000 live births in a given year or period	
1.2	Infant mortality rate	Number of deaths before their first birthday per 1,000 live births in a given year or period	
1.3	Neonatal mortality rate	Number of deaths during the first 28 completed days of life per 1,000 live births in a given year or period	
1.4	Post-neonatal mortality rate	Number of deaths during the first 28 to 364 days of life per 1,000 live births in a given year or period	
1.5	Child mortality rate	Number of deaths between 1 to 4 years old per 1,000 live births in a given year or period	
NUTRITION			
2.1a 2.1b	Underweight prevalence	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median weight for age of the WHO standard	Total number of children under age 5
2.2a 2.2b	Stunting prevalence	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median height for age of the WHO standard	Total number of children under age 5
2.3a 2.3b	Wasting prevalence	Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median weight for height of the WHO standard	Total number of children under age 5
2.4	Children ever breastfed	Number of women with a live birth in the 2 years preceding the survey who breastfed the child at any time	Total number of women with a live birth in the 2 years preceding the survey
2.5	Early initiation of breastfeeding	Number of women with a live birth in the 2 years preceding the survey who put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey
2.6	Exclusive breastfeeding under 6 months	Number of infants under 6 months of age who are exclusively breastfed	Total number of infants under 6 months of age

INDICATOR		NUMERATOR	DENOMINATOR
2.7	Continued breastfeeding at 1 year	Number of children age 12-15 months who are currently breastfeeding	Total number of children age 12-15 months
2.8	Continued breastfeeding at 2 years	Number of children age 20-23 months who are currently breastfeeding	Total number of children age 20-23 months
2.9	Predominant breastfeeding under 6 months	Number of infants under 6 months of age who received breast milk as the predominant source of nourishment during the previous day	Total number of infants under 6 months of age
2.10	Duration of breastfeeding	The age in months when 50 percent of children age 0-35 months did not receive breast milk during the previous day	
2.11	Bottle feeding	Number of children age 0-23 months who were fed with a bottle during the previous day	Total number of children age 0-23 months
2.12	Introduction of solid, semi-solid or soft foods	Number of infants age 6-8 months who received solid, semi-solid or soft foods during the previous day	Total number of infants age 6-8 months
2.13	Minimum meal frequency	Number of children age 6-23 months receiving solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum times or more, according to breastfeeding status, during the previous day	Total number of children age 6-23 months
2.14	Age-appropriate breastfeeding	Number of children age 0-23 months appropriately fed during the previous day	Total number of children age 0-23 months
2.15	Milk feeding frequency for non-breastfed children	Number of non-breastfed children age 6-23 months who received at least 2 milk feedings during the previous day	Total number of non-breastfed children age 6-23 months
2.17	Vitamin A supplementation (children under age 5)	Number of children age 6-59 months who received at least one high-dose vitamin A supplement in the 6 months preceding the survey	Total number of children age 6-59 months
2.18	Low-birth weight infants	Number of last live births in the 2 years preceding the survey weighing below 2,500 grams at birth	Total number of last live births in the 2 years preceding the survey
2.19	Infants weighed at birth	Number of last live births in the 2 years preceding the survey who were weighed at birth	Total number of last live births in the 2 years preceding the survey
CHILD HEALTH			
3.1	Tuberculosis immunization coverage	Number of children age 12-23 months who received BCG vaccine before their first birthday	Total number of children age 12-23 months

INDICATOR		NUMERATOR	DENOMINATOR
3.2	Polio immunization coverage	Number of children age 12-23 months who received OPV3 vaccine before their first birthday	Total number of children age 12-23 months
3.3	Immunization coverage for diphtheria, pertussis and tetanus (DPT)	Number of children age 12-23 months who received DPT3 vaccine before their first birthday	Total number of children age 12-23 months
3.4	Measles immunization coverage	Number of children age 12-23 months who received measles vaccine before their first birthday	Total number of children age 12-23 months
3.5	Hepatitis B immunization coverage	Number of children age 12-23 months who received the third dose of Hepatitis B vaccine before their first birthday	Total number of children age 12-23 months
3.7	Neonatal tetanus protection	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who were given at least two doses of tetanus toxoid vaccine within the appropriate interval prior to giving birth	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey
3.8	Oral rehydration therapy with continued feeding	Number of children under age 5 with diarrhoea in the previous 2 weeks who received ORT (ORS packet or recommended homemade fluid or increased fluids) and continued feeding during the episode of diarrhoea	Total number of children under age 5 with diarrhoea in the previous 2 weeks
3.9	Care seeking for suspected pneumonia	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who were taken to an appropriate health provider	Total number of children under age 5 with suspected pneumonia in the previous 2 weeks
3.10	Antibiotic treatment of suspected pneumonia	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who received antibiotics	Total number of children under age 5 with suspected pneumonia in the previous 2 weeks
3.11	Solid fuels	Number of household members in households that use solid fuels as the primary source of domestic energy to cook	Total number of household members
3.12	Household availability of insecticide-treated nets (ITNs)	Number of households with at least one insecticide treated net (ITN)	Total number of households
3.14	Children under age 5 sleeping under any type of mosquito net	Number of children under age 5 who slept under any type of mosquito net the previous night	Total number of children under age 5

INDICATOR		NUMERATOR	DENOMINATOR
3.15	Children under age 5 sleeping under insecticide-treated nets (ITNs)	Number of children under age 5 who slept under an insecticide-treated mosquito net (ITN) the previous night	Total number of children under age 5
3.16	Malaria diagnostics usage	Number of children under age 5 reported to have had fever in the previous 2 weeks who had a finger or heel stick for malaria testing	Total number of children under age 5 reported to have had fever in the previous 2 weeks
3.17	Anti-malarial treatment of children under age 5 the same or next day	Number of children under age 5 reported to have had fever in the previous 2 weeks who were treated with any anti-malarial drug within the same or next day of onset of symptoms	Total number of children under age 5 reported to have had fever in the previous 2 weeks
3.18	Anti-malarial treatment of children under age 5	Number of children under age 5 reported to have had fever in the previous 2 weeks who received any antimalarial treatment	Total number of children under age 5 reported to have had fever in the previous 2 weeks
3.19	Pregnant women sleeping under insecticide-treated nets (ITNs)	Number of pregnant women who slept under an insecticide-treated net (ITN) the previous night	Total number of pregnant women
WATER AND SANITATION			
4.1	Use of improved drinking water sources	Number of household members using improved sources of drinking water	Total number of household members
4.2	Water treatment	Number of household members using unimproved drinking water who use an appropriate treatment method	Total number of household members in households using unimproved drinking water sources
4.3	Use of improved sanitation	Number of household members using improved sanitation facilities	Total number of household members
4.4	Safe disposal of child's faeces	Number of children age 0-2 years whose (last) stools were disposed of safely	Total number of children age 0-2 years
REPRODUCTIVE HEALTH			
5.1	Adolescent birth rate	Age-specific fertility rate for women age 15-19 years	
5.2	Early childbearing	Number of women age 20-24 years who had at least one live birth before age 18	Total number of women age 20-24 years

INDICATOR		NUMERATOR	DENOMINATOR
5.3	Contraceptive prevalence rate	Number of women age 15-49 years currently married or in union who are using (or whose partner is using) a (modern or traditional) contraceptive method	Total number of women age 15-49 years who are currently married or in union
5.4	Unmet need	Number of women age 15-49 years who are currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception	Total number of women age 15-49 years who are currently married or in union
5.5a 5.5b	Antenatal care coverage	Number of women age 15-49 years who were attended during pregnancy in the 2 years preceding the survey (a) at least once by skilled personnel (b) at least four times by any provider	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey
5.6	Content of antenatal care	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who had their blood pressure measured and gave urine and blood samples during the last pregnancy	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey
5.7	Skilled attendant at delivery	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who were attended during childbirth by skilled health personnel	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey
5.8	Institutional deliveries	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who delivered in a health facility	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey
5.9	Caesarean section	Number of last live births in the 2 years preceding the survey who were delivered by caesarean section	Total number of last live births in the 2 years preceding the survey
5.10	Post-partum stay in health facility	Number of women age 15-49 years who stayed in the health facility for 12 hours or more after the delivery of their last live birth in the 2 years preceding the survey	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey
5.11	Post-natal health check for the newborn	Number of last live births in the last 2 years who received a post-natal health check from any provider within 2 days after birth	Total number of last live births in the last 2 years
5.12	Post-natal health check for the mother	Number of women age 15-49 years who received a post-natal health check from any provider within 2 days after their last live birth in the 2 years preceding the survey	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey
5.13	Maternal mortality ratio	the ratio of the number of maternal deaths per 100,000 live births	

INDICATOR		NUMERATOR	DENOMINATOR
CHILD DEVELOPMENT			
6.1	Support for learning	Number of children age 36-59 months with whom an adult has engaged in four or more activities to promote learning and school readiness in the past 3 days	Total number of children age 36-59 months
6.2	Father's support for learning	Number of children age 36-59 months whose father has engaged in one or more activities to promote learning and school readiness in the past 3 days	Total number of children age 36-59 months
6.3	Learning materials: children's books	Number of children under age 5 who have three or more children's books	Total number of children under age 5
6.4	Learning materials: playthings	Number of children under age 5 with two or more playthings	Total number of children under age 5
6.5	Inadequate care	Number of children under age 5 left alone or in the care of another child younger than 10 years of age for more than one hour at least once in the past week	Total number of children under age 5
6.6	Early child development index	Number of children age 36-59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains	Total number of children age 36-59 months
6.7	Attendance to early childhood education	Number of children age 36-59 months who are attending an early childhood education programme	Total number of children age 36-59 months
EDUCATION			
7.1	Literacy rate among young people	Number of women age 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	Total number of women age 15-24 years
7.2	School readiness	Number of children in first grade of primary school who attended pre-school during the previous school year	Total number of children attending the first grade of primary school
7.3	Net intake rate in primary education	Number of children of school-entry age who enter the first grade of primary school	Total number of children of school-entry age
7.4	Primary school net attendance ratio (adjusted)	Number of children of primary school age currently attending primary or secondary school	Total number of children of primary school age
7.5	Secondary school net attendance ratio (adjusted)	Number of children of secondary school age currently attending secondary school or higher	Total number of children of secondary-school age

INDICATOR		NUMERATOR	DENOMINATOR
7.6	Children reaching last grade of primary	Proportion of children entering the first grade of primary school who eventually reach last grade	
7.7	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)
7.8	Transition rate to secondary school	Number of children attending the last grade of primary school during the previous school year who are in the first grade of secondary school during the current school year	Total number of children who are attending the first grade of secondary school
7.9	Gender parity index (primary school)	Primary school net attendance ratio (adjusted) for girls	Primary school net attendance ratio (adjusted) for boys
7.10	Gender parity index (secondary school)	Secondary school net attendance ratio (adjusted) for girls	Secondary school net attendance ratio (adjusted) for boys
CHILD PROTECTION			
8.1	Birth registration	Number of children under age 5 whose births are reported registered	Total number of children under age 5
8.5	Violent discipline	Number of children age 2-14 years who experienced psychological aggression or physical punishment during the past month	Total number of children age 2-14 years
8.6	Marriage before age 15	Number of women age 15-49 years who were first married or in union by the exact age of 15	Total number of women age 15-49 years
8.7	Marriage before age 18	Number of women age 20-49 years who were first married or in union by the exact age of 18	Total number of women age 20-49 years
8.8	Young people age 15-19 years currently married or in union	Number of young people age 15-19 years who are currently married or in union	Total number of women age 15-19 years
8.10a 8.10b	Spousal age difference	Number of women currently married or in union whose spouse is 10 or more years older, (a) for women age 15-19 years, (b) for women age 20-24 years	Total number of women currently married or in union (a) age 15-19 years, (b) age 20-24 years

INDICATOR		NUMERATOR	DENOMINATOR
8.14	Attitudes towards domestic violence	Number of women/men who state that a husband/partner is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food	Total number of women/men age 15-49 years
9.1	Comprehensive knowledge about HIV prevention	Number of women/men age 15-49 years who correctly identify two ways of preventing HIV infection, know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission	Total number of women/men age 15-49 years
HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANED AND VULNERABLE CHILDREN			
9.2	Comprehensive knowledge about HIV prevention among young people	Number of women/men age 15-24 years who correctly identify two ways of preventing HIV infection, know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission	Total number of women/men age 15-24 years
9.3	Knowledge of mother-to-child transmission of HIV	Number of women/men age 15-49 years who correctly identify all three means of mother-to-child transmission of HIV	Total number of women/men age 15-49 years
9.4	Accepting attitudes towards people living with HIV	Number of women/men age 15-49 years expressing accepting attitudes on all four questions toward people living with HIV	Total number of women/men age 15-49 years who have heard of HIV
9.5	Women/Men who know where to be tested for HIV	Number of women/men age 15-49 years who state knowledge of a place to be tested for HIV	Total number of women/men age 15-49 years
9.6	Women/Men who have been tested for HIV and know the results	Number of women/men age 15-49 years who have been tested for HIV in the 12 months preceding the survey and who know their results	Total number of women /men age 15-49 years
9.7	Sexually active young women/men who have been tested for HIV and know the results	Number of women/men age 15-24 years who have had sex in the 12 months preceding the survey, who have been tested for HIV in the 12 months preceding the survey and who know their results	Total number of women/men age 15-24 years who have had sex in the 12 months preceding the survey
9.8	HIV counselling during antenatal care	Number of women age 15-49 years who gave birth in the 2 years preceding the survey and received antenatal care, reporting that they received counselling on HIV during antenatal care	Total number of women age 15-49 years who gave birth in the 2 years preceding the survey

INDICATOR		NUMERATOR	DENOMINATOR
9.9	HIV testing during antenatal care	Number of women age 15-49 years who gave birth in the 2 years preceding the survey and received antenatal care, reporting that they were offered and accepted an HIV test during antenatal care and received their results	Total number of women age 15-49 years who gave birth in the 2 years preceding the survey
9.10	Young women/men who have never had sex	Number of never married women/men age 15-24 years who have never had sex	Total number of never married women/men age 15-24 years
9.11	Sex before age 15 among young women/men	Number of women/men age 15-24 years who have had sexual intercourse before age 15	Total number of women/men age 15-24 years
9.12	Age –mixing among sexual partner	Number of women age 15-24 years who had sex in the 12 months preceding the survey with a partner who was 10 or more years older than they were	Total number of women age 15-24 years who have had sex in the 12 months preceding the survey
9.17	Children's living arrangements	Number of children age 0-17 years not living with a biological parent	Total number of children age 0-17 years
9.18	Prevalence of children with one or both parents dead	Number of children age 0-17 years with at least one dead parent	Total number of children age 0-17 years
9.19	School attendance of orphans	Number of children age 10-14 years who have lost both parents and are attending school	Total number of children age 10-14 years who have lost both parents
9.20	School attendance of non-orphans	Number of children age 10-14 years, whose parents are alive, who are living with at least one parent, and who are attending school	Total number of children age 10-14 years, whose parents are alive, and who are living with at least one parent
ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY			
MT1	Exposure to mass media	Proportion of women/men who read a newspaper, listen to the radio, and watch television at least once a week	
MT2	Use of computers	Proportion of women/men age 15 – 24 years used a computer during the last 12 months of the survey	
MT3	Use of internet	Proportion of women/men age 15 – 24 years used the internet during the last 12 months of the survey	

Lao Social Indicator Survey LSIS (MICS/DHS)

HOUSEHOLD QUESTIONNAIRE

HOUSEHOLD INFORMATION PANEL	HH
HH1. Cluster number: ___ ___ ___ ___	HH2. Household number: ___ ___
HH3. Interviewer name and number: Name _____ ___ ___ ___	HH4. Supervisor name and number: Name_____ ___ ___ ___
HH5. Day / Month / Year of interview:	___ ___ / ___ ___ / ___ ___ ___ ___
HH6. Area: Urban ..... 1 Rural with road ..... 2 Rural without road 3	HH7. Province Name & Code:* _____ ___ ___
HH7A. Is household selected for male interview? 1. Yes 2. No	

01 Vientiane Capital	05 Bokeo	09 Xiengkhuang	13 Savannakhet
02 Phongsaly	06 Luangprabang	10 Vientiane	14 Saravane
03 Luangnamtha	07 Huaphanh	11 Borikhamxay	15 Sekong
04 Oudomxay	08 Xayabury	12 Khammua	16 Champasack
			17 Attapeu

WE ARE FROM DEPARTMENT OF STATISTICS AND MINISTRY OF HEALTH. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ *Yes, permission is given ⇨ Go to HH18 to record the time and then begin the interview.*

☐ *No, permission is not given ⇨ Complete HH9. Discuss this result with your supervisor.*

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

HH8. Name of head of household: _____

HH9. Result of household interview: Completed ..... 01 No household member or no competent respondent at home at time of visit ..... 02 Entire household absent for extended period of time ..... 03 Refused ..... 04 Dwelling vacant / Address not a dwelling ..... 05 Dwelling destroyed ..... 06 Dwelling not found ..... 07 Other (*specify*)_____ 96	HH10. Respondent to household questionnaire: Name:_____ Line Number: ___ ___ HH11. Total number of household members: ___ ___
HH12. Number of women age 15-49 years: ___ ___	HH13. Number of woman's questionnaires completed: ___ ___
HH14. Number of children under age 5: ___ ___	HH15. Number of under-5 questionnaires completed: ___ ___
HH15A. Number of men age 15-49 years eligible for interview ___ ___	HH15B. Number of men's questionnaires completed: ___ ___
HH16. Field edited by (Name and number): Name _____ ___ ___ ___	HH17. Data entry clerk (Name and number): Name _____ ___ ___

HH18. *Record the time.*

Hour __ __

Minutes__ __

HOUSEHOLD LISTING FORM — 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?

If yes, complete listing for questions HL2-HL4. Then, ask questions starting with HL5 for each person at a time.

Use an additional questionnaire if all rows in the household listing form have been used.

										*For age **15** and above*	*For women age **15-49***	*For men age **15-49***	*For children age **5-14***	*For children under age **5***	*For children age **0-17** years*							
HL1. *Line Number*	HL2. *Name*	HL3. WHAT IS THE RELATIONSHIP OF (*name*) TO THE HEAD OF HOUSEHOLD?	HL4. IS (*name*) MALE OR FEMALE? 1 Male 2 Female		HL10. DID (*name*) STAY HERE LAST NIGHT? 1 Yes 2 No	HL5. WHAT IS (*name*)'S DATE OF BIRTH? 98 DK 9998 DK		HL6. HOW OLD IS (*name*)? *Record in completed years. If age is 95 or above, record '95'*	HL6A WHAT IS MARITAL (*name*)'S STATUS 1 Never Married 2 Married 3 Divorced 4 Widowed 5. Separated	HL7. *Circle line number if woman is age **15-49***	HL7A. *In HHs selected for male interview, circle line number if man is age 15-49*	HL8. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record line number of mother/ caretaker*	HL9. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record line number of mother/ caretaker*	HL11. IS (*name*)'S NATURAL MOTHER ALIVE? 1 Yes 2 No⇘ HL13 8 DK⇘ HL13	HL12. DOES (*name*)'S NATURAL MOTHER LIVE IN THIS HOUSEHOLD? *Record line number of mother or 00 for "No"*	HL13. IS (*name*)'S NATURAL FATHER ALIVE? 1 Yes 2 No⇘ Next Line 8 DK⇘ Next Line	HL14. DOES (*name*)'S NATURAL FATHER LIVE IN THIS HOUSEHOLD? *Record line number of father or 00 for "No"*
Line	Name	Relation*	M	F	Y N	Month	Year	Age		15 - 49	15-49	Mother	Mother	Y N DK	Mother	Y N DK	Father
01		0 1	1	2	1 2	__ __	__ __ __ __	__ __	___	01	01	__ __	__ __	1 2 8	__ __	1 2 8	__ __
02		___ ___	1	2	1 2	__ __	__ __ __ __	___ ___	___	02	02	__ __	__ __	1 2 8	__ __	1 2 8	__ __
03		___ ___	1	2	1 2	__ __	__ __ __ __	___ ___	___	03	03	__ __	__ __	1 2 8	__ __	1 2 8	__ __
04		___ ___	1	2	1 2	__ __	__ __ __ __	___ ___	___	04	04	__ __	__ __	1 2 8	__ __	1 2 8	__ __
05		___ ___	1	2	1 2	__ __	__ __ __ __	___ ___	___	05	05	__ __	__ __	1 2 8	__ __	1 2 8	__ __
06		___ ___	1	2	1 2	__ __	__ __ __ __	___ ___	___	06	06	__ __	__ __	1 2 8	__ __	1 2 8	__ __
07		___ ___	1	2	1 2	__ __	__ __ __ __	___ ___	___	07	07	__ __	__ __	1 2 8	__ __	1 2 8	__ __
08		___ ___	1	2	1 2	__ __	__ __ __ __	___ ___	___	08	08	__ __	__ __	1 2 8	__ __	1 2 8	__ __
09		___ ___	1	2	1 2	__ __	__ __ __ __	___ ___	___	09	09	__ __	__ __	1 2 8	__ __	1 2 8	___ ___

HL1. *Line Number*	HL2. *Name*	HL3. WHAT IS THE RELATION-SHIP OF (*name*) TO THE HEAD OF HOUSE-HOLD?	HL4. IS (*name*) MALE OR FEMALE? 1 Male 2 Female		HL10. DID (*name*) STAY HERE LAST NIGHT? 1 Yes 2 No	HL5. WHAT IS (*name*)'S DATE OF BIRTH? 98 DK 9998 DK		HL6. HOW OLD IS (*name*)? *Record in completed years. If age is 95 or above, record '95'*	HL6A WHAT IS MARITAL (*name*)'S STATUS 1 Never Married 2 Married 3 Divorced 4 Widowed 5. Separated	HL7. *Circle line number if woman is age* **15-49**	HL7A. *In HHs selected for male interview, circle line number if man is age 15-49*	HL8. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record line number of mother/ caretaker*	HL9. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record line number of mother/ caretaker*	HL11. IS (*name*)'S NATURAL MOTHER ALIVE? 1 Yes 2 No ⇘ HL13 8 DK ⇘ HL13	HL12. DOES (*name*)'S NATURAL MOTHER LIVE IN THIS HOUSEHOLD? *Record line number of mother or 00 for "No"*	HL13. IS (*name*)'S NATURAL FATHER ALIVE? 1 Yes 2 No ⇘ Next Line 8 DK ⇘ Next Line	HL14. DOES (*name*)'S NATURAL FATHER LIVE IN THIS HOUSEHOLD? *Record line number of father or 00 for "No"*
Line	Name	Relation*	M	F	Y N	Month	Year	Age		15 - 49	15-49	Mother	Mother	Y N DK	Mother	Y N DK	Father
10		__ __	1	2	1 2	__ __	__ __ __ __	__ __	__	10	10	__ __	__ __	1 2 8	__ __	1 2 8	__ __
11		__ __	1	2	1 2	__ __	__ __ __ __	__ __	__	11	11	__ __	__ __	1 2 8	__ __	1 2 8	__ __
12		__ __	1	2	1 2	__ __	__ __ __ __	__ __	__	12	12	__ __	__ __	1 2 8	__ __	1 2 8	__ __
13		__ __	1	2	1 2	__ __	__ __ __ __	__ __	__	13	13	__ __	__ __	1 2 8	__ __	1 2 8	__ __
14		__ __	1	2	1 2	__ __	__ __ __ __	__ __	__	14	14	__ __	__ __	1 2 8	__ __	1 2 8	__ __
15		__ __	1	2	1 2	__ __	__ __ __ __	__ __	__	15	15	__ __	__ __	1 2 8	__ __	1 2 8	__ __

Tick here if additional questionnaire used ☐

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

Return to Household Information Panel and complete HH10, HH11, HH12, HH14, and HH15A.
Now for each woman age 15-49 years, complete the information panel of a separate Woman's Questionnaire.
In households selected for male interview, for each man age 15-49 years complete the information panel of a separate Man'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 a separate Under-5 Questionnaire.
You should now have a separate questionnaire for each eligible woman, man and each child under five in the household.

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

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

EDUCATION — ED

For all household members			*For household members age* **3 and above**				*For household members age* **3-24** *years*								
ED1. *Line Number*	ED2. *Name and age* *Copy from Household Listing Form, HL2 and HL6*		ED3. HAS (*name*) EVER ATTENDED SCHOOL OR PRE-SCHOOL? 1 Yes 2 No ⇘ Next Line		ED4. WHAT IS THE HIGHEST LEVEL OF SCHOOL (*name*) ATTENDED? WHAT IS THE HIGHEST GRADE (*name*) COMPLETED AT THIS LEVEL? level: 0 Preschool 1 Primary 2 Lower Sec: 3 Upper Sec: 4 Post secondary non tertiary 5 Tertiary Edu. 8 DK *If level=0, skip to ED5*	ED4. Grade: Primary 11-15 Lower Sec 21-24 Upper Sec 31-33 Post secondary non tertiary 41-43 Tertiary Edu 51-57 DK 98 *If less than 1 grade at this level, enter 00*	ED5. DURING THE (***2011-2012***) SCHOOL YEAR, DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No ⇘ ED7		ED6. DURING THIS SCHOOL YEAR, WHICH LEVEL AND GRADE IS (*name*) ATTENDING? level: 0 Preschool 1 Primary 2 Lower Sec: 3 Upper Sec: 4 Post secondary non tertiary 5 Tertiary Edu. 8 DK *If level=0, skip to ED7*	ED6. Grade: Primary 11-15 Lower Sec 21-24 Upper Sec 31-33 Post secondary non tertiary 41-43 Tertiary Edu 51-57 DK 98	ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS (***2010-2011***), DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No ⇘ Next Line 8 DK ⇘ Next Line			ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (*name*) ATTEND? level: 0 Preschool 1 Primary 2 Lower Sec: 3 Upper Sec: 4 Post secondary non tertiary 5 Tertiary Edu. 8 DK *If level=0, go to next person*	ED8. Grade: Primary 11-15 Lower Sec 21-24 Upper Sec 31-33 Post secondary non tertiary 41-43 Tertiary Edu 51-57 DK 98
Line	Name	Age	Yes	No	Level	Grade	Yes	No	Level	Grade	Y	N	DK	Level	Grade
01		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
02		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
03		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
04		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
05		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
06		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
07		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
08		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
09		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
10		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
11		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
12		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
13		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
14		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __
15		__ __	1	2	____	__ __	1	2	____	__ __	1	2	8	____	__ __

WATER AND SANITATION		WS
WS1. WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?	Piped water Piped into dwelling ..... 11 Piped into compound, yard or plot ..... 12 Piped to neighbour ..... 13 Public tap / standpipe ..... 14 Tube Well, Borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank / drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Bottled water ..... 91 Other (*specify*) _____ 96	 11⇨WS5B 12⇨WS5B 13⇨WS5B 14⇨WS3 21⇨WS3 31⇨WS3 32⇨WS3 41⇨WS3 42⇨WS3 51⇨WS3 61⇨WS3 71⇨WS3 81⇨WS3 96⇨WS3
WS2. WHAT IS THE MAIN SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS HANDWASHING?	Piped water Piped into dwelling ..... 11 Piped into compound, yard or plot ..... 12 Piped to neighbour ..... 13 Public tap / standpipe ..... 14 Tube Well, Borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank / drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Other (*specify*) _____ 96	 11⇨WS5B 12⇨WS5B 13⇨WS5B
WS3. WHERE IS THAT WATER SOURCE LOCATED?	In own dwelling ..... 1 In own yard / plot ..... 2 Elsewhere 3	1⇨WS6 2⇨WS6
WS4. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	Number of minutes ..... __ __ __ DK 998	

WS5. WHO USUALLY GOES TO THIS SOURCE TO COLLECT THE WATER FOR YOUR HOUSEHOLD? *Probe:* IS THIS PERSON UNDER AGE 15? WHAT SEX?	Adult woman (age 15+ years) ..... 1 Adult man (age 15+ years) ..... 2 Female child (under 15) ..... 3 Male child (under 15) ..... 4 DK 8	
WS5A. *Check WS1 and WS2* ☐ *If code is 14 ⇨ Continue with WS5B* ☐ *Otherwise ⇨ Go to WS6*		
WS5B. DOES THE WATER COME FROM A TREATED WATER SUPPLY SYSTEM?	Yes ..... 1 No ..... 2 DK 8	
WS6. DO YOU DO ANYTHING TO THE WATER TO MAKE IT SAFER TO DRINK?	Yes ..... 1 No ..... 2 DK 8	2⇨WS8 8⇨WS8
WS7. WHAT DO YOU USUALLY DO TO MAKE THE WATER SAFER TO DRINK? *Probe:* ANYTHING ELSE? *Record all items mentioned.*	Boil ..... A Add bleach / chlorine ..... B Strain it through a cloth ..... C Use water filter (ceramic, sand, composite, etc.) ..... D Solar disinfection ..... E Let it stand and settle ..... F Other (*specify*) _____ X DK ..... Z	
WS8. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE? *If "flush" or "pour flush", probe:* WHERE DOES IT FLUSH TO? *If necessary, ask permission to observe the facility.*	Flush / Pour flush Flush to piped sewer system ..... 11 Flush to septic tank ..... 12 Flush to pit (latrine) ..... 13 Flush to somewhere else ..... 14 Flush to unknown place / Not sure / DK where ..... 15 Pit latrine Ventilated Improved Pit latrine (VIP) ..... 21 Pit latrine with slab ..... 22 Pit latrine without slab / Open pit ..... 23 Composting toilet ..... 31 Bucket ..... 41 Hanging toilet, Hanging latrine ..... 51 No facility, Bush, Field ..... 95 Other (*specify*) _____ 96	95⇨Next Module
WS9. DO YOU SHARE THIS FACILITY WITH OTHERS WHO ARE NOT MEMBERS OF YOUR HOUSEHOLD?	Yes ..... 1 No 2	2⇨Next Module
WS10. DO YOU SHARE THIS FACILITY ONLY WITH MEMBERS OF OTHER HOUSEHOLDS THAT YOU KNOW, OR IS THE FACILITY OPEN TO THE USE OF THE GENERAL PUBLIC?	Other households only (not public) ..... 1 Public facility 2	2⇨Next Module
WS11. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY, INCLUDING YOUR OWN HOUSEHOLD?	Number of households (if less than 10) 0 __ Ten or more households ..... 10 DK 98	

HOUSEHOLD CHARACTERISTICS		HC
HC1A. WHAT IS THE RELIGION OF THE HEAD OF THIS HOUSEHOLD?	*Buddhist* ..... 1 *Christianity* ..... 2 *Islam* ..... 3 *Animist* ..... *4* Other religion (*specify*) _____ 6 No religion 7	
HC1C. TO WHAT ETHNIC GROUP DOES THE HEAD OF THIS HOUSEHOLD BELONG?	*Ethnic Group* ( ) *Code* ____ ____ ____ Other ethnic group (*specify*) _____ 96	
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	Number of rooms ..... __ __	
HC3. *Main material of the dwelling floor.* *Record observation.*	Natural floor Earth / Sand ..... 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 Rudimentary Roofing Palm / Bamboo ..... 22 Wood planks ..... 23 Finished roofing Metal ..... 31 Wood ..... 32 Calamine / Cement fibre ..... 33 Ceramic tiles ..... 34 Cement ..... 35 Roofing shingles ..... 36 Other (*specify*) _____ 96	

HC5. *Main material of the exterior walls.* *Record observation.*	Natural walls No walls ..... 11 Cane / Palm / Trunks ..... 12 Dirt ..... 13 Rudimentary walls Bamboo with mud ..... 21 Plywood ..... 24 Cardboard ..... 25 Reused wood ..... 26 Bamboo mat ..... 27 Bamboo/Bamboo with dry leaf ..... 28 Bamboo lattice ..... 29 Finished walls Cement ..... 31 Stone with lime / cement ..... 32 Bricks ..... 33 Cement blocks ..... 34 Wood planks / shingles ..... 36 Other (*specify*) _____ 96	
HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD MAINLY USE FOR COOKING?	Electricity ..... 01 Liquefied Petroleum 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 No food cooked in household ..... 95 Other (*specify*) _____ 96	01⇨HC8 02⇨HC8 03⇨HC8 04⇨HC8 05⇨HC8 95⇨HC8
HC7. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS? *If 'In the house', probe*: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?	In the house In a separate room used as kitchen ..... 1 Elsewhere in the house ..... 2 In a separate building ..... 3 Outdoors ..... 4 Other (*specify*) _____ 6	

HC8. DOES YOUR HOUSEHOLD HAVE:	Yes	No
[A] ELECTRICITY?	Electricity 1	2
[B] A RADIO?	Radio 1	2
[C] A TELEVISION?	Television 1	2
[D] A NON-MOBILE TELEPHONE?	Non-mobile telephone 1	2
[E] A REFRIGERATOR?	Refrigerator 1	2
[F] A CLOCK?	Clock 1	2
[G] FAN?	Fan 1	2
[H] SOFA /WOODEN SETTEE?	Sofa /wooden settee 1	2
[I] WATER PUMP?	Water pump 1	2
[J] AIR-CONDITIONER?	Air conditioner 1	2
[K] WASHING MACHINE?	Washing Machine 1	2
[L] CD/DVD PLAYER	CD/DVD Player 1	2

HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:	Yes No	
[A] A WATCH?	Watch 1 2	
[B] A MOBILE TELEPHONE?	Mobile Phone 1 2	
[C] A BICYCLE?	Bicycle 1 2	
[D] A MOTORCYCLE OR SCOOTER?	Motorcycle/Scooter 1 2	
[E] AN ANIMAL-DRAWN CART?	Animal drawn-cart 1 2	
[F] A CAR OR TRUCK?	Car/Truck 1 2	
[G] A BOAT WITH A MOTOR?	Boat with motor 1 2	
[H] TUK TUK	Tuk tuk 1 2	
[I] TAK TAK?	Tak tak 1 2	
[J] CAMERA?	Camera 1 2	
[K] COMPUTER?	Computer 1 2	
HC10. DO YOU OR ANY MEMBER OF THIS HOUSEHOLD OWN THIS DWELLING? *If "No", then ask:* DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD? *If "Rented from someone else", circle "2". For other responses, circle "6".*	Own ..... 1 Rent ..... 2 Other (Not owned or rented) 6	
HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?	Yes ..... 1 No 2	2⇨HC13
HC12. HOW MANY HECTARES OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN? *If less than 1, record "00". If 95 or more, record '95'. If unknown, record '98'.*	Hectares ..... ___ ___	
HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?	Yes ..... 1 No 2	2⇨HC15
HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE? [A] BULLS? [B] BUFFALO? [C] GOATS? [D] SHEEP? [E] POULTRY? [F] PIGS? [G] HORSES, DONKEYS, OR MULES *If none, record '00'.* *If 95 or more, record '95'.* *If unknown, record '98'.*	Bulls ..... ___ ___ Buffalo ..... ___ ___ Goats ..... ___ ___ Sheep ..... ___ ___ Poultry ..... ___ ___ Pigs ..... ___ ___ Horses/Donkeys/Mules ..... ___ ___	
HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?	Yes ..... 1 No 2	

INSECTICIDE TREATED NETS		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?	Number of nets ___ ___	
TN3. *ask the respondent to show you the nets in the household. if more than 6 nets, use additional questionnaire(s).*		

	1st Net	2nd Net	3rd Net	4th Net	5th Net	6th Net
TN4. *Mosquito net observed?*	Observed....1 Not observed....2	Observed....1 Not observed....2	Observed....1 Not observed....2	Observed....1 Not observed....2	Observed....1 Not observed....2	Observed....1 Not observed....2
TN5. *Observe or ask the type of mosquito net.* *If you cannot observe the net, show pictures of typical net types to respondent.*	Long-lasting treated nets Olyset net....11 Permanent net....12 Pre-treated nets Ordinary net....21 Other net (*specify*) ____31 DK type....98	Long-lasting treated nets Olyset net....11 Permanent net....12 Pre-treated nets Ordinary net....21 Other net (*specify*) ____31 DK type....98	Long-lasting treated nets Olyset net....11 Permanent net....12 Pre-treated nets Ordinary net....21 Other net (*specify*) ____31 DK type....98	Long-lasting treated nets Olyset net....11 Permanent net....12 Pre-treated nets Ordinary net....21 Other net (*specify*) ____31 DK type....98	Long-lasting treated nets Olyset net....11 Permanent net....12 Pre-treated nets Ordinary net....21 Other net (*specify*) ____31 DK type....98	Long-lasting treated nets Olyset net....11 Permanent net....12 Pre-treated nets Ordinary net....21 Other net (*specify*) ____31 DK type....98
TN6. HOW MANY MONTHS AGO DID YOUR HOUSEHOLD GET THE MOSQUITO NET? *If less than one month, record "00"*	Months ago.... ___ ___ More than 36 mo. Ago....95 DK / Not sure....98	Months ago.... ___ ___ More than 36 mo. Ago....95 DK / Not sure....98	Months ago.... ___ ___ More than 36 mo. Ago....95 DK / Not sure....98	Months ago.... ___ ___ More than 36 mo. Ago....95 DK / Not sure....98	Months ago.... ___ ___ More than 36 mo. Ago....95 DK / Not sure....98	Months ago.... ___ ___ More than 36 mo. Ago....95 DK / Not sure....98

TN7. *Check TN5 for type of net*	☐ *Long-lasting (11-12)* ⇨ *TN11* ☐ *Pre-treated (21)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-12)* ⇨ *TN11* ☐ *Pre-treated (21)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-12)* ⇨ *TN11* ☐ *Pre-treated (21)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-12)* ⇨ *TN11* ☐ *Pre-treated (21)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-12)* ⇨ *TN11* ☐ *Pre-treated (21)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*	☐ *Long-lasting (11-12)* ⇨ *TN11* ☐ *Pre-treated (21)* ⇨ *TN9* ☐ *Else* ⇨ *Continue*
TN8. WHEN YOU GOT THE NET, WAS IT ALREADY TREATED WITH AN INSECTICIDE TO KILL OR REPEL MOSQUITOES?	Yes .... 1 No .... 2 DK / Not sure 8	Yes .... 1 No .... 2 DK / Not sure 8	Yes .... 1 No .... 2 DK / Not sure 8	Yes .... 1 No .... 2 DK / Not sure 8	Yes .... 1 No .... 2 DK / Not sure 8	Yes .... 1 No .... 2 DK / Not sure 8
TN9. SINCE YOU GOT THE NET, WAS IT EVER SOAKED OR DIPPED IN A LIQUID TO KILL OR REPEL MOSQUITOES?	Yes .... 1 No .... 2 ⇨ TN11 DK / Not sure .... 8 ⇨ TN11	Yes .... 1 No .... 2 ⇨ TN11 DK / Not sure .... 8 ⇨ TN11	Yes .... 1 No .... 2 ⇨ TN11 DK / Not sure .... 8 ⇨ TN11	Yes .... 1 No .... 2 ⇨ TN11 DK / Not sure .... 8 ⇨ TN11	Yes .... 1 No .... 2 ⇨ TN11 DK / Not sure .... 8 ⇨ TN11	Yes .... 1 No .... 2 ⇨ TN11 DK / Not sure .... 8 ⇨ TN11
TN10. HOW MANY MONTHS AGO WAS THE NET LAST SOAKED OR DIPPED? *If less than one month, record "00"*	Months ago ... ___ ___ More than 24 mo. Ago .... 95 DK / Not sure 98	Months ago ... ___ ___ More than 24 mo. Ago .... 95 DK / Not sure 98	Months ago ... ___ ___ More than 24 mo. Ago .... 95 DK / Not sure 98	Months ago ... ___ ___ More than 24 mo. Ago .... 95 DK / Not sure 98	Months ago ... ___ ___ More than 24 mo. Ago .... 95 DK / Not sure 98	Months ago ... ___ ___ More than 24 mo. Ago .... 95 DK / Not sure 98
TN11. DID ANYONE SLEEP UNDER THIS MOSQUITO NET LAST NIGHT?	Yes .... 1 No .... 2 ⇨ TN13 DK / Not sure .... 8 ⇨ TN13	Yes .... 1 No .... 2 ⇨ TN13 DK / Not sure .... 8 ⇨ TN13	Yes .... 1 No .... 2 ⇨ TN13 DK / Not sure .... 8 ⇨ TN13	Yes .... 1 No .... 2 ⇨ TN13 DK / Not sure .... 8 ⇨ TN13	Yes .... 1 No .... 2 ⇨ TN13 DK / Not sure .... 8 ⇨ TN13	Yes .... 1 No .... 2 ⇨ TN13 DK / Not sure .... 8 ⇨ TN13

TN12. WHO SLEPT UNDER THIS MOSQUITO NET LAST NIGHT? *Record the person's line number from the household listing form* *If someone not in the household list slept under the mosquito net, record "00"*	Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___	Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___	Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___	Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___	Name ______ Line number .. ___ ___ Name ______ Line number .. ___ ___ Name ______ Line number .. ___ ___ Name ______ Line number .. ___ ___ Name ______ Line number .. ___ ___	Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___ Name ______ Line number ... ___ ___
TN13.	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 in first column of a new questionnaire for next net. If no more nets, go to next module*
						Tick here if additional questionnaire used ☐

CHILD DISCIPLINE — CD

Table 1: Children Aged 2-14 Years Eligible for Child Discipline Questions

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

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

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

Table 2: Selection of Random Child for Child Discipline Questions

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

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

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

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

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

SALT IODIZATION		**SI**
SI1. WE WOULD LIKE TO CHECK WHETHER THE SALT USED IN YOUR HOUSEHOLD IS IODIZED. MAY I HAVE A SAMPLE OF THE SALT USED TO COOK MEALS IN YOUR HOUSEHOLD? *Once you have tested the salt, circle number that corresponds to test outcome.*	No color change .....1 Color change .....2 No salt in the house.....6 Salt not tested 7	

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

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

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

☐ *No ⇨ Continue.*

HH20A. *Is household selected for male interview and does any eligible man age 15-49 reside in the household?*

Check Household Information Panel, HH7A and Household Listing Form, column 7A for any eligible man.

If household is selected for male interview, you should have a questionnaire with the Information Panel filled in for each eligible man.

☐ *Yes ⇨ Go to QUESTIONNAIRE FOR INDIVIDUALMEN*
to administer the questionnaire to the first eligible man.

☐ *No ⇨ Continue.*

HH21. *Does any child under the age of 5 reside in the household?*

Check Household Listing Form, column HL9 for any eligible child under age 5.
You should have a questionnaire with the Information Panel filled in for each eligible child.

☐ *Yes ⇨ Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE*
to administer the questionnaire to mother or caretaker of the first eligible child.

☐ *No ⇨ End the interview by thanking the respondent for his/her cooperation.*
Gather together all questionnaires for this household and complete HH8 to HH15B on the cover page.

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

Lao Social Indicator Survey LSIS (MICS/DHS)

QUESTIONNAIRE FOR INDIVIDUAL WOMEN

WOMAN'S INFORMATION PANEL	WM
This questionnaire is to be administered to all women age 15 through 49 (see Household Listing Form, column HL7). A separate questionnaire should be used for each eligible woman.	
WM1. Cluster number: ___ ___ ___ ___	WM2. Household number: ___ ___
WM3. Woman's name: Name_____	WM4. Woman's line number: ___ ___
WM5. Interviewer name and number: Name _____ ___ ___ ___	WM6. Day / Month / Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___

Repeat greeting if not already read to this woman:

WE ARE FROM DEPARTMENT OF STATISTICS AND MINISTRY OF HEATH. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 60 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT *60* MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ *Yes, permission is given ⇨ Go to WM10 to record the time and then begin the interview.*

☐ *No, permission is not given ⇨ Complete WM7. Discuss this result with your supervisor.*

WM7. Result of woman's interview	
	Completed .....01 Not at home .....02 Refused .....03 Partly completed .....04 Incapacitated .....05 Other (*specify*) _____ 96

WM8. Field edited by (Name and number):	WM9. Data entry clerk (Name and number):
Name _____ ___ ___ ___	Name _____ ___ ___

WM10. *Record the time.*	Hour and minutes .....__ __ : __ __	

WOMAN'S BACKGROUND		**WB**
WB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth Month.....__ __ DK month.....98 Year .....__ __ __ __ DK year.....9998	
WB2. HOW OLD ARE YOU? *Probe:* HOW OLD WERE YOU AT YOUR LAST BIRTHDAY? *Compare and correct WB1 and/or WB2 if inconsistent*	Age (in completed years) .....__ __	
WB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes .....1 No 2	 2⇨WB7
WB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool.....0 Primary.....1 Lower Secondary .....2 Upper Secondary.....3 Post secondary non tertiary.....4 Tertiary Education 5	0⇨WB7
WB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? *Grade:* *Primary 11-15* *Lower Sec 21-24* *Upper Sec 31-33* *Post secondary non tertiary 41-43* *Tertiary Edu 51-57* *98 DK* *If less than 1 grade at this level, enter "00"*	Grade .....__ __	
WB6. *Check WB4:* ☐ *Lower secondary or higher. ⇨ Go to next module* ☐ *Primary ⇨ Continue with WB7*		
WB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. *Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME? *Sample sentences for literacy test:* 1. *The child is reading a book.* 2. *The rain 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	

ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY		WT
WT1. *Check WB7:* ☐ *Question left blank (Respondent has secondary or more education) ⇨ Continue with WT2* ☐ *Able to read or no sentence in required language (codes 2, 3 or 4) ⇨ Continue with WT2* ☐ *Cannot read at all or blind (codes 1 or 5) ⇨ Go to WT3*		
WT2. HOW OFTEN DO YOU READ A NEWSPAPER OR MAGAZINE: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
WT3. DO YOU LISTEN TO THE RADIO ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
WT4. HOW OFTEN DO YOU WATCH TELEVISION: WOULD YOU SAY THAT YOU WATCH ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
WT5. *Check WB2: Age of respondent 15-24 years?* ☐ *Yes, age 15-24 ⇨ Continue with WT6* ☐ *No, age 25-49 ⇨ Go to Next Module*		
WT6. HAVE YOU EVER USED A COMPUTER?	Yes.....1 No.....2	2⇨WT9
WT7. HAVE YOU USED A COMPUTER FROM ANY LOCATION IN THE LAST 12 MONTHS?	Yes.....1 No.....2	2⇨WT9
WT8. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE A COMPUTER: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
WT9. HAVE YOU EVER USED THE INTERNET?	Yes.....1 No.....2	2⇨Next Module
WT10. IN THE LAST 12 MONTHS, HAVE YOU USED THE INTERNET? *If necessary, probe for use from any location, with any device.*	Yes.....1 No.....2	2⇨ Next Module
WT11. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE THE INTERNET: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	

CHILD MORTALITY		CM
All questions refer only to LIVE births.		
CM1. NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH?	Yes .....1 No 2	2⇨CM8
CM4. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?	Yes .....1 No 2	2⇨CM6
CM5. HOW MANY SONS LIVE WITH YOU? HOW MANY DAUGHTERS LIVE WITH YOU? *If none, record '00'.*	Sons at home .....__ __ Daughters at home.....__ __	
CM6. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?	Yes .....1 No 2	2⇨CM8
CM7. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU? HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU? *If none, record '00'.*	Sons elsewhere.....__ __ Daughters elsewhere .....__ __	
CM8. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED? *If "No" probe by asking:* I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?	Yes .....1 No 2	2⇨CM10
CM9. HOW MANY BOYS HAVE DIED? HOW MANY GIRLS HAVE DIED? *If none, record '00'.*	Boys dead .....__ __ Girls dead .....__ __	
CM10. *Sum answers to CM5, CM7, and CM9.*	Sum .....__ __	
CM11. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (*total number in CM10*) LIVE BIRTHS DURING YOUR LIFE. IS THIS CORRECT? ☐ *Yes. Check below:* ☐ *No live births ⇨ Go to ILLNESS SYMPTOMS Module* ☐ *One or more live births ⇨ Continue with BIRTH HISTORY Module* ☐ *No ⇨ Check responses to CM1-CM10 and make corrections as necessary before proceeding to the BIRTH HISTORY module or ILLNESS SYMPTOMS module*		

BIRTH HISTORY — BH

NOW I WOULD LIKE TO RECORD THE NAMES OF ALL OF YOUR BIRTHS, WHETHER STILL ALIVE OR NOT, STARTING WITH THE FIRST ONE YOU HAD.
Record names of all of the births in BH1. Record twins and triplets on separate line. If there are more than 14 births, use an additional questionnaire.

BH Line No.	BH1. WHAT NAME WAS GIVEN TO YOUR (*first/next*) BABY?	BH2. WERE ANY OF THESE BIRTHS TWINS? 1 Single 2 Multiple	BH3. IS (*name*) A BOY OR A GIRL? 1 Boy 2 Girl	BH4. IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe*: WHAT IS HIS/HER BIRTHDAY?		BH5. IS (*name*) STILL ALIVE? 1 Yes 2 No	BH6. HOW OLD WAS (*name*) AT HIS/HER LAST BIRTHDAY? *Record age in completed years.*	BH7. IS (*name*) LIVING WITH YOU? 1 Yes 2 No	BH8. *Record household line number of child (from HL1)* *Record "00" if child is not listed.*	BH9. *If dead:* HOW OLD WAS (*name*) WHEN HE/SHE DIED? *If "1 year", probe:* HOW MANY MONTHS OLD WAS (*name*)? *Record days if less than 1 month; record months if less than 2 years; or years*		BH10. WERE THERE ANY OTHER LIVE BIRTHS BETWEEN (*name of previous birth*) AND (*name*), INCLUDING ANY CHILDREN WHO DIED AFTER BIRTH? 1 Yes 2 No
Line	Name	S M	B G	Month	Year	Y N	Age	Y N	Line No	Unit	Number	Y N
01		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ Next Line	Days ..... 1 Months..... 2 Years 3	__ __	
02		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
03		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
04		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
05		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
06		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
07		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth

08		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
09		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
10		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
11		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
12		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
13		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
14		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨ BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth

BH11. HAVE YOU HAD ANY LIVE BIRTHS SINCE THE BIRTH OF (*name of last birth in Birth History*)?	Yes ..... 1 No..... 2	1⇨Record Birth(s) in Birth History

CM12. *Compare number in CM10 with number of births in the Birth History above and check:*

☐ *Numbers are same ⇨ Continue with CM13*

☐ *Numbers are different ⇨ Probe and reconcile*

CM13. *Check BH4: Last birth occurred within the last 2 years, that is, since (day and month of interview) in* ***2009***

☐ *No live birth in last 2 years. ⇨ Go to ILLNESS SYMPTOMS Module.*

☐ *One or more live births in last 2 years. ⇨ Ask for the name of the child*

*Name of child*_____

If child has died, take special care when referring to this child by name in the following modules.

Continue with the next module.

DESIRE FOR LAST BIRTH		DB
This module is to be administered to all women with a live birth in the 2 years preceding date of interview. Check child mortality module CM13 and record name of last-born child here _____. Use this child's name in the following questions, where indicated.		
DB1. WHEN YOU GOT PREGNANT WITH (*name*), DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes .....1 No 2	1⇨Next Module
DB2. DID YOU WANT TO HAVE A BABY LATER ON, OR DID YOU NOT WANT ANY (MORE) CHILDREN?	Later .....1 No more.....2	2⇨Next Module
DB3. HOW MUCH LONGER DID YOU WANT TO WAIT?	Months.....1 __ __ Years .....2 __ __ DK.....998	

MATERNAL AND NEWBORN HEALTH — MN

This module is to be administered to all women with a live birth in the 2 years preceding date of interview.
Check child mortality module CM13 and record name of last-born child here _____.
Use this child's name in the following questions, where indicated.

MN1. DID YOU SEE ANYONE FOR ANTENATAL CARE DURING YOUR PREGNANCY WITH (*name*)?	Yes ..... 1 No 2	2⇨MN5
MN2. WHOM DID YOU SEE? *Probe:* ANYONE ELSE? *Probe for the type of person seen and circle all answers given.*	Health professional: Doctor ..... A Nurse / Midwife ..... B Auxiliary nurse ..... C Other person Traditional birth attendant ..... F Community health worker ..... G Other (*specify*) _____ X	
MN2A. HOW MANY MONTHS PREGNANT WERE YOU WHEN YOU FIRST RECEIVED ANTENATAL CARE FOR THIS PREGNANCY?	Months ..... __ __ DK 98	
MN3. HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING THIS PREGNANCY?	Number of times ..... __ __ DK 98	
MN4. AS PART OF YOUR ANTENATAL CARE DURING THIS PREGNANCY, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE: [A] WAS YOUR BLOOD PRESSURE MEASURED? [B] DID YOU GIVE A URINE SAMPLE? [C] DID YOU GIVE A BLOOD SAMPLE?	Yes No Blood pressure ..... 1 2 Urine sample ..... 1 2 Blood sample 1 2	
MN5. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? MAY I SEE IT PLEASE? *If a card is presented, use it to assist with answers to the following questions.*	Yes (card seen) ..... 1 Yes (card not seen) ..... 2 No ..... 3 DK 8	
MN6. WHEN YOU WERE PREGNANT WITH (*name*), DID YOU RECEIVE ANY INJECTION IN THE ARM OR SHOULDER TO PREVENT THE BABY FROM GETTING TETANUS, THAT IS CONVULSIONS AFTER BIRTH?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN9 8⇨MN9
MN7. HOW MANY TIMES DID YOU RECEIVE THIS TETANUS INJECTION DURING YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times ..... __ DK 8	 8⇨MN9

MN8. *How many tetanus injections during last pregnancy were reported in MN7?*

☐ *At least two tetanus injections during last pregnancy. ⇨ Go to MN11A*

☐ *Fewer than two tetanus injections during last pregnancy. ⇨ Continue with MN9*

MN9. DID YOU RECEIVE ANY TETANUS INJECTION AT ANY TIME BEFORE YOUR PREGNANCY WITH (*name*), EITHER TO PROTECT YOURSELF OR ANOTHER BABY?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN11A 8⇨MN11A
MN10. HOW MANY TIMES DID YOU RECEIVE A TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times ..... __ DK 8	 8⇨MN11A
MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)?	Years ago..... __ __	
MN11A. DURING THIS PREGNANCY, WERE YOU GIVEN OR DID YOU BUY ANY IRON TABLETS OR IRON SYRUP?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN17 8⇨MN17
MN11B. DURING THE WHOLE PREGNANCY, FOR HOW MANY DAYS DID YOU TAKE THE TABLETS OR SYRUP? *If answer is not numeric, probe for approximate number of days*	Days..... __ __ __ DK 998	
MN17. WHO ASSISTED WITH THE DELIVERY OF (*name*)? *Probe:* ANYONE ELSE? *Probe for the type of person assisting and circle all answers given.* *If respondent says no one assisted, probe to determine whether any adults were present at the delivery.*	Health professional: Doctor ..... A Nurse / Midwife ..... B Auxiliary Nurse..... C Other person Traditional birth attendant ..... F Community health worker ..... G Relative / Friend..... H Other (*specify*) _____ X No one ..... Y	
MN18. WHERE DID YOU GIVE BIRTH TO (*name*)? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Home Your home ..... 11 Other home ..... 12 Public sector Govt. hospital ..... 21 health centre ..... 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	 11⇨MN20 12⇨MN20 96⇨MN20
MN19. WAS (*name*) DELIVERED BY CAESAREAN SECTION? THAT IS, DID THEY CUT YOUR BELLY OPEN TO TAKE THE BABY OUT?	Yes ..... 1 No 2	
MN20. WHEN (*name*) WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?	Very large..... 1 Larger than average ..... 2 Average..... 3 Smaller than average..... 4 Very small ..... 5 DK 8	

MN21. WAS (*name*) WEIGHED AT BIRTH?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN23 8⇨MN23
MN22. HOW MUCH DID (*name*) WEIGH? *Record weight from health card, if available.*	From card..... 1 (kg) __ . __ __ __ From recall ..... 2 (kg) __ . __ __ __ DK 99998	
MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF (*name*)?	Yes ..... 1 No 2	
MN24. DID YOU EVER BREASTFEED (*name*)?	Yes ..... 1 No 2	 2⇨Next Module
MN25. HOW LONG AFTER BIRTH DID YOU FIRST PUT (*name*) TO THE BREAST? *If less than 1 hour, record '00' hours.* *If less than 24 hours, record hours.* *Otherwise, record days.*	Immediately..... 000 Hours ..... 1 __ __ Days..... 2 __ __ Don't know / remember..... 998	
MN26. IN THE FIRST THREE DAYS AFTER DELIVERY, WAS (*name*) GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK?	Yes ..... 1 No 2	 2⇨NEXT MODULE
MN27. WHAT WAS (*name*) GIVEN TO DRINK? *Probe:* ANYTHING ELSE?	Milk (other than breast milk) ..... A Plain water ..... B Sugar or glucose water..... C Gripe water ..... D Sugar-salt-water solution ..... E Fruit juice ..... F Infant formula..... G Tea / Infusions ..... H Honey..... I Other (specify)_____ X	

POST-NATAL HEALTH CHECKS — PN

This module is to be administered to all women with a live birth in the 2 years preceding the date of interview.
Check child mortality module CM13 and record name of last-born child here _____.
Use this child's name in the following questions, where indicated.

PN1. *Check MN18: Was the child delivered in a health facility?*

☐ *Yes, the child was delivered in a health facility (MN18=21-26 or 31-36) ⇨ Continue with PN2*

☐ *No, the child was not delivered in a health facility (MN18=11-12 or 96) ⇨ Go to PN6*

PN2. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT WHAT HAPPENED IN THE HOURS AND DAYS AFTER THE BIRTH OF (*name).* YOU HAVE SAID THAT YOU GAVE BIRTH IN (*name or type of facility in MN18*). HOW LONG DID YOU STAY THERE AFTER THE DELIVERY? *If less than one day, record hours.* *If less than one week, record days.* *Otherwise, record weeks.*	Hours .....1 __ __ Days .....2 __ __ Weeks.....3 __ __ Don't know / remember 998	
PN3. I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (*name*)'S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (*name*), CHECKING THE CORD, OR SEEING IF (*name*) IS OK. BEFORE YOU LEFT THE (*name or type of facility in MN18*), DID ANYONE CHECK ON (*name*)'S HEALTH?	Yes .....1 No 2	
PN4. AND WHAT ABOUT CHECKS ON YOUR HEALTH – I MEAN, SOMEONE ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU. DID ANYONE CHECK ON YOUR HEALTH BEFORE YOU LEFT (*name or type or facility in MN18*)?	Yes .....1 No 2	
PN5. NOW I WOULD LIKE TO TALK TO YOU ABOUT WHAT HAPPENED AFTER YOU LEFT (*name or type of facility in MN18*). DID ANYONE CHECK ON (*name*)'S HEALTH AFTER YOU LEFT (*name or type of facility in MN18*)?	Yes .....1 No 2	1⇨PN11 2⇨PN16

PN6. *Check MN17: Did a health professional, traditional birth attendant, or community health worker assist with the delivery?*

☐ *Yes, delivery assisted by a health professional or other health worker (MN17=A-G) ⇨ Continue with PN7*

☐ *No, delivery not assisted by a health professional or other health worker (A-G not circled in MN17) ⇨ Go to PN10*

PN7. YOU HAVE ALREADY SAID THAT (*person or persons in MN17*) ASSISTED WITH THE BIRTH. NOW I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (*name*)'S HEALTH AFTER DELIVERY, FOR EXAMPLE EXAMINING (*name*), CHECKING THE CORD, OR SEEING IF (*name*) IS OK. AFTER THE DELIVERY WAS OVER AND BEFORE (*person or persons in MN17*) LEFT YOU, DID (*person or persons in MN17*) CHECK ON (*name*)'S HEALTH?	Yes .....1 No 2	
PN8. AND DID (*person or persons in MN17*) CHECK ON <u>YOUR</u> HEALTH BEFORE LEAVING? BY CHECK ON YOUR HEALTH, I MEAN ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.	Yes .....1 No 2	
PN9. AFTER THE (*person or persons in MN17*) LEFT YOU, DID ANYONE CHECK ON THE HEALTH OF (*name*)?	Yes .....1 No 2	1⇨PN11 2⇨PN18
PN10. I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (*name*)'S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (*name*), CHECKING THE CORD, OR SEEING IF THE BABY IS OK. AFTER (*name*) WAS DELIVERED, DID ANYONE CHECK ON HIS/HER HEALTH?	Yes .....1 No 2	2⇨PN19
PN11. DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?	Once .....1 More than once 2	1⇨PN12A 2⇨PN12B
PN12A. HOW LONG AFTER DELIVERY DID THAT CHECK HAPPEN? PN12B. HOW LONG AFTER DELIVERY DID THE FIRST OF THESE CHECKS HAPPEN? *If less than one day, record hours.* *If less than one week, record days.* *Otherwise, record weeks.*	Hours .....1 __ __ Days .....2 __ __ Weeks .....3 __ __ Don't know / remember 998	

PN13. WHO CHECKED ON (*name*)'S HEALTH AT THAT TIME?	Health professional Doctor ..... A Nurse / Midwife ..... B Auxiliary nurse ..... C Other person Traditional birth attendant ..... F Community health worker ..... G Relative / Friend ..... H Other (*specify*) _____ X	
PN14. WHERE DID THIS CHECK TAKE PLACE? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Home Your home ..... 11 Other home ..... 12 Public sector Govt. hospital ..... 21 Health centre ..... 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	
PN15. *Check MN18: Was the child delivered in a health facility?* ☐ *Yes, the child was delivered in a health facility (MN18=21-26 or 31-36) ⇨ Continue with PN16* ☐ *No, the child was not delivered in a health facility (MN18=11-12 or 96) ⇨ Go to PN17*		
PN16. AFTER YOU LEFT (*name or type of facility in MN18*), DID ANYONE CHECK ON <u>YOUR</u> HEALTH?	Yes ..... 1 No 2	1⇨PN20 2⇨Next Module
PN17. *Check MN17: Did a health professional, traditional birth attendant, or community health worker assist with the delivery?* ☐ *Yes, delivery assisted by a health professional or other health worker (MN17=A-G) ⇨ Continue with PN18* ☐ *No, delivery not assisted by a health professional or other health worker (A-G not circled in MN17) ⇨ Go to PN19*		
PN18. AFTER THE DELIVERY WAS OVER AND (*person or persons in MN17*) LEFT, DID ANYONE CHECK ON <u>YOUR</u> HEALTH?	Yes ..... 1 No 2	1⇨PN20 2⇨Next Module
PN19. AFTER THE BIRTH OF (*name*), DID ANYONE CHECK ON <u>YOUR</u> HEALTH? I MEAN SOMEONE ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.	Yes ..... 1 No 2	2⇨Next Module

PN20. DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?	Once .....1 More than once 2	1⇨PN21A 2⇨PN21B
PN21A. HOW LONG AFTER DELIVERY DID THAT CHECK HAPPEN? PN21B. HOW LONG AFTER DELIVERY DID THE FIRST OF THESE CHECKS HAPPEN? *If less than one day, record hours.* *If less than one week, record days.* *Otherwise, record weeks.*	Hours .....1 __ __ Days .....2 __ __ Weeks.....3 __ __ Don't know / remember 998	
PN22. WHO CHECKED ON YOUR HEALTH THAT TIME?	Health professional Doctor ..... A Nurse / Midwife..... B Auxiliary nurse ..... C Other person Traditional birth attendant.....F Community health worker.....G Relative / Friend ..... H Other (*specify*) _____X	
PN23. WHERE DID THIS CHECK TAKE PLACE? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Home Your home .....11 Other home.....12 Public sector Govt. hospital.....21 Health centre .....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	

ILLNESS SYMPTOMS		IS
IS1. *Check Household Listing, column HL9* *Is the respondent the mother or caretaker of any child under age 5?* ☐ *Yes ⇨ Continue with IS2.* ☐ *No ⇨ Go to Next Module.*		
IS2. SOMETIMES CHILDREN HAVE SEVERE ILLNESSES AND SHOULD BE TAKEN IMMEDIATELY TO A HEALTH FACILITY. WHAT TYPES OF SYMPTOMS WOULD CAUSE YOU TO TAKE YOUR CHILD TO A HEALTH FACILITY RIGHT AWAY? *Probe:* ANY OTHER SYMPTOMS? *Keep asking for more signs or symptoms until the mother/caretaker cannot recall any additional symptoms.* *Circle all symptoms mentioned, but do NOT prompt with any suggestions*	Child not able to drink or breastfeed ..... A Child becomes sicker ..... B Child develops a fever ..... C Child has fast breathing ..... D Child has difficult breathing ..... E Child has blood in stool ..... F Child is drinking poorly ..... G Diarrhea ..... H Cough ..... I Other (*specify*) _____ X Other (*specify*) _____ Y Other (*specify*) _____ Z	

CONTRACEPTION		CP
CP0. NOW I WOULD LIKE TO TALK ABOUT FAMILY PLANNING - THE VARIOUS WAYS OR METHODS THAT A COUPLE CAN USE TO DELAY OR AVOID A PREGNANCY. HAVE YOU EVER HEARD OF (METHOD)?		
CP0A. **FEMALE STERILIZATION?** PROBE: WOMEN CAN HAVE AN OPERATION TO AVOID HAVING ANY MORE CHILDREN.	Yes ..... 1 No 2	
CP0B. **MALE STERILIZATION?** PROBE: MEN CAN HAVE AN OPERATION TO AVOID HAVING ANY MORE CHILDREN.	Yes ..... 1 No 2	
CP0C. **IUD**? PROBE: WOMEN CAN HAVE A LOOP OR COIL PLACED INSIDE THEM BY A DOCTOR OR A NURSE.	Yes ..... 1 No 2	
CP0D. **INJECTABLES**? PROBE: WOMEN CAN HAVE AN INJECTION BY A HEALTH PROVIDER THAT STOPS THEM FROM BECOMING PREGNANT FOR ONE OR MORE MONTHS.	Yes ..... 1 No 2	
CP0E. **IMPLANTS**? PROBE: WOMEN CAN HAVE ONE OR MORE SMALL RODS PLACED IN THEIR UPPER ARM BY A DOCTOR OR NURSE WHICH CAN PREVENT PREGNANCY FOR ONE OR MORE YEARS.	Yes ..... 1 No 2	
CP0F. **PILL**? PROBE: WOMEN CAN TAKE A PILL EVERY DAY TO AVOID BECOMING PREGNANT.	Yes ..... 1 No 2	
CP0G. **CONDOM**? PROBE: MEN CAN PUT A RUBBER SHEATH ON THEIR PENIS BEFORE SEXUAL INTERCOURSE.	Yes ..... 1 No 2	
CP0H. **FEMALE CONDOM**? PROBE: WOMEN CAN PLACE A SHEATH IN THEIR VAGINA BEFORE SEXUAL INTERCOURSE	Yes ..... 1 No 2	
CP0I. **RHYTHM METHOD**? PROBE: EVERY MONTH THAT A WOMAN IS SEXUALLY ACTIVE SHE CAN AVOID PREGNANCY BY NOT HAVING SEXUAL INTERCOURSE ON THE DAYS OF THE MONTH SHE IS MOST LIKELY TO GET PREGNANT.	Yes ..... 1 No 2	
CP0J. **WITHDRAWAL**? PROBE: MEN CAN BE CAREFUL AND PULL OUT BEFORE CLIMAX.	Yes ..... 1 No 2	
CP0K. HAVE YOU HEARD OF ANY OTHER WAYS OR METHODS THAT WOMEN OR MEN CAN USE TO AVOID PREGNANCY?	Yes ..... 1 _____ (Specify) _____ (Specify) No 2	

CP1. ARE YOU PREGNANT NOW?	Yes, currently pragnant ..... 1 No ..... 2 Unsure/Don't Know 8	1⇨CP5
CP2. COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?	Yes ..... 1 No 2	2⇨ CP5
CP3. WHAT ARE YOU DOING TO DELAY OR AVOID A PREGNANCY? *Do not prompt.* *If more than one method is mentioned, circle each one.*	Female sterilization ..... A Male sterilization ..... B IUD ..... C Injectables ..... D Implants ..... E Pill ..... F Male condom ..... G Female condom ..... H Diaphragm ..... I Foam / Jelly ..... J Lactational amenorrhoea method (LAM) ..... K Periodic abstinence / Rhythm ..... L Withdrawal ..... M Other (*specify*) _____ X	 K⇨ CP5 L⇨ CP5 M⇨CP5 X⇨CP5
CP4. WHERE DID YOU OBTAIN (CURRENT METHOD) THE LAST TIME? *Probe to identify the type of source.* *If unable to determine if public or private sector, write the name of the place.* _____ *(Name of place)*	Public Sector Govt. Hospital ..... 11 Health Center ..... 12 Lao Youth Center LYC ..... 13 Outreach Team ..... 14 Village Health Volunteer VHV ..... 15 Other Public Sector _____ 16 (Specify) Private Medical Sector Private hospital/Clinic ..... 21 Pharmacy ..... 22 Private Doctor ..... 23 Mobile Clinic ..... 24 Field Worker ..... 25 Other Private Medical Sector _____ 26 (Specify) Other Source Shop ..... 31 Friend/Relative ..... 33 Other _____ 96 (Specify)	Go to Next Module for all respon-ses
CP5. DO YOU KNOW OF A PLACE WHERE YOU CAN OBTAIN A METHOD OF FAMILY PLANNING?	Yes ..... 1 No 2	2⇨Next Module

CP6. WHERE IS THAT? ANY OTHER PLACE? *Probe to identify the type of source.* *If unable to determine if public or private sector, write the name of the place.* _____ *(Name of place)*	Public Sector Govt. Hospital.....A Health Center.....B Lao Youth Center LYC.....C Outreach Team.....D Village Health Volunteer VHV.....E Other Public Sector _____ F (Specify) Private Medical Sector Private hospital/Clinic..... G Pharmacy.....H Private Doctor ..... I Mobile Clinic..... J Field Worker.....K Other Private Medical Sector _____ L (Specify) Other Source Shop..... M Friend/Relative.....N Other _____ X (Specify)	

UNMET NEED		UN
UN1. *Check CP1. Currently pregnant?* ☐ *Yes, currently pregnant ⇨ Continue with UN2* ☐ *No, unsure or DK ⇨ Go to UN5*		
UN2. NOW I WOULD LIKE TO TALK TO YOU ABOUT YOUR CURRENT PREGNANCY. WHEN YOU GOT PREGNANT, DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes ..... 1 No 2	1⇨UN4
UN3. DID YOU WANT TO HAVE A BABY LATER ON OR DID YOU NOT WANT ANY (MORE) CHILDREN?	Later ..... 1 No more 2	
UN4. NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. AFTER THE CHILD YOU ARE NOW EXPECTING, WOULD YOU LIKE TO HAVE ANOTHER CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY MORE CHILDREN?	Have another child ..... 1 No more / None ..... 2 Undecided / Don't know 8	1⇨UN7 2⇨UN13 8⇨UN13
UN5. *Check CP3. Currently using "Female sterilization"?* ☐ *Yes ⇨ Go to UN13* ☐ *No ⇨ Continue with UN6*		
UN6. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE FUTURE. WOULD YOU LIKE TO HAVE (A/ANOTHER) CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY (MORE) CHILDREN?	Have (a/another) child ..... 1 No more / None ..... 2 Says she cannot get pregnant ..... 3 Undecided / Don't know 8	 2⇨UN9 3⇨UN11 8⇨UN9
UN7. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD?	Months ..... 1 __ __ Years ..... 2 __ __ Soon / Now ..... 993 Says she cannot get pregnant ..... 994 After marriage ..... 995 Other ..... 996 Don't know 998	 994⇨UN11
UN8. *Check CP1. Currently pregnant?* ☐ *Yes, currently pregnant ⇨ Go to UN13* ☐ *No, unsure or DK ⇨ Continue with UN9*		

UN9. *Check CP2. Currently using a method?* ☐ *Yes ⇨ Go to UN13* ☐ *No ⇨ Continue with UN10*		
UN10. DO YOU THINK YOU ARE PHYSICALLY ABLE TO GET PREGNANT AT THIS TIME?	Yes ..... 1 No ..... 2 DK 8	1 ⇨UN13 8 ⇨UN13
UN11. WHY DO YOU THINK YOU ARE NOT PHYSICALLY ABLE TO GET PREGNANT?	Infrequent sex / No sex ..... A Menopausal ..... B Never menstruated ..... C Hysterectomy (surgical removal of uterus) ..... D Has been trying to get pregnant for 2 years or more without result ..... E Postpartum amenorrheic ..... F Breastfeeding ..... G Too old ..... H Fatalistic ..... I Other (*specify*) _____ X Don't know ..... Z	
UN12. *Check UN11. "Never menstruated" mentioned?* ☐ *Mentioned ⇨ Go to next module* ☐ *Not mentioned ⇨ Continue with UN13*		
UN13. WHEN DID YOUR LAST MENSTRUAL PERIOD START?	Days ago ..... 1 __ __ Weeks ago ..... 2 __ __ Months ago ..... 3 __ __ Years ago ..... 4 __ __ In menopause / Has had hysterectomy (surgical removal of uterus) ..... 994 Before last birth ..... 995 Never menstruated 996	

ATTITUDES TOWARD DOMESTIC VIOLENCE					DV
DV1. SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES. IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS:		Yes	No	DK	
[A] IF SHE GOES OUT WITHOUT TELLING HIM?	Goes out without telling	1	2	8	
[B] IF SHE NEGLECTS THE CHILDREN?	Neglects children	1	2	8	
[C] IF SHE ARGUES WITH HIM?	Argues with him	1	2	8	
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?	Refuses sex	1	2	8	
[E] IF SHE BURNS THE FOOD?	Burns food.....	1	2	8	

MARRIAGE/UNION		MA
MA1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A MAN AS IF MARRIED?	Yes, currently married .....1 Yes, living with a man.....2 No, not in union 3	 3⇨MA5
MA2. HOW OLD IS YOUR HUSBAND/PARTNER? *Probe*: HOW OLD WAS YOUR HUSBAND/PARTNER ON HIS LAST BIRTHDAY?	Age in years.....__ __ DK.....98	After the response go to MA7
MA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN AS IF MARRIED?	Yes, formerly married .....1 Yes, formerly lived with a man .....2 No 3	 3 ⇨Next Module
MA6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed.....1 Divorced .....2 Separated 3	
MA7. HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once .....1 More than once.....2	
MA8. IN WHAT MONTH AND YEAR DID YOU FIRST MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Date of first marriage Month.....__ __ DK month.....98 Year .....__ __ __ __ DK year.....9998	 Year⇨ Next Module
MA9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?	Age in years.....__ __	

SEXUAL BEHAVIOUR		SB
Check for the presence of others. Before continuing, ensure privacy.		
SB1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME IMPORTANT LIFE ISSUES. THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL. HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?	Never had intercourse ..... 00 Age in years..... __ __ First time when started living with (first) husband/partner..... 95	00⇨Next Module
SB2. THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes..... 1 No ..... 2 DK / Don't remember..... 8	
SB3. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE? *Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more the answer must be recorded in years.*	Days ago..... 1 __ __ Weeks ago..... 2 __ __ Months ago..... 3 __ __ Years ago ..... 4 __ __	4⇨Next Module
SB4. THE LAST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes..... 1 No 2	
SB5. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE? *Probe to ensure that the response refers to the relationship at the time of sexual intercourse* *If 'boyfriend', then ask:* WERE YOU LIVING TOGETHER AS IF MARRIED? *If 'yes', circle '2'. If 'no', circle'3'.*	Husband ..... 1 Cohabiting partner ..... 2 Boyfriend..... 3 Casual acquaintance ..... 4 Other (*specify*)_____6	3⇨SB7 4⇨SB7 6⇨SB7
SB6. *Check MA1:* ☐ *Currently married or living with a man (MA1 = 1 or 2) ⇨ Go to Next Module* ☐ *Not married / Not in union (MA1 = 3) ⇨ Continue with SB7*		
SB7. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner..... __ __ DK..... 98	

HIV/AIDS		HA
HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	Yes ..... 1 No 2	 2⇨Go to HA27A
HA2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?	Yes ..... 1 No ..... 2 DK 8	
HA3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes ..... 1 No ..... 2 DK 8	
HA4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes ..... 1 No ..... 2 DK 8	
HA5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes ..... 1 No ..... 2 DK 8	
HA6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK 8	
HA7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK 8	
HA8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY: [A] DURING PREGNANCY? [B] DURING DELIVERY? [C] BY BREASTFEEDING?	Yes No DK During pregnancy ..... 1 2 8 During delivery ..... 1 2 8 By breastfeeding 1 2 8	
HA9. IN YOUR OPINION, IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA10. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA11. IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA12. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA12A. IF A WIFE KNOWS HER HUSBAND HAS A DISEASE THAT SHE CAN GET DURING SEXUAL	Yes ..... 1 No 2	

INTERCOURSE, IS SHE JUSTIFIED IN ASKING THAT THEY USE A CONDOM WHEN THEY HAVE SEX?	DK / Not sure / Depends 8	
HA12B. IS A WIFE JUSTIFIED IN REFUSING TO HAVE SEX WITH HER HUSBAND WHEN SHE KNOWS HE HAS SEX WITH OTHER WOMEN?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA12C. *Check MA1: Currently married or living together with a man as if married* ☐ *Not in union ⇨ Go to HA13* ☐ *Currently married or living with a man ⇨ Continue with HA12D*		
HA12D. CAN YOU SAY NO TO YOUR (HUSBAND/PARTNER) IF YOU DO NOT WANT TO HAVE SEXUAL INTERCOURSE?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA12E. COULD YOU ASK YOUR (HUSBAND/PARTNER) TO USE A CONDOM IF YOU WANTED HIM TO?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
HA13. *Check CM13: Any live birth in last 2 years?* ☐ *No live birth in last 2 years ⇨ Go to HA24* ☐ *One or more live births in last 2 years ⇨ Continue with HA14*		
HA14. *Check MN1: Received antenatal care?* ☐ *Received antenatal care ⇨ Continue with HA15* ☐ *Did not receive antenatal care ⇨ Go to HA24*		
HA15. DURING ANY OF THE ANTENATAL VISITS FOR YOUR PREGNANCY WITH (*name*), WERE YOU GIVEN ANY INFORMATION ABOUT: [A] BABIES GETTING THE AIDS VIRUS FROM THEIR MOTHER? [B] THINGS THAT YOU CAN DO TO PREVENT GETTING THE AIDS VIRUS? [C] GETTING TESTED FOR THE AIDS VIRUS? WERE YOU: [D] OFFERED A TEST FOR THE AIDS VIRUS?	Y N DK AIDS from mother ..... 1 2 8 Things to do ..... 1 2 8 Tested for AIDS ..... 1 2 8 Offered a test 1 2 8	
HA16. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS AS PART OF YOUR ANTENATAL CARE?	Yes ..... 1 No ..... 2 DK 8	 2⇨HA19 8⇨HA19
HA17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 DK 8	 2⇨HA22 8⇨HA22
HA18. REGARDLESS OF THE RESULT, ALL WOMEN WHO ARE TESTED ARE SUPPOSED TO RECEIVE	Yes ..... 1 No 2	1⇨HA22 2⇨HA22

COUNSELLING AFTER GETTING THE RESULT. AFTER YOU WERE TESTED, DID YOU RECEIVE COUNSELLING?	DK 8	8⇨HA22
HA19. *Check MN17: Birth delivered by health professional (A, B or C)?* ☐ *Yes, birth delivered by health professional ⇨ Continue with HA20* ☐ *No, birth not delivered by health professional ⇨ Go to HA24*		
HA20. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS BETWEEN THE TIME YOU WENT FOR DELIVERY BUT BEFORE THE BABY WAS BORN?	Yes ..... 1 No 2	2⇨HA24
HA21. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No 2	
HA22. HAVE YOU BEEN TESTED FOR THE AIDS VIRUS SINCE THAT TIME YOU WERE TESTED DURING YOUR PREGNANCY?	Yes ..... 1 No 2	1⇨HA25
HA23. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED FOR THE AIDS VIRUS?	Less than 12 months ago ..... 1 12-23 months ago ..... 2 2 or more years ago 3	1⇨HA27A 2⇨HA27A 3⇨HA27A
HA24. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes ..... 1 No 2	2⇨HA27
HA25. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?	Less than 12 months ago ..... 1 12-23 months ago ..... 2 2 or more years ago 3	
HA26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 DK 8	1⇨HA27A 2⇨HA27A 8⇨HA27A
HA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes ..... 1 No 2	
HA27A. HAVE YOU HEARD ABOUT OTHER INFECTIONS THAT CAN BE TRANSMITTED THROUGH SEXUAL CONTACT?	Yes ..... 1 No 2	
HA27B. *Check SB1: Has had sexual intercourse (SB1)?* ☐ *Never had sexual intercourse ⇨ Go to next module* ☐ *Has had sexual intercourse ⇨ Continue with HA27C*		
HA27C. *Check HA27A: Heard about sexually transmitted infections (HA27A)?* ☐ *Yes ⇨ Continue with HA27D* ☐ *No ⇨ Go to HA27E*		

HA27D. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT YOUR HEALTH IN THE LAST 12 MONTHS. DURING THE LAST 12 MONTHS, HAVE YOU HAD A DISEASE WHICH YOU GOT THROUGH SEXUAL CONTACT?	Yes ..... 1 No ..... 2 DK 8	
HA27E. SOMETIMES WOMEN EXPERIENCE A BAD-SMELLING ABNORMAL GENITAL DISCHARGE. DURING THE LAST 12 MONTHS, HAVE YOU HAD A BAD-SMELLING ABNORMAL GENITAL DISCHARGE?	Yes ..... 1 No ..... 2 DK 8	
HA27F. SOMETIMES WOMEN HAVE A GENITAL SORE OR ULCER. DURING THE LAST 12 MONTHS, HAVE YOU HAD A GENITAL SORE OR ULCER?	Yes ..... 1 No ..... 2 DK 8	
HA27G. *Check HA27D, HA27E, and HA27F:* ☐ *Has not had any infection or DK ⇨ Go to next module* ☐ *Has had an infection (any "Yes") ⇨ Continue with HA27H*		
HA27H. THE LAST TIME YOU HAD (PROBLEM FROM HA27D/HA27E/HA27F), DID YOU SEEK ANY KIND OF ADVICE OR TREATMENT?	Yes ..... 1 No 2	2⇨Next Module
HA27I. WHERE DID YOU GO? *Probe to identify the type of source.* *If unable to determine if public or private sector, write the name of the place.* _____ *(Name of place)*	Public Sector Govt. Hospital ..... 11 Health Center ..... 12 Lao Youth Center LYC ..... 13 Outreach Team ..... 14 Village Health Volunteer VHV ..... 15 Other Public Sector _____ 16 (Specify) Private Medical Sector Private hospital/Clinic ..... 21 Pharmacy ..... 22 Private Doctor ..... 23 Mobile Clinic ..... 24 Field Worker ..... 25 Other Private Medical Sector _____ 26 (Specify) Other Source Shop ..... 31 Friend/Relative ..... 33 Other _____ 96 (Specify)	

MATERNAL MORTALITY		MM
NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT YOUR BROTHERS AND SISTERS, THAT IS, ALL OF THE CHILDREN BORN TO YOUR NATURAL MOTHER. PLEASE INCLUDE ALL YOUR SISTERS AND BROTHERS WHO ARE LIVING WITH YOU, THOSE WHO ARE LIVING ELSEWHERE, AND THOSE WHO HAVE DIED.		
MM1. HOW MANY CHILDREN DID YOUR MOTHER GIVE BIRTH TO, INCLUDING YOURSELF?	Number of births to natural mother ___ ___	
MM2. *CHECK MM1.* ☐ *TWO OR MORE BIRTHS ⇨ CONTINUE WITH MM3* ☐ *ONLY ONE BIRTH (RESPONDENT ONLY) ⇨ GO TO WM11*		
MM3. HOW MANY OF THESE BIRTHS DID YOUR MOTHER HAVE BEFORE YOU WERE BORN?	Number of preceding births ___ ___	

	[S1] OLDEST	[S2] NEXT OLDEST	[S3] NEXT OLDEST	[S4] NEXT OLDEST	[S5] NEXT OLDEST
MM4. WHAT NAME WAS GIVEN TO YOUR OLDEST (NEXT OLDEST) BROTHER OR SISTER?	_____	_____	_____	_____	_____
MM5. IS (*NAME*) MALE OR FEMALE?	Male ..... 1 Female 2	Male ..... 1 Female 2	Male ..... 1 Female 2	Male ..... 1 Female 2	Male ..... 1 Female 2
MM6. IS (*NAME*) STILL ALIVE?	Yes ..... 1 No ..... 2 ⇨MM8 DK ..... 8 ⇨[S2]	Yes ..... 1 No ..... 2 ⇨MM8 DK ..... 8 ⇨[S3]	Yes ..... 1 No ..... 2 ⇨MM8 DK ..... 8 ⇨[S4]	Yes ..... 1 No ..... 2 ⇨MM8 DK ..... 8 ⇨[S5]	Yes ..... 1 No ..... 2 ⇨MM8 DK ..... 8 ⇨[S6]
MM7. HOW OLD IS (*NAME*)?	___ ___ ⇨ Go to [S2]	___ ___ ⇨ Go to [S3]	___ ___ ⇨ Go to [S4]	___ ___ ⇨ Go to [S5]	___ ___ ⇨ Go to [S6]
MM8. HOW MANY YEARS AGO DID (*NAME*) DIE?	___ ___	___ ___	___ ___	___ ___	___ ___
MM9. HOW OLD WAS (*NAME*) WHEN HE/SHE DIED?	___ ___ *If male or died before age 12, go to [S2]*	___ ___ *If male or died before age 12, go to [S3]*	___ ___ *If male or died before age 12, go to [S4]*	___ ___ *If male or died before age 12, go to [S5]*	___ ___ *If male or died before age 12, go to [S6]*
MM10. WAS (*NAME*) PREGNANT WHEN SHE DIED?	Yes ..... 1 ⇨MM13 No 2	Yes ..... 1 ⇨MM13 No 2	Yes ..... 1 ⇨MM13 No 2	Yes ..... 1 ⇨MM13 No 2	Yes ..... 1 ⇨MM13 No 2
MM11. DID (*NAME*) DIE DURING CHILDBIRTH?	Yes ..... 1 ⇨MM13 No 2	Yes ..... 1 ⇨MM13 No 2	Yes ..... 1 ⇨MM13 No 2	Yes ..... 1 ⇨MM13 No 2	Yes ..... 1 ⇨MM13 No 2
MM12. DID (*NAME*) DIE WITHIN TWO MONTHS AFTER THE END OF A PREGNANCY OR CHILDBIRTH?	Yes ..... 1 No 2	Yes ..... 1 No 2	Yes ..... 1 No 2	Yes ..... 1 No 2	Yes ..... 1 No 2
MM13. HOW MANY LIVE BORN CHILDREN DID (*NAME*) GIVE BIRTH TO DURING HER LIFETIME?	___ ___	___ ___	___ ___	___ ___	___ ___
MM14.	*IF NO MORE SIBLINGS, GO TO WM11*	*IF NO MORE SIBLINGS, GO TO WM11*	*IF NO MORE SIBLINGS, GO TO WM11*	*IF NO MORE SIBLINGS, GO TO WM11*	*IF NO MORE SIBLINGS, GO TO WM11*

	[S6] OLDEST	[S7] OLDEST	[S8] NEXT OLDEST	[S9] NEXT OLDEST	[S10] NEXT OLDEST
MM4. WHAT NAME WAS GIVEN TO YOUR OLDEST (NEXT OLDEST) BROTHER OR SISTER?	_____	_____	_____	_____	_____
MM5. IS (*NAME*) MALE OR FEMALE?	Male .....1 Female 2	Male.....1 Female 2	Male .....1 Female 2	Male .....1 Female 2	Male.....1 Female 2
MM6. IS (*NAME*) STILL ALIVE?	Yes.....1 No .....2 ⇨MM8 DK.....8 ⇨[S7]	Yes .....1 No.....2 ⇨MM8 DK .....8 ⇨[S8]	Yes.....1 No .....2 ⇨MM8 DK.....8 ⇨[S9]	Yes.....1 No .....2 ⇨MM8 DK.....8 ⇨[S10]	Yes .....1 No.....2 ⇨MM8 DK .....8 ⇨[S11]
MM7. HOW OLD IS (*NAME*)?	__ __ ⇨ Go to [S7]	__ __ ⇨ Go to [S8]	__ __ ⇨ Go to [S9]	__ __ ⇨ Go to [S10]	__ __ ⇨ Go to [S11]
MM8. HOW MANY YEARS AGO DID (*NAME*) DIE?	__ __	__ __	__ __	__ __	__ __
MM9. HOW OLD WAS (*NAME*) WHEN HE/SHE DIED?	__ __ *If male or died before age 12, go to [S7]*	__ __ *If male or died before age 12, go to [S8]*	__ __ *If male or died before age 12, go to [S9]*	__ __ *If male or died before age 12, go to [S10]*	__ __ *If male or died before age 12, go to [S11]*
MM10. WAS (*NAME*) PREGNANT WHEN SHE DIED?	Yes.....1 ⇨MM13 No 2	Yes .....1 ⇨MM13 No.....2	Yes.....1 ⇨MM13 No 2	Yes.....1 ⇨MM13 No 2	Yes .....1 ⇨MM13 No.....2
MM11. DID (*NAME*) DIE DURING CHILDBIRTH?	Yes.....1 ⇨MM13 No 2	Yes .....1 ⇨MM13 No.....2	Yes.....1 ⇨MM13 No 2	Yes.....1 ⇨MM13 No 2	Yes .....1 ⇨MM13 No.....2
MM12. DID (*NAME*) DIE WITHIN TWO MONTHS AFTER THE END OF A PREGNANCY OR CHILDBIRTH?	Yes.....1 No 2	Yes .....1 No.....2	Yes.....1 No 2	Yes.....1 No 2	Yes .....1 No.....2
MM13. HOW MANY LIVE BORN CHILDREN DID (*NAME*) GIVE BIRTH TO DURING HER LIFETIME?	__ __	__ __	__ __	__ __	__ __
MM14.	*IF NO MORE SIBLINGS, GO TO WM11*	*IF NO MORE SIBLINGS, GO TO WM11*	*IF NO MORE SIBLINGS, GO TO WM11*	*IF NO MORE SIBLINGS, GO TO WM11*	*IF NO MORE SIBLINGS, GO TO WM11*
					TICK HERE IF ADDITIONAL QUESTIONNAIRE USED ☐

WM11. *Record the time.*	Hour and minutes .....__ __ : __ __	

WM12. *Check Household Listing Form, column HL9.*
Is the respondent the mother or caretaker of any child age 0-4 living in this household?

☐ *Yes ⇨ Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with this respondent.*

☐ *No ⇨ End the interview with this respondent by thanking her for her cooperation. Check for the presence of any other eligible woman or man or children under-5 in the household.*

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

Lao Social Indicator Survey LSIS (MICS/DHS)

QUESTIONNAIRE FOR INDIVIDUAL MEN

MAN'S INFORMATION PANEL	MI
This questionnaire is to be administered to all men age 15-49 in households selected for male interview (see Household Information Panel HH7A and Household Listing Form HL7A). A separate questionnaire should be used for each eligible man	
MI1. Cluster number: ___ ___ ___ ___	MI2. Household number: ___ ___
MI3. Man's name: Name_____	MI4. Man's line number: ___ ___
MI5. Interviewer name and number: Name_____ ___ ___ ___	MI6. Day / Month / Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___

Repeat greeting if not already read to this man:

WE ARE FROM DEPARTMENT OF STATISTICS AND MINISTRY OF HEATH. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire has already been read to this man, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 30 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ *Yes, permission is given ⇨ Go to MI10 to record the time and then begin the interview.*

☐ *No, permission is not given ⇨ Complete MI7. Discuss this result with your supervisor.*

MI7. Result of man's interview	
	Completed .....01 Not at home .....02 Refused .....03 Partly completed .....04 Incapacitated .....05 Other (*specify*) _____ 96

MI8. Field edited by (Name and number):	MI9. Data entry clerk (Name and number):
Name _____ ___ ___ ___	Name _____ ___ ___

MI10. *Record the time.*	Hour and minutes .....__ __ : __ __	

MAN'S BACKGROUND		**MB**
MB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth Month.....__ __ DK month.....98 Year .....__ __ __ __ DK year.....9998	
MB2. HOW OLD ARE YOU? *Probe:* HOW OLD WERE YOU AT YOUR LAST BIRTHDAY? *Compare and correct MB1 and/orMB2 if inconsistent*	Age (in completed years) .....__ __	
MB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL	Yes .....1 No.....2	 2⇨MB7
MB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool.....0 Primary.....1 Lower Secondary.....2 Upper Secondary.....3 Post secondary non tertiary.....4 Tertiary Education 5	0⇨MB7
MB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? *Grade:* *Primary 11-15* *Lower Sec 21-24 Upper Sec 31-33* *Post secondary non tertiary 41-43 Tertiary Edu 51-57* *98 DK* *If less than 1 grade at this level, enter "00"*	Grade .....__ __	
MB6. *Check MB4:* ☐ *Lower secondary or higher. ⇨ Go to Next Module* ☐ *Primary ⇨ Continue with MB7*		
MB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. *Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME? *Sample sentences for literacy test:* *1. The child is reading a book.* *2. The rain 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	

ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY		MT
MT1. *Check MB7:* ☐ *Question left blank (Respondent has secondary or more education) ⇨ Continue with MT2* ☐ *Able to read or no sentence in required language (codes 2, 3 or 4) ⇨ Continue with MT2* ☐ *Cannot read at all or blind (codes 1 or 5) ⇨ Go to MT3*		
MT2. HOW OFTEN DO YOU READ A NEWSPAPER OR MAGAZINE: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
MT3. DO YOU LISTEN TO THE RADIO ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
MT4. HOW OFTEN DO YOU WATCH TELEVISION: WOULD YOU SAY THAT YOU WATCH ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
MT5. *Check MB2: Age of respondent 15-24 years?* ☐ *Yes, age 15-24 ⇨ Continue with MT6* ☐ *No, age 25-49 ⇨ Go to Next Module*		
MT6. HAVE YOU EVER USED A COMPUTER?	Yes.....1 No.....2	2⇨MT9
MT7. HAVE YOU USED A COMPUTER FROM ANY LOCATION IN THE LAST 12 MONTHS?	Yes.....1 No.....2	2⇨MT9
MT8. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE A COMPUTER: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	
MT9. HAVE YOU EVER USED THE INTERNET?	Yes.....1 No.....2	2⇨Next Module
MT10. IN THE LAST 12 MONTHS, HAVE YOU USED THE INTERNET? *If necessary, probe for use from any location, with any device.*	Yes.....1 No.....2	2⇨ Next Module
MT11. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE THE INTERNET: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day.....1 At least once a week.....2 Less than once a week.....3 Not at all.....4	

CONTRACEPTION		MC
MC0. NOW I WOULD LIKE TO TALK ABOUT FAMILY PLANNING - THE VARIOUS WAYS OR METHODS THAT A COUPLE CAN USE TO DELAY OR AVOID A PREGNANCY. Have you ever heard of (METHOD)?		
MC0A. **FEMALE STERILIZATION?** PROBE: WOMEN CAN HAVE AN OPERATION TO AVOID HAVING ANY MORE CHILDREN.	Yes .....1 No 2	
MC0B. **MALE STERILIZATION?** PROBE: MEN CAN HAVE AN OPERATION TO AVOID HAVING ANY MORE CHILDREN.	Yes .....1 No 2	
MC0C. **IUD**? PROBE: WOMEN CAN HAVE A LOOP OR COIL PLACED INSIDE THEM BY A DOCTOR OR A NURSE.	Yes .....1 No 2	
MC0D. **INJECTABLES**? PROBE: WOMEN CAN HAVE AN INJECTION BY A HEALTH PROVIDER THAT STOPS THEM FROM BECOMING PREGNANT FOR ONE OR MORE MONTHS.	Yes .....1 No 2	
MC0E. **IMPLANTS**? PROBE: WOMEN CAN HAVE ONE OR MORE SMALL RODS PLACED IN THEIR UPPER ARM BY A DOCTOR OR NURSE WHICH CAN PREVENT PREGNANCY FOR ONE OR MORE YEARS.	Yes .....1 No 2	
MC0F. **PILL**? PROBE: WOMEN CAN TAKE A PILL EVERY DAY TO AVOID BECOMING PREGNANT.	Yes .....1 No 2	
MC0G. **CONDOM**? PROBE: MEN CAN PUT A RUBBER SHEATH ON THEIR PENIS BEFORE SEXUAL INTERCOURSE.	Yes .....1 No 2	
MC0H. **FEMALE CONDOM**? PROBE: WOMEN CAN PLACE A SHEATH IN THEIR VAGINA BEFORE SEXUAL INTERCOURSE	Yes .....1 No 2	
MC0I. **RHYTHM METHOD**? PROBE: EVERY MONTH THAT A WOMAN IS SEXUALLY ACTIVE SHE CAN AVOID PREGNANCY BY NOT HAVING SEXUAL INTERCOURSE ON THE DAYS OF THE MONTH SHE IS MOST LIKELY TO GET PREGNANT.	Yes .....1 No 2	
MC0J. **WITHDRAWAL**? PROBE: MEN CAN BE CAREFUL AND PULL OUT BEFORE CLIMAX.	Yes .....1 No 2	
MC0K. HAVE YOU HEARD OF ANY OTHER WAYS OR METHODS THAT WOMEN OR MEN CAN USE TO AVOID PREGNANCY?	Yes .....1 _____ (Specify) _____ (Specify) No 2	

MC1. IN THE LAST FEW MONTHS HAVE YOU; HEARD ABOUT FAMILY PLANNING ON THE RADIO SEEN ANYTHING ABOUT FAMILY PLANNING ON THE TV READ ABOUT FAMILY PLANNING IN THE NEWSPAPER OR MAGAZINE	Yes No Radio.....1 2 TV.....1 2 Newspaper or Magazine 1 2	
MC2. IN THE LAST FEW MONTHS, HAVE YOU DISCUSSED FAMILY PLANNING WITH A HEALTH WORKER OR HEALTH PROFESSIONAL?	Yes ..... 1 No..... 2	
MC3. NOW I WOULD LIKE TO ASK YOU ABOUT A WOMAN'S RISK OF PREGNANCY FROM ONE MENSTRUAL PERIOD TO THE NEXT, ARE THERE CERTAIN DAYS WHEN A WOMAN IS MORE LIKELY TO BECOME PREGNANT WHEN SHE HAS SEXUAL RELATION?	Yes ..... 1 No..... 2 DK..... 8	 2⇨MC5 8⇨MC5
MC4. IS THIS TIME JUST BEFORE HER PERIOD BEGINS, RIGHT AFTER HER PERIOD HAS ENDED, OR HALFWAY BETWEEN TWO PERIODS?	Just before her period begins.....1 During her period.....2 Right after her period has ended.....3 Halfway between two periods.....4 Other _____ 6 (Specify)	
MC5. I WILL READ YOU SOME STATEMENTS ABOUT CONTRACEPTION. PLEASE TELL ME IF YOU AGREE OR DISAGREE WITH EACH ONE (I) CONTRACEPTION IS A WOMAN'S BUSINESS AND A MAN SHOULD NOT HAVE TO WORRY ABOUT IT (II) WOMAN WHO USE CONTRACEPTION MAY BECOME PROMISCUOUS	Agree Disagree DK Contraception is a Woman's business 1 2 8 Woman may become Promiscuous 1 2 8	
MC6. *Check MC0G,* ☐ *If yes to know male condom ⇨ Go toMC7* ☐ *If no to know male condom ⇨ Go to next module*		
MC7. DO YOU KNOW A PLACE WHERE A PERSON CAN GET CONDOM?	Yes ..... 1 No..... 2	 2⇨ Next Module

MC8. WHERE IS THAT? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Public Sector Government Hospital.....A Health Center ....B Lao Youth Center LYC..... .....C Outreach team .....D Village Health Volunteer VHV .....E Other public sector..... .....F _____ (Specify) Private medical sector Private hospital/clinic.....G Pharmacy.....H Private Doctor.....I Mobile Clinic.....J Field Worker.....K Other private medical sector.....L _____ (Specify) Other source Shop.....M Friends/Relatives.....O Other _____...X (Specify)	

ATTITUDES TOWARD DOMESTIC VIOLENCE					MV
MV1. SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES. IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS:		Yes	No	DK	
[A] IF SHE GOES OUT WITHOUT TELLING HIM?	Goes out without telling	1	2	8	
[B] IF SHE NEGLECTS THE CHILDREN?	Neglects children	1	2	8	
[C] IF SHE ARGUES WITH HIM?	Argues with him	1	2	8	
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?	Refuses sex	1	2	8	
[E] IF SHE BURNS THE FOOD?	Burns food	1	2	8	

MARRIAGE AND SEXUAL ACTIVITY		MS
MS1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A WOMAN AS IF MARRIED?	Yes, currently married ..... 1 Yes, living with a woman ..... 2 No, not in union 3	1⇨MS4 2⇨MS4
MS2. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A WOMAN AS IF MARRIED?	Yes, formerly married ..... 1 Yes, formerly lived with a woman ..... 2 No 3	 3⇨ MS9
MS3. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED, OR SEPARATED?	Widowed ..... 1 Divorced ..... 2 Separated 3	1⇨ MS6 2⇨ MS6 3⇨ MS6
MS4. IS YOUR (WIFE/PARTNER) LIVING WITH YOU NOW OR IS SHE STAYING ELSEWHERE?	Living with him ..... 1 Staying elsewhere 2	
MS5. RECORD THE WIFE'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD LISTING QUESTIONNAIRE. IF SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	Name _____ Line number ..... __ __	
MS6. HAVE YOU BEEN MARRIED OR LIVED WITH A WOMAN ONLY ONCE OR MORE THAN ONCE?	Only once ..... 1 More than once 2	
MS7. IN WHAT MONTH AND YEAR DID YOU FIRST MARRY OR START LIVING WITH A WOMAN AS IF MARRIED?	Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	 Year⇨ MS9
MS8. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST WIFE/PARTNER?	Age in years ..... __ __	
MS9. CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY		
MS10. NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME IMPORTANT LIFE ISSUES. THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL. HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?	Never had sexual intercourse ..... 00 Age in years ..... __ __ first time when started living with (first) wife/partner 95	00⇨ Next Module
MS11. THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes ..... 1 No ..... 2 DK / Don't remember 8	
MS12. 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

MS13. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WAS A CONDOM USED?	Yes .....1 No.....2	
MS14. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE? *Probe to ensure that the response refers to the relationship at the time of sexual intercourse.* *If girlfriend:* WERE YOU LIVING TOGETHER AS IF MARRIED? *if "Yes" circle "2"* *if "No" circle "3"*	Wife .....1 Live-in partner .....2 Girlfriend not living with respondent.....3 Casual acquaintance.....4 Prostitute.....5 Other (*specify*) _____ 6	 3⇨MS16 4⇨MS16 5⇨MS16 6⇨MS16
MS15. *Check MS1* ☐ *If currently married or living with a woman ⇨ Go to Next Module* ☐ *If no, not in union ⇨ Continue with MS16*		
MS16. HOW OLD IS THIS PERSON? *If response is DK, probe:* ABOUT HOW OLD IS THIS PERSON?	Age of partner.....___ ___ DK.....98	

HIV/AIDS		MH
MH1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	Yes ..... 1 No 2	 2⇨Go to MH27B
MH2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?	Yes ..... 1 No ..... 2 DK 8	
MH3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes ..... 1 No ..... 2 DK 8	
MH4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes ..... 1 No ..... 2 DK 8	
MH5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes ..... 1 No ..... 2 DK 8	
MH6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK 8	
MH7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK 8	
MH8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY: [A] DURING PREGNANCY? [B] DURING DELIVERY? [C] BY BREASTFEEDING?	Yes No DK During pregnancy ..... 1 2 8 During delivery ..... 1 2 8 By breastfeeding 1 2 8	
MH9. IN YOUR OPINION, IF A MALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD HE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
MH10. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
MH11. IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
MH12. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	

MH12A. IF A WIFE KNOWS HER HUSBAND HAS A DISEASE THAT SHE CAN GET DURING SEXUAL INTERCOURSE, IS SHE JUSTIFIED IN ASKING THAT THEY USE A CONDOM WHEN THEY HAVE SEX?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
MH12B. IS A WIFE JUSTIFIED IN REFUSING TO HAVE SEX WITH HER HUSBAND WHEN SHE KNOWS HE HAS SEX WITH OTHER WOMEN?	Yes ..... 1 No ..... 2 DK / Not sure / Depends 8	
CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY		
MH24. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes ..... 1 No 2	2⇨MH27
MH25. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?	Less than 12 months ago ..... 1 12-23 months ago ..... 2 2 or more years ago 3	
MH26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 DK 8	
MH26A. WHERE WAS THE TEST DONE? *Any other place?* *Probe to identify the type of source. If unable to determine if public or private sector, write the name of the place.* _____ *Name of place(s)*	Public Sector Govt. Hospital ..... 11 Health center ..... 12 Lao Youth Clinic ..... 13 Outreach team ..... 14 Village Health Volunteer VHV ..... 15 Other Public Sector _____ 16 (Specify) Private Medical Sector Private hospital/Clinic ..... 21 Pharmacy ..... 22 Private Doctor ..... 23 Mobile Clinic ..... 24 Field Worker ..... 25 Other Private Medical Sector _____ 26 (Specify) Other Source Shop ..... 31 Friend/Relative ..... 33 Other _____ 96 (Specify)	GO TO MH27B FOR ALL RESPONSES
MH27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes ..... 1 No 2	2⇨MH27B

MH27A. WHERE IS THAT? *Any other place?* *Probe to identify the type of source. If unable to determine if public or private sector, write the name of the place.* _____ *Name of place(s)*	Public Sector Govt. Hospital ..... A Health center ..... B Lao Youth Clinic..... C Outreach team ..... D Village Health Volunteer VHV..... E Other Public Sector _____ H (Specify) Private Medical Sector Private hospital/Clinic ..... I Pharmacy..... J Private Doctor ..... K Mobile Clinic..... L Field Worker..... M Other Private Medical Sector _____ O (Specify) Other Source Shop..... P Friend/Relative..... Q Other _____ R (Specify)	
MH27B. HAVE YOU HEARD ABOUT OTHER INFECTIONS THAT CAN BE TRANSMITTED THROUGH SEXUAL CONTACT?	Yes..... 1 No 2	
MH27C. *Check MS10: Never had sexual intercourse (MS10)?* ☐ *Never had sexual intercourse ⇨ Go toMI11* ☐ *Has had sexual intercourse ⇨ Continue with MH27D*		
MH27D. *MH 27B: Heard about sexually transmitted infection (MH27B)?* ☐ *Yes ⇨ Continue with MH27E* ☐ *No ⇨ Go to MH27F*		
MH27E. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT YOUR HEALTH IN THE LAST 12 MONTHS. DURING THE LAST 12 MONTHS, HAVE YOU HAD A DISEASE WHICH YOU GOT THROUGH SEXUAL CONTACT?	Yes..... 1 No ..... 2 DK..... 8	
MH27F. SOMETIMES MEN EXPERIENCE AN ABNORMAL DISCHARGE FROM THEIR PENIS. DURING THE LAST 12 MONTHS, HAVE YOU HAD AN ABNORMAL DISCHARGE FROM YOUR PENIS?	Yes..... 1 No ..... 2 DK..... 8	
MH27G. SOMETIMES MEN HAVE SORE OR ULCER. DURING THE LAST 12 MONTHS, HAVE YOU HAD A SORE OR ULCER NEAR YOUR PENIS?	Yes..... 1 No ..... 2 DK..... 8	

MH27H. *Check MH27E, MH27F, and MH27G:*

☐ *Has not had any infection or DK ⇨ Go toMI11*

☐ *Has had an infection (any "Yes") ⇨ Continue with MH27I*

MH27I. THE LAST TIME YOU HAD (PROBLEM FROM MH27E/MH27F/MH27G), DID YOU SEEK ANY KIND OF ADVICE OR TREATMENT?	Yes ..... 1 No 2	 2⇨MI11
MH27J. WHERE DID YOU GO? *Probe to identify the type of source.* *If unable to determine if public or private sector, write the name of the place.* _____ *Name of place(s)*	Public Sector Govt. Hospital ..... 11 Health Center..... 12 Lao Youth Center LYC..... 13 Outreach Team..... 14 Village Health Volunteer VHV..... 15 Other Public Sector _____ 16 (Specify) Private Medical Sector Private hospital/Clinic ..... 21 Pharmacy..... 22 Private Doctor ..... 23 Mobile Clinic..... 24 Field Worker..... 25 Other Private Medical Sector _____26 (Specify) Other Source Shop..... 31 Friend/Relative..... 33 Other _____96 (Specify)	

MI11. *Record the time.*	Hour and minutes .....__ __ : __ __	

MI12. *Check Household Listing Form, column HL7A.*
Is there any other men aged 15 - 49 living in this household?

☐ *Yes ⇨ Interview another eligible man with QUESTIONNAIRE FOR INDIVIDUAL MEN.*
☐ *No ⇨ End the interview with this respondent by thanking him for his cooperation.*
Check for the presence of any other eligible man or children under-5 in the household.

Lao Social
Indicator Survey
LSIS (MICS/DHS)

QUESTIONNAIRE FOR CHILDREN UNDER FIVE

UNDER-FIVE CHILD INFORMATION PANEL	UF
This questionnaire is to be administered to all mothers or caretakers (see Household Listing Form, column HL9) who care for a child that lives with them and is under the age of 5 years (see Household Listing Form, column HL6). A separate questionnaire should be used for each eligible child.	
UF1. Cluster number: ___ ___ ___ ___	UF2. Household number: ___ ___
UF3. Child's name: Name_____	UF4. Child's line number: ___ ___
UF5. Mother's / Caretaker's name: Name_____	UF6. Mother's / Caretaker's line number: ___ ___
UF7. Interviewer name and number: Name_____ ___ ___ ___	UF8. Day / Month / Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___

Repeat greeting if not already read to this respondent:

WE ARE FROM DEPARTMENT OF STATISTICS AND MINISTRY OF HEALTH. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT (*name*)'S HEALTH AND WELL-BEING. THE INTERVIEW WILL TAKE ABOUT 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of either the household questionnaire or woman questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (***child's name from UF3***)'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 30 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

- ☐ *Yes, permission is given ⇨ Go to UF12 to record the time and then begin the interview.*
- ☐ *No, permission is not given ⇨ Complete UF9. Discuss this result with your supervisor*

UF9. Result of interview for children under 5 *Codes refer to mother/caretaker.*	Completed .....01 Not at home .....02 Refused .....03 Partly completed .....04 Incapacitated .....05 Other (*specify*) _____ 96

UF10. Field edited by (Name and number): Name _____ ___ ___ ___	UF11. Data entry clerk (Name and number): Name _____ ___ ___

UF12. *Record the time.*	Hour and minutes..... __ __ : __ __	

AGE		**AG**
AG1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF (*name*). IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe:* WHAT IS HIS / HER BIRTHDAY? *If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day* *Month and year must be recorded.*	Date of birth Day .....__ __ DK day.....98 Month.....__ __ Year .....__ __ __ __	
AG2. HOW OLD IS (*name*)? *Probe*: HOW OLD WAS (*name*) AT HIS / HER LAST BIRTHDAY? *Record age in completed years.* *Record '0' if less than 1 year.* *Compare and correct AG1 and/or AG2 if inconsistent.*	Age (in completed years) .....__	

BIRTH REGISTRATION		BR
BR1. DOES (*name*) HAVE A BIRTH CERTIFICATE? *If yes, ask:* MAY I SEE IT?	Yes, seen.....1 Yes, not seen.....2 No .....3 DK.....8	1⇨Next Module 2⇨Next Module
BR2. HAS (*name*)'S BIRTH BEEN REGISTERED WITH THE CIVIL AUTHORITIES?	Yes .....1 No .....2 DK.....8	1⇨Next Module
BR3. DO YOU KNOW HOW TO REGISTER YOUR CHILD'S BIRTH?	Yes .....1 No 2	

EARLY CHILDHOOD DEVELOPMENT		EC
EC1. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR (*name*)?	None .....00 Number of children's books.....0 __ Ten or more books 10	
EC2. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT (*name*) PLAYS WITH WHEN HE/SHE IS AT HOME. DOES HE/SHE PLAY WITH: [A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)? [B] TOYS FROM A SHOP OR MANUFACTURED TOYS? [C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS OR LEAVES)? *If the respondent says "YES" to the categories above, then probe to learn specifically what the child plays with to ascertain the response*	Y N DK Homemade toys .....1 2 8 Toys from a shop.....1 2 8 Household objects or outside objects 1 2 8	
EC3. SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN. ON HOW MANY DAYS IN THE PAST WEEK WAS (*name*): [A] LEFT ALONE FOR MORE THAN AN HOUR? [B] LEFT IN THE CARE OF ANOTHER CHILD, THAT IS, SOMEONE LESS THAN 10 YEARS OLD, FOR MORE THAN AN HOUR? *If 'none' enter' 0'. If 'don't know' enter'8'*	Number of days left alone for more than an hour .....__ Number of days left with other child for more than an hour .....__	
EC4. *Check AG2: Age of child* ☐ *Child age 3 or 4 ⇨ Continue with EC5* ☐ *Child age 0, 1 or 2 ⇨ Go to Next Module*		
EC5. DOES (*name*) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	Yes .....1 No .....2 DK.....8	 2⇨EC7 8⇨EC7
EC6. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (*name*) ATTEND?	Number of hours.....__ __	

EC7. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER OVER 15 YEARS OF AGE ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (*name*): *If yes, ask:* WHO ENGAGED IN THIS ACTIVITY WITH (*name*)? *Circle all that apply.*		Mother	Father	Other	No one	
[A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (*name*)?	Read books	A	B	X	Y	
[B] TOLD STORIES TO (*name*)?	Told stories	A	B	X	Y	
[C] SANG SONGS TO (*name*) OR WITH (*name*), INCLUDING LULLABIES?	Sang songs	A	B	X	Y	
[D] TOOK (*name*) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	Took outside	A	B	X	Y	
[E] PLAYED WITH (*name*)?	Played with	A	B	X	Y	
[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH (*name*)?	Named/counted	A	B	X	Y	
EC8. I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH AND DEVELOPMENT OF YOUR CHILD. CHILDREN DO NOT ALL DEVELOP AND LEARN AT THE SAME RATE. FOR EXAMPLE, SOME WALK EARLIER THAN OTHERS. THESE QUESTIONS ARE RELATED TO SEVERAL ASPECTS OF YOUR CHILD'S DEVELOPMENT. CAN (*name*) IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?	Yes .....1 No .....2 DK.....8					
EC9. CAN (*name*) READ AT LEAST FOUR SIMPLE, POPULAR WORDS?	Yes .....1 No .....2 DK.....8					
EC10. DOES (*name*) KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?	Yes .....1 No .....2 DK.....8					
EC11. CAN (*name*) PICK UP A SMALL OBJECT WITH TWO FINGERS, LIKE A STICK OR A ROCK FROM THE GROUND?	Yes .....1 No .....2 DK.....8					
EC12. IS (*name*) SOMETIMES TOO SICK TO PLAY?	Yes .....1 No .....2 DK.....8					
EC13. DOES (*name*) FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY?	Yes .....1 No .....2 DK.....8					

EC14. WHEN GIVEN SOMETHING TO DO, IS (*name*) ABLE TO DO IT INDEPENDENTLY?	Yes .....1 No .....2 DK.....8	
EC15. DOES *(name)* GET ALONG WELL WITH OTHER CHILDREN?	Yes .....1 No .....2 DK.....8	
EC16. DOES (*name*) KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?	Yes .....1 No .....2 DK.....8	
EC17. DOES (*name*) GET DISTRACTED EASILY?	Yes .....1 No .....2 DK.....8	

BREASTFEEDING		BF
BF1. HAS (*name*) EVER BEEN BREASTFED?	Yes ..... 1 No ..... 2 DK 8	 2⇨BF3 8⇨BF3
BF2. IS HE/SHE STILL BEING BREASTFED?	Yes ..... 1 No ..... 2 DK 8	
BF3. I WOULD LIKE TO ASK YOU ABOUT LIQUIDS THAT (*name*) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED IN WHETHER (*name*) HAD THE ITEM EVEN IF IT WAS COMBINED WITH OTHER FOODS. DID (*name*) DRINK PLAIN WATER YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF4. DID (*name*) DRINK INFANT FORMULA YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2⇨BF6 8⇨BF6
BF5. HOW MANY TIMES DID (*name*) DRINK INFANT FORMULA?	Number of times ..... __ __	
BF6. DID (*name*) DRINK MILK, SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2⇨BF8 8⇨BF8
BF7. HOW MANY TIMES DID (*name*) DRINK TINNED, POWDERED OR FRESH ANIMAL MILK?	Number of times ..... __ __	
BF8. DID (*name*) DRINK JUICE OR JUICE DRINKS YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF9. DID (*name*) DRINK CLEAR BROTH/SOUP (NAM KAENG) YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF10. DID (*name*) DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF11. DID (*name*) DRINK ORS (*oral list / Nam Tha Lay Phoun*) YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	

BF12. DID (*name*) DRINK ANY OTHER LIQUIDS YESTERDAY, DURING THE DAY OR NIGHT?	Yes .....1 No .....2 DK.....8	
BF13. DID (*name*) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Yes .....1 No .....2 DK.....8	 2⇨BF15 8⇨BF15
BF14. HOW MANY TIMES DID (*name*) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Number of times .....__ __	
BF15. DID (*name*) EAT THIN PORRIDGE YESTERDAY, DURING THE DAY OR NIGHT?	Yes .....1 No .....2 DK.....8	
BF16. DID (*name*) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?	Yes .....1 No .....2 DK.....8	 2⇨BF18 8⇨BF18
BF17. HOW MANY TIMES DID (*name*) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?	Number of times .....__ __	
BF18. YESTERDAY, DURING THE DAY OR NIGHT, DID (*name*) DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE?	Yes .....1 No .....2 DK.....8	

CARE OF ILLNESS		CA
CA1. IN THE LAST TWO WEEKS, HAS (*name*) HAD DIARRHOEA?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA7 8⇨CA7
CA2. I WOULD LIKE TO KNOW HOW MUCH (*name*) WAS GIVEN TO DRINK DURING THE DIARRHOEA (INCLUDING BREASTMILK). DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO DRINK, ABOUT THE SAME AMOUNT, OR MORE THAN USUAL? *If less, probe*: WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO DRINK, OR SOMEWHAT LESS?	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Nothing to drink ..... 5 DK 8	
CA3. DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO EAT, ABOUT THE SAME AMOUNT, MORE THAN USUAL, OR NOTHING TO EAT? *If "less", probe:* WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO EAT OR SOMEWHAT LESS?	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Stopped food ..... 5 Never gave food ..... 6 DK 8	
CA4. DURING THE EPISODE OF DIARRHOEA, WAS (*name*) GIVEN TO DRINK ANY OF THE FOLLOWING: *Read each item aloud and record response before proceeding to the next item.* [A] A FLUID MADE FROM A SPECIAL PACKET CALLED (*oralyte / Nam Tha Lay Phoun*)? [B] A PRE-PACKAGED ORALYTE FLUID FOR DIARRHOEA? [C] RECOMMENDED HOMEMADE FLUID SUCH AS COCONUT WATER OR RICE WATER WITH SALT	Y N DK Fluid from oralyte packet ..... 1 2 8 Pre-packaged oralyte fluid ..... 1 2 8 RECOMMENDED HOMEMADE FLUID 1 2 8	
CA5. WAS ANYTHING (ELSE) GIVEN TO TREAT THE DIARRHOEA?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA7 8⇨CA7

CA6. WHAT (ELSE) WAS GIVEN TO TREAT THE DIARRHOEA? *Probe*: ANYTHING ELSE? *Record all treatments given. Write brand name(s) of all medicines mentioned.* _____ *(Name)*	Pill or Syrup Antibiotic ..... A Antimotility ..... B Zinc ..... C Other (Not antibiotic, antimotility or zinc) ..... G Unknown pill or syrup ..... H Injection Antibiotic ..... L Non-antibiotic ..... M Unknown injection ..... N Intravenous ..... O Home remedy / Herbal medicine ..... Q Other (*specify*) _____ X	
CA7. AT ANY TIME IN THE LAST TWO WEEKS, HAS (*name*) HAD AN ILLNESS WITH A COUGH?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA8. WHEN (*name*) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, RAPID BREATHS OR HAVE DIFFICULTY BREATHING?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA9. WAS THE FAST OR DIFFICULT BREATHING DUE TO A PROBLEM IN THE CHEST OR A BLOCKED OR RUNNY NOSE?	Problem in chest only ..... 1 Blocked or runny nose only ..... 2 Both ..... 3 Other (*specify*) _____ 6 DK 8	 2⇨CA14 6⇨CA14
CA10. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA12 8⇨CA12
CA11. FROM WHERE DID YOU SEEK ADVICE OR TREATMENT? *Probe:* ANYWHERE ELSE? *Circle all providers mentioned, but do NOT prompt with any suggestions.* *Probe to identify each type of source.* *If unable to determine if public or private sector, write the name of the place.* _____ *(Name of place)*	Public sector Govt. hospital ..... A Health centre ..... B Village health worker ..... D Outreach team ..... E Other public (*specify*) _____ H Private medical sector Private hospital / clinic ..... I Private physician ..... J Private pharmacy ..... K Mobile clinic ..... L Other private medical (*specify*) _____ O Other source Relative / Friend ..... P Shop ..... Q Traditional practitioner ..... R Other (*specify*) _____ X	

CA12. WAS (*name*) GIVEN ANY MEDICINE TO TREAT THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA13. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? *Circle all medicines given. Write brand name(s) of all medicines mentioned.* _____ *(Names of medicines)*	Antibiotic Pill / Syrup ..... A Injection ..... B Anti-malarials ..... M Paracetamol / Panadol / Acetaminophen ... P Aspirin ..... Q Ibuprofen ..... R Other (*specify*) _____ X DK ..... Z	
CA14. *Check AG2: Child aged 0,1or 2?* ☐ *Yes ⇨ Continue with CA15* ☐ *No ⇨ Go to Next Module*		
CA15. 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	

MALARIA		ML
ML1. IN THE LAST TWO WEEKS, HAS (*name*) BEEN ILL WITH A FEVER AT ANY TIME?	Yes ..... 1 No ..... 2 DK 8	 2⇨Next Module 8⇨Next Module
ML2. AT ANY TIME DURING THE ILLNESS, DID (*name*) HAVE BLOOD TAKEN FROM HIS/HER FINGER OR HEEL FOR TESTING?	Yes ..... 1 No ..... 2 DK 8	
ML3. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML8 8⇨ML8
ML4. WAS (*name*) TAKEN TO A HEALTH FACILITY OR VILLAGE HEALTH VOLUNTEER DURING THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML8 8⇨ML8
ML5. WAS (*name*) GIVEN ANY MEDICINE FOR FEVER OR MALARIA AT THE HEALTH FACILITY OR FROM A VILLAGE HEALTH VOLUNTEER?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML7 8⇨ML7
ML6. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? *Circle all medicines mentioned. Write brand name(s) of all medicines, if given.* _____ *(Name)*	Anti-malarials: SP / Fansidar ..... A Chloroquine ..... B Amodiaquine ..... C Quinine ..... D Coartem (Combination with Artemisinin) E Artesunate ..... F Other anti-malarial (*specify*) _____ H Antibiotic drugs Pill / Syrup ..... I Injection ..... J Other medications: Paracetamol/ Panadol /Acetaminophen . P Aspirin ..... Q Ibuprofen ..... R Other (*specify*) _____ X DK ..... Z	
ML7. WAS (*name*) GIVEN ANY MEDICINE FOR THE FEVER OR MALARIA BEFORE BEING TAKEN TO THE HEALTH FACILITY OR VILLAGE HEALTH VOLUNTEER?	Yes ..... 1 No ..... 2 DK 8	1⇨ML9 2⇨ML10 8⇨ML10
ML8. WAS (*name*) GIVEN ANY MEDICINE FOR FEVER OR MALARIA DURING THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML10 8⇨ML10

ML9. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? *Circle all medicines mentioned. Write brand name(s) of all medicines, if given.* _____ *(Name)* .	Anti-malarials: SP / Fansidar ..... A Chloroquine ..... B Amodiaquine ..... C Quinine ..... D Coartem (Combination with Artemisinin) E Artesunate ..... F Other anti-malarial (*specify*) _____ H Antibiotic drugs Pill / Syrup ..... I Injection ..... J Other medications: Paracetamol/ Panadol/ Acetaminophen . P Aspirin ..... Q Ibuprofen ..... R Other (*specify*) _____ X DK ..... Z	
ML10. *Check ML6 and ML9: Anti-malarial mentioned (codes A - H)?* ☐ *Yes ⇨ Continue with ML11* ☐ *No ⇨ Go to Next Module*		
ML11. HOW LONG AFTER THE FEVER STARTED DID (*name*) FIRST TAKE (*name of anti-malarial from ML6 or ML9*)? *If multiple anti-malarials mentioned in ML6 or ML9, name all anti-malarial medicines mentioned.*	Same day ..... 0 Next day ..... 1 2 days after the fever ..... 2 3 days after the fever ..... 3 4 or more days after the fever ..... 4 DK 8	

IMMUNIZATION — IM

If an immunization card is available, copy the dates in IM3 for each type of immunization recorded on the card. IM6-IM17 are for registering vaccinations that are not recorded on the card. IM6-IM17 will only be asked when a card is not available.

IM1. DO YOU HAVE A CARD WHERE (*name*)'S VACCINATIONS ARE WRITTEN DOWN? (*If yes*) MAY I SEE IT PLEASE?	Yes, seen ..... 1 Yes, not seen ..... 2 No card 3	1⇨IM3 2⇨IM6
IM2. DID YOU EVER HAVE A VACCINATION CARD FOR (*name*)?	Yes ..... 1 No 2	1⇨IM6 2⇨IM6

IM3.
(a) Copy dates for each vaccination from the card.
(b) Write '44' in day column if card shows that vaccination was given but no date recorded.

		Date of Immunization								
		Day		Month		Year				
BCG	BCG									
HEPB0 AT BIRTH	H0									
POLIO 1	OPV1									
DPT-HEPB-HIB1	H1									
POLIO 2	OPV2									
DPT-HEPB-HIB2	H2									
POLIO 3	OPV3									
DPT-HEPB-HIB3	H3									
MEASLES	MEASLES									
VITAMIN A (MOST RECENT)	VITA									
DEWORMING (MOST RECENT)										

IM4. *Check IM3. Are all vaccines (BCG to Measles) recorded?*

☐ *Yes⇨ Go to IM18*

☐ *No ⇨ Continue with IM5*

IM5. IN ADDITION TO WHAT IS RECORDED ON THIS CARD, DID (*name*) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS? *Record 'Yes' only if respondent mentions vaccines shown in the table above.*	Yes .....1 *(Probe for vaccinations and write '66' in the corresponding day column for each vaccine mentioned. Then skip to IM18)* No .....2 DK 8	 2⇨IM18 8⇨IM18
IM6. HAS (*name*) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY?	Yes .....1 No .....2 DK 8	 2⇨IM18 8⇨IM18
IM7. HAS (*name*) EVER RECEIVED A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT USUALLY CAUSES A SCAR?	Yes .....1 No .....2 DK 8	
IM8. HAS (*name*) EVER RECEIVED ANY "VACCINATION DROPS IN THE MOUTH" TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO?	Yes .....1 No .....2 DK 8	 2⇨IM11 8⇨IM11
IM9. WAS THE FIRST POLIO VACCINE RECEIVED IN THE FIRST TWO WEEKS AFTER BIRTH OR LATER?	First two weeks .....1 Later 2	
IM10. HOW MANY TIMES WAS THE POLIO VACCINE RECEIVED?	Number of times .....__	
IM11. HAS (*name*) EVER RECEIVED A DPT VACCINATION – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, OR DIPHTHERIA? *Probe by indicating that DPT vaccination is sometimes given at the same time as Polio*	Yes .....1 No .....2 DK 8	 2⇨IM13 8⇨IM13
IM12. HOW MANY TIMES WAS A DPT VACCINE RECEIVED?	Number of times .....__	
IM13. HAS (*name*) EVER BEEN GIVEN A HEPATITIS B VACCINATION – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING HEPATITIS B? *Probe by indicating that the Hepatitis B vaccine is sometimes given at the same time as Polio and DPT vaccines*	Yes .....1 No .....2 DK 8	 2⇨IM16 8⇨IM16
IM14. WAS THE FIRST HEPATITIS B VACCINE RECEIVED WITHIN 24 HOURS AFTER BIRTH, OR LATER?	Within 24 hours .....1 Later 2	
IM15. HOW MANY TIMES WAS A HEPATITIS B VACCINE RECEIVED?	Number of times .....__	
IM16. HAS (*name*) EVER RECEIVED A MEASLES INJECTION OR AN MMR INJECTION – THAT IS, A SHOT IN THE ARM AT THE AGE OF 9 MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?	Yes .....1 No .....2 DK 8	

IM18. HAS (*name*) RECEIVED A VITAMIN A DOSE LIKE (THIS/ANY OF THESE) WITHIN THE LAST 6 MONTHS? *Show common types of ampules / capsules / syrups*	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: [A] *National Measles Campaign(2007)* [B] *National Immunisation Day* [C] *Provincial Health Day*	Y N DK *Measles campaign*.....1 2 8 *National Immunisation Day*.....1 2 8 *Provincial Health Day*.....1 2 8	

UF13. *Record the time.*	Hour and minutes.....__ __ : __ __	

UF14. *Is the respondent the mother or caretaker of another child age 0-4 living in this household?*

☐ *Yes ⇨ Indicate to the respondent that you will need to measure the weight and height of the child later. Go to the next QUESTIONNAIRE FOR CHILDREN UNDER FIVE to be administered to the same respondent*

☐ *No ⇨ End the interview with this respondent by thanking him/her for his/her cooperation and tell her/him that you will need to measure the weight and height of the child*

Check to see if there are other woman's or man's or under-5 questionnaires to be administered in this household.

Move to another woman's or man's or under-5 questionnaire, or start making arrangements for anthropometric measurements of all eligible children in the household.

ANTHROPOMETRY		**AN**
After questionnaires for all children are complete, the measurer weighs and measures each child. Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child. Check the child's name and line number on the household listing before recording measurements.		
AN1. *Measurer's name and number:*	Name_____ ___ ___ ___	
AN2. *Result of height / length and weight measurement*	Either or both measured.....1 Child not present .....2 Child or caretaker refused.....3 Other (*specify*) _____ 6	 2⇨AN6 3⇨AN6 6⇨AN6
AN3. *Child's weight*	Kilograms (kg) .....__ __ . __ Weight not measured 99.9	
AN4. *Child's length or height* *Check age of child in AG2:* ☐ *Child under 2 years old.* ⇨ *Measure length (lying down).* ☐ *Child age 2 or more years.* ⇨ *Measure height (standing up).*	Length (cm) Lying down .....1 __ __ __ . __ Height (cm) Standing up .....2 __ __ __ . __ Length / Height not measured.....9999.9	
AN5. *Oedema* *Observe and record*	Checked Oedema present.....1 Oedema not present.....2 Unsure .....3 Not checked (*specify reason*)_____ 7	

AN6. *Is there another child in the household who is eligible for measurement?*

☐ *Yes* ⇨ *Record measurements for next child.*

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

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

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations


MPI

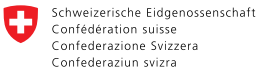

LAO STATISTICS
BUREAU


unicef


UNFPA


USAID


Australian
AID


Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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UN
DP


World Health
Organization


JICA


UNAIDS


WFP
United Nations
World Food
Programme