# LAO REPRODUCTIVE HEALTH SURVEY 2005

UNFPA Project LAO/02/P07: Strengthening the Data Base for Population and Development Planning

> Committee for Planning and Investment National Statistics Centre Supported by UNFPA



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# RESULTS IN BRIEF: COMPARATIVE INDICATORS FROM LAO REPRODUCTIVE HEALTH SURVEY 2000 AND 2005

	2000	2005		2000	2005
Population Size, Persons			Method of Contraception Ever Used, Percent		
Total	126,121	120,324	Any method (currently married women)	40.5	51.4
Females	63,407	60,740	Modern method (currently mar- ried women)	37.2	47.2
Males	62,714	59,584	Any method (all women)	30.9	39.6
			Modern method (all women)	28.3	36.6
Overall Sex Ratio			Contraceptive Prevalence Rate, Percent		
Males per 100 females	98.9	98	Any method (currently married women)	32.2	38.4
Dependency Ratio			Modern method (currently mar- ried women)	28.9	35.0
<15 years and >65 years per 100 persons aged 15-64 years	89.0	83.6	Traditional method (currently married women)	3.2	3.4
Household, Persons			Antenatal Care, Percent		
Average size of house- hold	6.0	5.6	No antennal care	75.8	71.5
			Doctor	12.6	15.7
Head of Household Percent			Nurse	5.6	8.7
Females	6.8	7.3	Midwife	3.2	4.3
Males	93.2	92.7	Health worker	1.7	1.6
Women's Educational Attainment, 15-49 Years Old, Percent			Place of Delivery, Percent		
None	30.6	28.8	Central hospital	3.1	1.8
Primary	44.3	43.7	Province/district hospital	7.4	9.9
Lower secondary	21.5	16.2	Health center	0.4	0.8
Upper secondary	2.9	10.5	Private clinic	0.1	0.3
Higher education	0.7	0.8	Home	86.1	84.8
			Others	2.9	1.2

	2000	2005		2000	2005
Fertility					
Crude birth rate (CBR)	34.0	29.9	Type of Assistance during Delivery, Percent		
Total fertility rate (TFR)	4.88 <sup>1</sup>	4.07 <sup>2</sup>	Doctor	7.8	8.1
Mean children ever born (cur- rently married women)	3.6	3.2	Nurse	3.1	3.5
Mean children still living (cur- rently married women)	3.1	2.9	Midwife	2	3
Median length of birth interval, months	29	34	Health worker	4.5	3.9
Median age at first birth	<b>19.7</b> <sup>3</sup>	19 <sup>4</sup>	ТВА	13.2	12.1
			Relative/friend	55.1	63.4
Mortality			Others	6.1	1.8
Crude death rate (CDR)	6.3	5.4	No one	8.2	3.4
Neonatal mortality rate (NNMR)	36	26	Ever Heard of HIV/AIDS, Percent		
Postnatal mortality rate (PNMR)	46	30			
Infant mortality rate (IMR)	82	56	Females	69.3	70.4
Child mortality rate (CMR)	25	15	Males	77.5	84.9
Under five mortality rate (U5MR)	107	68			

 <sup>&</sup>lt;sup>1</sup> The TFR estimate in the LRHS 2000 is calculated for the period 1995-1999
<sup>2</sup> The TFR estimate in the LRHS 2005 is calculated for the period 2002-2005
<sup>3</sup> The median age at first birth in the LRHS 2000 is calculated based on all women
<sup>4</sup> The median age at first birth in the LRHS 2005 is calculated based on ever-married women

## **MAP OF LAO PDR**



The Lao Reproductive Health Survey 2005 (LRHS 2005) is the third reproductive health survey undertaken by National Statistics Centre (NSC) and is the result of a collaborative effort between the NSC and the Mother and Child Health Centre (MCHC) of the Ministry of Health (MOH). The United Nations Population Fund (UNFPA) funded the Survey and provided capacity building and technical support on data processing and analysis and assistance to prepare the report through the Demographic Institute of the University of Indonesia and external consultants.

The Survey was undertaken with the purpose of providing up-to-date information on demographic status and reproductive health knowledge and practices such as levels, preferences and determinants of fertility; contraceptive knowledge, prevalence and unmet need; antenatal care, place of delivery and type of assistance during birth; breast-feeding practices; and knowledge of sexually transmitted infections (STIs) and HIV/AIDS.

The report of the Survey presents a wealth of information on the current demographic and reproductive health situation in the Lao PDR. This information will form the basis for evidence based results oriented policy making and planning as well as further in-depth research on selected reproductive health issues. Many of the results of the Survey are encouraging. For most indicators including fertility, a positive trend is observed compared to the findings of the Reproductive Health Survey 2000. Particularly notable is the large increase in the contraceptive prevalence rate irrespective of women's background characteristics. This finding most likely reflects the efforts in improving national access and coverage of family planning. However, the report also highlights areas for improvement. For example, the number of women receiving skilled attendance during birth has only increased marginally during the past 5 years. Furthermore the report shows imbalances on several indicators according to region and residency; women living in rural areas and in the south and the north generally lags behind women living in urban areas and in the central region. This information should help policy makers strengthen or redirect efforts to improve provision and increase demand of reproductive health services.

We would like to extend our sincere appreciation to all organisations and individuals who have assisted in conducting the LRHS 2005 and thus contributed to making the survey a success.

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# LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARI	Acute Respiratory Infection
ASFR	Age Specific Fertility Rate
BCC	Behavior Change Communication
CBR	Crude Birth Rate
CDR	Crude Death Rate
CEB	Children Ever Born
CMR	Child Mortality Rate
CPI	Committee for Planning and Investment
CPR	Contraceptive Prevalence Rate
CSL	Children Still Living
DHS	Demographic and Health Survey
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
IEC	Information Education and Communication
IMR	Infant Mortality Rate
IUD	Intrauterine Device
LRHS	Lao Reproductive Health Survey
NNMR	Neonatal Mortality Rate
NA	Not Applicable
No	Number
NPDP	National Population and Development Policy
NR	Non Numeric Responses
NSC	National Statistics Centre
NSEDP	National Socio-Economic Development Plan
ORT	Oral Rehydration therapy
PDR	People's Democratic Republic
PNMR	Postnatal Mortality Rate
RH	Reproductive Health
RTI	Reproductive Tract Infection
SPPS	Systematic Probability Proportional to Size
STI	Sexual Transmitted Infection
TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
U5MR	Under Five Mortality Rate
UNFPA	The United Nation Population Fund
WHO	World Health Organisation

**Background:** This report presents the results of the Lao Reproductive Health Survey (LRHS) 2005. The Survey was designed to provide information for policy makers and planners on levels and trends of fertility, knowledge and use of contraception, maternal, infant and child mortality, maternal and child health, breastfeeding and knowledge of HIV/AIDS and sexually transmitted infections (STIs).

The National Statistics Centre (NSC) with the support of UNFPA conducted the LRHS 2005 covering 16 provinces, the Capital and one Special Zone. The LRHS is a nationally representative sample of 21,600 households where 21,368 households were interviewed. Of the sample population, 13,107 eligible women aged 15-49 and 3,327 eligible men aged 15-59 years old were interviewed. After data cleaning and editing, 13,074 out of 13,107 sets of questionnaires from women respondents were processed from which indicators on fertility and reproduction were derived.

**Household and respondents characteristics:** The total population of the household sample is 120,324 people, consisting of 59,584 men and 60,740 women. The sex ratio is as expected with 98 men per 100 women. The age composition of the household population indicates that Lao PDR has a young population with 41.7 per cent under the age of 15 years old. This is a reflection of high fertility in the past. The economically active population (15 - 64 years old) has grown slightly from 52.9 per cent in 2000 to 54.5 per cent in 2005 contributing to a drop in the dependency ratio from 89 dependents (under 15 years and over 65 years old) per 100 working age population (15-64 years old) in 2000 to 83.6 dependents per 100 working population in 2005.

The current average household size is high at 5.6 persons, but compared to the LRHS 2000, the average size has declined by 0.4. Urban households have the smallest size with an average of 5.2 members compared to household sizes in rural areas with road (5.7) and rural areas without road (5.9). There is a tendency towards a growing number of female headed households. In the 2000 Survey, 6.8 per cent of households were headed by a female compared to 7.3 per cent in 2005. This may be attributed to increased urbanisation and mobility of women.

About 74.3 per cent of women respondents aged 15-49 years old are currently married, 21.8 per cent are never-married and 3.9 per cent are divorced/ widowed.

The Survey data shows that women who attended school have overall lower education levels than men who attended school. The percentage of women who have only finished primary school is higher than that of men, however, fewer women than men have completed lower and upper secondary school as well as higher education. The patterns of gender gap in schooling are evident irrespective of region and residency.

Almost half of the households have no toilet facilities and in rural areas without road

as many as seven in ten households have no toilet. Over 40 per cent of all households have no electricity. This figure disguises great differences according to residency with 4 per cent of urban household having no electricity compared 66.7 per cent of households in rural areas without road.

**Fertility:** Using birth histories, the LRHS 2005 includes time series estimation of the total fertility rate (TFR) per woman for 5-10 years before the Survey, 0-4 years before the Survey and 1-36 months before the Survey. The LRHS 2005 recorded during the period 1-36 months before the Survey, a TFR of 4.07 children per woman aged 15-49 years old. The TFR has declined by 0.81 children per woman compared to data in the time period 1995-1999 presented in the LRHS 2000 (4.88). Women living in rural areas without road, in the Southern region and with no completed education had the highest TFR and women living in urban areas, in Central region and with completed lower and upper secondary education had the lowest TFR. The difference in TFR by educational levels is particularly remarkable. Women with no completed education had over two and half times higher TFR per woman than women with upper secondary education (5.43 vs. 2.02).

Examination of the age specific fertility rates (ASFRs) 1-36 months before the survey shows that the peak of child bearing among Lao women is between 20-29 years and after age 30, fertility drops significantly. This decline may be a reflection of fertility regulation but it could also partially be due to a decline in fecundity especially for older age groups.

Children ever born (CEB) is another fertility indicator showing the number of births women have at the time of the Survey, but unlike the TFR it is a measure of cumulative fertility. Thus, older women will generally report more children than younger women. The LRHS 2005 found that the mean CEB to currently married women aged 15-49 years is 3.2 children. This represents a decline compared to the LRHS 2000 which recorded an average CEB of 3.6. The differentials of CEB by women's background characteristics in 2005 are quite consistent with differentials of TFR, i.e. women in urban areas, women in the Central and Northern regions and those with at least upper secondary education have lower CEB than other women with less education, living in rural areas and in the Southern region. The completed parity of married women at the end of the childbearing period (women aged 45-49 years old) was on average 4.8 children.

The median length of birth interval (the number of months preceding the current birth) is 34 months. As anticipated, the median birth interval increases with age and education level of the mother. The median birth interval for women with no completed education is 32 months compared to 42 months for women with upper secondary education. This implies that higher educated mothers space their births more widely than uneducated/less educated mothers. Compared to the LRHS 2000, the median birth interval has increased by 5 months from 29 months in 2000 to 34 months in 2005.

Age at first birth is an important indicator of fertility and is often closely related to age at first marriage. About 10.1 per cent of ever-married women aged 15-49 years old had

given birth before reaching the age of 15 years and 37.3 per cent had given birth before the age of 18 years. By exact age 25 years, eight in ten women have had their first birth. The median age at first birth is 19 years for ever-married women aged 15-49 years old and 20 years for women aged 25-49 years old. Only small variations were found by examining background characteristics of women.

Overall, 16.8 per cent of all women aged 15-19 years have begun childbearing. Of this 16.8 per cent, 13 per cent were already mothers and 3.8 per cent were pregnant with their first child. Teenagers from rural areas, from the Northern region and those with primary school or no completed education have higher incidence of teenage fertility compared to other groups. Education appears to have a particularly strong delaying effect on early child bearing: teenagers with no education were over 2 times more likely to have started childbearing than teenagers with lower secondary education (27.9 per cent vs. 12.9 per cent) and over 11 times more likely to have started childbearing than teenagers with upper secondary education (27.9 per cent vs. 2.4 per cent).

Family planning: The LRHS 2005 found that 89.4 per cent of all women respondents and 90.7 per cent of currently married women knew (ever heard of) of at least one method of contraception. Knowledge of modern methods is higher compared to traditional methods. About 89.7 per cent of married women knew about at least one modern contraceptive method compared to 69.6 per cent who knew about at least one traditional method. Married women have a higher contraceptive knowledge of modern and traditional methods compared to never-married and divorced/widowed women. This can be due to greater exposure to family planning messages and greater needs for married women to regulate their reproduction. Similarly, the knowledge level is higher in urban areas than in rural areas, higher for women with education than no completed education and higher for women living in the Central region compared to women living in other regions in the country. Pills (81.2 per cent), condoms (79.3 per cent), injections (78.4 per cent), IUD (69.9 per cent) and female sterilisation (69.1 per cent) are the most widely known methods among married women. About eight in ten women knew about condoms which form a good basis for STI and HIV prevention programmes. Compared to 5 years ago, knowledge of all types of methods among married women has increased.

While the knowledge of contraception is high, the percentages of all women who have ever used any method of contraception are much lower at 39.6 per cent for any method and 36.3 per cent for modern methods respectively. Among married women, slightly less than half have ever used a modern method and as expected, never-married women have a low ever use of modern contraception at 1.8 per cent. The most popular method for married women is the pill (29 per cent) followed by injection (19.5 per cent). Less than 4 per cent of all women have ever used condoms. Compared to data from 2000, the overall trend in ever use is encouraging. The proportion of all women who have ever used modern contraception increased by 8 percentage points and the proportion of married women who have ever used contraception increased by 10 percentage points.

The contraceptive prevalence rate (percentage of women currently using a contraceptive method) for currently married is 35 per cent for modern methods and 3.4 per cent for traditional methods. The percentage of usage increases with the increasing age of women up to age group 40-44 years old. Almost half of the currently married women were using contraception after their peak ages of childbearing into their 30s. Urban women, those who live in the Northern region and those with at least lower second-ary education have higher contraceptive prevalence for modern methods compared to other groups. Overall, pills and injections are the most popular methods, used by 15.9 per cent and 10.6 per cent of currently married women respectively. Other contraceptive methods had less than 5 per cent prevalence which could indicate that other methods are not readily available. Female sterilisation is rare and use is clustered among urban women, women with lower secondary education, women with 3-4 children and women living in the Northern region. Male sterilisation is almost non-existent.

Comparison with the 2000 survey found that the prevalence of modern contraceptive usage by currently married women has increased by 21 per cent during the last 5 years. This increase is observed for all age groups, residences, regions and education categories of women.

Age at first use of contraception among ever-married women is declining. Women currently aged 40-44 years old reported much higher ages for first use of contraception compared to women aged 25-34 years old. The very different patterns in initiation and use of contraception by current age groups suggest that older women used contraception primarily to limit the number of their children and thus did not begin to use it until they were over age 30 years. The much earlier use of contraception among younger women implies that many of them are using it to delay the first birth or to space subsequent births.

The most cited reason of married women for not using contraception is that they wanted more children (13.7 percent). This is followed by health concerns cited by 11.8 per cent and husband disapproval cited by 9.7 per cent. Women with no or primary education were slightly more likely to report husband disapproval as a reason for not using contraception compared to women with upper secondary education.

Overall the results show significant progress in modern contraceptive usage which indicates a noteworthy change in childbearing behaviour among Lao women. Family planning is becoming more popular and practiced by more women which is consistent with the observed decline in fertility.

**Other proximate determinants of fertility:** Age at first marriage is an important determinant of fertility as most births occur within marriage. By exact age 18 years, 44.5 per cent of women currently aged 25-49 years old were married and by the exact age 25 years, 86.6 per cent of the women were married. The median age at first marriage for ever-married women aged 25-49 years old is 19 years. There is a positive association between women's education levels and median age at first marriage. Median age at first marriage increases gradually from 18 years for women with no completed or primary education to 22 years for women with upper secondary education. The median age for women living in urban areas is 2 years higher compared to women living in rural areas (20 vs. 18 years).

The patterns of age at first sexual intercourse resembles that of age at first marriage suggesting that sexual intercourse mostly takes place within marriage. This is confirmed by the low levels of never-married who had had intercourse (1.4 per cent).

**Fertility preferences:** About half (50.5 per cent) of currently married women said they did not want another child, about one in five (18.8 per cent) stated they wanted to have another child within 2 years and 6.2 per cent wanted to delay first birth for 2 or more years. About 8.4 per cent was unsure about timing and 6.7 per cent was undecided. Almost half (43 per cent) of married women with two children stated that they wanted to stop childrearing. This means that they were satisfied with two children.

Examination of the percentage of married women who wanted to stop childbearing found relatively little variations by examining women's background characteristics. This may suggest that new attitudes toward limitation of childbearing before the reproductive period ends are already widespread. A large proportion of women (often more than half) irrespective of region, residence and education want to limit childbearing after they have had two children.

The total unmet need for family planning among currently married women is 27.3 percent: 11 per cent has an unmet need for spacing and 16.3 per cent has an unmet need for limiting. A high percentage of unmet need is observed among women with no completed education whether it is for spacing or for limitation. Women living in rural areas without a road and women living in the Southern region also report high levels of unmet need. Women aged 40-44 and 45-49 years old report a very high unmet need for limiting at 30.6 per cent and 44 per cent respectively.

About 36.6 per cent of currently married women reported that they have a met need for contraceptives. The total demand for family planning (unmet need and met need) indicates a high potential need for contraceptive services (63.9 per cent): 46.7 per cent for limiting and 17.1 per cent for spacing. Building on the success of the family planning programme by strengthening services is necessary to address the unmet needs of various groups.

Generally, Lao people prefer a relatively large family size. The mean ideal number of children recorded from the LRHS 2005 is 3.7 for currently married women and 3.5 for all women. Compared to 2000, this represents a decrease by 0.4 children for all women. Ideal family size decreases with increasing levels of women's education. Urban women have lower ideal family size than women living in rural areas.

**Mortality and life expectancy:** The mortality indicators [crude death rate (CDR), infant and child mortality rates (IMR, CMR) and under five mortality rate (U5MR)] in the 2005 LRHS are most likely underestimated. For more robust mortality figures, it is recommended to use data presented in the Lao Population and Housing Census which took place in 2005 (National Statistics Centre/Committee for Planning and Investment, 2005).

In the LRHS 2005, the CDR for one year preceding the survey is estimated to be 5.4 per 1000 population. Direct estimates shows that the neonatal mortality rate, (prob-

ability of dying in the first month of life) is 26 per 1000 births and the postnatal mortality rate (probability of dying between 2nd and 11th month of life) is 30 per 1000 births<sup>5</sup>. This means that almost half (46 per cent) of infant deaths are in the neonatal period. Infant deaths during the first month of life are often associated with complications during child birth and the finding could indicate that skilled delivery, emergency obstetric care and post natal care are limited.

Because of the underestimation of mortality estimates using the direct methods, indirect estimation was applied using the Mortpak-Lite software to get more realistic figures of mortality. The survey shows an indirect estimate of IMR of 63 infant deaths per 1000 live births and a CMR of 25 per 1000 children between age 1-4 years old. The U5MR was estimated to be 88 per 1000 live births. The differentials of infant and child mortality by background characteristics of women is consistent with expectations, that is, women who live in urban areas and in the Central region, and those who have higher education reported lower levels of IMR. IMR recorded by mother's background characteristics show that the IMR is over twice as high in rural areas with road compared to urban areas (63 vs. 27). For women living in rural areas without road, IMR is almost 3 times higher than that recorded for women living in urban areas (78 vs. 27).

Based on the result of the indirect method estimate of IMR, life expectancy of Lao people is 62.7 years which represents an increase from 59 years recorded in the LRHS 2000.

**Maternal and child health:** Survey data shows that about three in ten births (28.5 per cent) during the last 5 years are to women who received antenatal care (ANC) suggesting that access to and use of antenatal care is low. About 15.7 per cent obtained ANC from a doctor, 8.7 per cent from a nurse, 4.3 per cent from a midwife and 1.6 per cent from a health worker. Traditional birth attendants and "Others" provided ANC for 0.8 per cent of births. ANC is more available in urban areas than in the rural areas, indicated by higher percentage of women who live in urban areas obtaining ANC (84.3 per cent) compared to 29.2 per cent of women who in rural areas with road and 9.3 per cent in rural areas without road. ANC also increases sharply with women's education.

Although, the overall coverage of antenatal care is low, there is a tendency for younger women to have ANC. About 32 per cent women aged 20-34 years obtained ANC compared to only 18.6 per cent of births of women aged 35 years or older. About 43.5 per cent and 32.9 per cent of women with 1st and 2nd/3rd birth orders obtained ANC compared to 20.1 per cent or less of women with higher birth orders. Among births from mothers who went for ANC, most mothers went for the first time during 3rd/5th months of the pregnancy.

<sup>&</sup>lt;sup>5</sup> Post natal mortality rate is in this report calculated as infant mortality rate - neonatal mortality rate.

Among children born in the last 5 years, 84.8 per cent were born at home. Of the 12.8 per cent of births which took place at a health facility, 1.8 per cent was delivered at the Central Hospital, 5.1 per cent at provincial hospitals, 4.8 per cent at district hospitals, 0.8 per cent at health centres and 0.3 percent at private clinics. Women living in urban areas were much more likely to deliver at a health facility compared to women living in rural areas (51.2) were about 5 times more likely to deliver at a health facility compared to women living in rural areas with road (9.8 per cent) and 5 times more likely to deliver in a health facility compared to women living in rural areas with road (2.1 per cent). Women with at least lower secondary education were by and large more likely to deliver in a health facility compared to women with less or no education. Little variation can be seen according to the age of women, however, women aged 34 years or less tended to deliver their births more frequently at a health facility compared to women older than 35 years. The low percentage of women who deliver their births at a health facility is of concern since skilled delivery and emergency obstetric care are the only interventions which can substantially lower maternal morbidity and mortality.

About 75.7 per cent of women not giving births in hospitals stated as a reason that it was "Not necessary". This reason was cited by a large majority of respondents irrespective of background characteristics such as residence and level of education. Other reasons less frequently cited included "Distance" (33.7 per cent) and "Cost" (5.5 per cent).

In the last 5 years, most births were delivered with assistance of relatives (63.4 per cent) and traditional birth attendants (12.1 per cent). Health professionals assisted in 18.5 per cent of births: 8.1 per cent were assisted by a doctor, 3.5 per cent by a nurse, 3 per cent by a midwife and 3.9 per cent by a health worker. In urban areas, health professionals delivered 63.2 per cent of births compared to 15.3 per cent in rural areas with road and 5.3 per cent in rural areas without road. Similarly, women with lower secondary and particularly those with upper secondary education were much more likely to deliver their birth assisted by a health professional compared to age of women and birth order of the child, however, women with birth order 1 tended to be more likely to deliver their birth assisted by health professionals compared to women with higher birth order.

**Breastfeeding:** About 49.2 per cent of mothers reported that they were currently breastfeeding at the time of the Survey. Of those currently breast feeding, urban women are less likely to breastfed their babies, compared to women who live in rural areas. Similarly, those who finished lower and upper secondary school (34.9 per cent and 38.3 per cent) are less likely to breastfed their babies compared to women with no education (59 per cent) and women who finished primary school (46.6 per cent). Women living in the Central region (43.3 per cent) are less likely to breastfed their babies compared to women in the Northern and Southern regions (50.2 per cent and 56 per cent respectively). This leads to suggest that modernisation tends to reduce the motivation of women to breastfeed their babies. Survey data indicates that only a small percentage of children are exclusively breastfed. About 90.1 per cent of infants less than 6 months received food supplementation in addition to being breastfed. About 87.2 per cent

of respondents reported that their infant received food supplementation at the age of 0-1 months old. Water was most commonly given as supplementation followed by other liquid, mushy food and tinned/fresh milk. For children aged 0-1 month old, plain water was provided by seven out of ten women and mushy food by two out of ten women.

## **Knowledge concerning sexually transmitted infections (STIs) and HIV/AIDS:** In all, 55.8 per cent of women had ever heard of STIs: 30.8 per cent received informa-

tion from a health worker, 26.2 per cent from radio, 22 per cent from TV, 18.2 per cent from friends/relatives, 12 per cent from the community and 20.8 per cent from other sources. Men were more likely to have heard of an STI compared to women (70 vs. 55.8 per cent). The pattern of source of information for men is similar to that of women: about 38.9 per cent heard of STIs from radio, 36.1 from a health worker, 26.4 per cent from TV, and 23.4 per cent from friends/relatives and 14.2 per cent from the community. About 30.6 of per cent of male respondents cited other sources. The proportions of women and men who had ever heard of STIs from urban areas, the Central region and with at least lower secondary education were higher compared to those from rural areas, Northern/Southern regions and with primary or no completed education. The most frequently cited STI is gonorrhoea named by 43.9 per cent of women and 60 per cent of men followed by warts, "others" and syphilis.

About seven in ten women and over eight in ten men have ever heard about HIV/ AIDS. Health workers are the most commonly cited source of women (39.1 per cent), followed by radio (33.4 per cent), TV (28.6 per cent), friends/relatives (24.8 per cent), posters (13.3 per cent), community 12.3 per cent and school teachers 6.7 per cent. The pattern of source of information is slightly different for men who cite radio as the most common source (49.1 per cent), followed by health workers (44.7 per cent), TV (33.4 per cent), friends and relatives (26.7 per cent), posters (18.2 per cent), community (12.8 per cent), and school teachers (4.6 per cent). Both for men and women the knowledge of HIV/AIDS tends to cluster around urban areas, the Central region and among those who have higher education. As expected school teachers are cited more frequently by women and men aged 15-19 years old compared to other age groups. Compared to the 2000 Survey, knowledge of HIV and AIDS has increased by 1.1 percentage points for women and 7.4 percentage points for men.

Men have much higher levels of knowledge than women on how HIV transmits. About 63.4 per cent of women cited sexual intercourse, 42.2 per cent cited sharing a syringe, 29.3 per cent cited blood transfusions and 18.6 per cent cited mother to child transmission. In comparison, 81 per cent of men cited sexual intercourse, 55.5 per cent cited sharing a syringe, 39.4 per cent cited blood transfusions and 22.6 per cent cited mother to child transmission.



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# Chapter 1

## INTRODUCTION

## Background Information about Lao People's Democratic Republic

# Geodemography and reproductive health status

Lao People's Democratic Republic (Lao PDR) is a landlocked country with 49 ethnic groups located in the heart of the Indochinese peninsula in South-East Asia. It shares borders with China, Cambodia, Vietnam, Thailand and Myanmar. Lao PDR has a land area of 236,800 square kilometres, three quarters of which is covered by mountains and plateaus. It has a tropical climate with a monsoon season from May to October.

The population of Lao PDR reached 5,621,000 (five million six hundred and twenty-one thousand) and had a natural growth rate of 2.5 per cent according to the 2005 Population and Housing Census. The Census recorded a very young population structure with about half of the total population under the age of 20 years old. The average household size was 5.9 persons and about 1 in 10 households was headed by a woman. Three out of four people lived in rural areas and engaged in subsistence farming. There had been a substantial migration from rural to urban areas in all provinces and the number of people employed in the government and the private sector increased slightly. Compared to the Census in 1995, the total fertility rate declined from 5.6 children per woman in 1995 to 4.5 children per woman in 2005 and in the same period, life expectancy increased from 52 years to 63 years for women and from 50 years to 59 years for men. (National Statistics Centre/Committee for Planning and Investment, 2005).

Despite significant progress, the reproductive health status of women and girls, particularly members of ethnic groups and those living in rural and remote areas remains poor. Lao PDR has among the highest maternal mortality ratios and infant mortality rates in the region. In rural areas, women and adolescent girls have shorter intervals between births, marry younger, bear children younger and have a higher fertility rate compared to those living in urban areas. While the HIV prevalence rate remains low, the more serious epidemics in several neighbouring countries and the increasing population mobility both within and across Lao borders, make the country vulnerable. (http://Lao.UNFPA. org/bckgrnd.htm).

While the economy has gradually improved, Lao PDR is still among the poorest countries in Southeast Asia. The Fifth National Socio-Economic Development Plan (NSEDP) for the period of 2001-2005, was developed to accelerate economic growth and improve access to social services with a long term objective to remove Lao PDR from the status of a least developed country. As a follow up to the Fifth Plan, the Government adopted the Sixth NSEDP (2006-2010) in 2006. The Sixth Plan assesses the progress made in the previous period and outlines clear targets and strategies to reach mid-term and long-term goals. The 2010 targets for education are to increase the enrolment rate to 90.6 per cent in primary school, to increase the attendance rate to 68.4 per cent in lower secondary school and to 40 per cent in upper secondary school. In terms of health improvement, the NSEDP targets for 2010 are to increase life expectancy at birth to 63.5 years, reduce the maternal mortality ratio to 300 deaths per 100,000 live births and reduce the infant mortality and under-five mortality rates to below 55 deaths and 75 deaths per 1,000 live births respectively (Committee for Planning and Investment, October 2006).

## Population and Reproductive Health Policies

# National Population and Development Policy

The 1994 International Conference on Population and Development (ICPD) in Cairo inspired the Government to seek ways to include population in its development policies. In June 1999 the Government adopted the National Population and Development Policy (NPDP) which was revised in 2006. The 2006 review identified progress and constraints in reaching targets and the need to include new emerging issues in the revised version. Furthermore, the 1999 policy was designed to meet ten-year targets while NSEDPs are broken into 5-year stages of development programmes. Consequently, new population and health targets were set for 2010 and 2015 in the revised NPDP and these targets were incorporated into the Sixth NSEDP. The NPDP encourages couples to decide the number and spacing of their children according to their circumstances; promotes equality in family responsibilities and decision making; seeks to ensure that women's health in particular is improved and directs government organisations and concerned ministries to provide adolescents with reproductive health information in schools and in their communities. The policy specifically calls for effective measures to reduce the number of unwanted pregnancies and pregnancies among girls under 18 years of age and to educate young people about preventing the transmission of sexually transmitted infections (STIs), including HIV (Committee for Planning and Investment, 2006).

#### **National Reproductive Health Policy**

A National Reproductive Health (RH) Policy was adopted in 2005. The main objectives and priorities are to provide a framework for interventions by all stakeholders and to serve as a basis for planning and allocation of resources.

The RH policy consists of nine elements, as described below:

- 1. Family planning, with the objective to improve the availability and sustainability of, and access to, quality family planning services to all couples and individuals of reproductive age.
- 2. Maternal and child health and nutrition interventions to reduce maternal, neonatal and infant morbidity and mortality.
- 3. Prevention and control of reproductive tract infection (RTI), STIs and HIV, among people of reproductive age and among high-risk groups.
- Prevention and management of induced abortion, with the objective to reduce prevalence of both short-term and permanent complications of unsafe abortion.
- 5. Promotion of youth friendly reproductive health with the objective to make accessible culturally appropriate, age-specific, and user-friendly services and to provide information, education and counselling to assist youth in developing life skills to deal with sexuality and reproductive health issues in a satisfactory and responsible manner.
- 6. Male involvement and participation in reproductive health with the objective to encourage men to take greater responsibility for their own sexual behaviour as well as to respect and support women's reproductive rights and health.
- 7. Elimination of all forms of discrimination against women and children.
- 8. Reduction of breast and reproductive tract cancers.
- 9. Reduction of the prevalence and psychosocial burden of infertility.

The objectives are to be achieved through strategies focusing on strengthening and improving the coverage and delivery of reproductive health services through the provision of a minimum package at different levels of health care facilities; integrat-

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ing reproductive health in the primary health care network; strengthening partnerships between the health sector and line ministries, mass organisations, health partners and the private sector; developing the skills of health care professionals and improving quality of care; strengthening the health management information system and monitoring reproductive health indicators to track progress (Ministry of Health, 2005).

# Lao Reproductive Health Survey 2005

## Purpose and objectives of the Survey

Lao PDR completed its first reproductive health survey in 1994 and conducted a more complex second survey in 2000 (LRHS 2000). The Lao Reproductive Health Survey 2005 (LRHS 2005) is a continuation of the second survey with similar objectives, coverage, sample design and instruments of data collection. Thus, a comparison of findings from the two surveys is possible and this will provide indications regarding performance, progress and challenges in the implementation of reproductive health programmes and related issues, including gender equity, during the years 2000-2005.

The objective of the LRHS 2005 is to provide policy makers with data for results orientated and evidence based planning and monitoring in the areas of population and reproductive health. The main purposes are:

- To strengthen the database for population and development planning and to provide information on levels and trends of fertility and mortality, knowledge and use of contraception, maternal and child health, breastfeeding practices and knowledge of STIs and HIV/AIDS.
- To provide data to evaluate reproductive health changes.

## Coverage and sample design

The LRHS 2005 is a nationally representative sample survey, with 21,600 households chosen as respondents, from which eligible women aged 15 to 49 years and men aged 15 to 59 years, regardless of their marital status, were selected for detailed interviews.

A two-stage stratified cluster sample covering 16 provinces, the Capital and one Special Zone was applied in the Survey<sup>6</sup>. The 2005 Census house-hold list was used as the sampling frame.

- 1. The first stage of sample selection was to select 40 sample villages, using a systematic probability proportional to size (SPPS) method, in each of the provinces (except in Vientiane Province the number of selected clusters was increased to 57 and in the Province Xaysomboon Special Zone it was reduced to only 23 clusters). This was done within each province by making a list of administrative districts in geographic order to ensure that systematic sample selection would yield an adequate spread of the sampled villages. Thus for the entire country 720 villages were selected as clusters. There was a change in the status of two districts, Hom and Longxan which came under Vientiane Province at the time of the 2005 Survey.
- 2. The second stage was to select households in the villages selected in the first stage. Within each selected village, a fixed number of 30 households were selected using systematic random sampling. Thus, each province had about 1,200 households for the 2005 survey.

Each cluster was defined to be urban, rural with road or rural without road. To be classified as an urban village, three of the following five conditions must be satisfied:

• The village must lie in the municipal vicinity where the district or provincial authority

<sup>&</sup>lt;sup>6</sup> The administrative structure of Lao PDR has three levels: the provincial level, the district level and the village level. In 2005 when the field work of the Reproductive Health Survey was undertaken, Lao PDR was divided into 16 Provinces, one municipality (Vientiane, which serves as the Capital of Lao PDR) and a Special Zone. In 2006, the Special Zone was dissolved and its territory was incorporated into Xienkuang and Vientiane Provinces. Currently there are therefore 16 Provinces and one Capital (Vientiane). There are 141 districts and 10 552 villages (Decree of the Prime Minister/ No 10/pm/31/1/2006).

INTRODUCTION

is located; there are more than 600 residents or more than 100 households.

- There is a road for motor vehicles to get access to the village.
- The majority of the households in the village are electrified.
- There is a tap water supply in service to the majority of households.
- There is a market in the village.

A village is considered to be rural with road if it has a road which is accessible year-round by a car and a village is considered to be rural without road if it has no road or the road is only accessible by car during parts of the year.

Within the 21,600 households selected for the Survey, 13,135 eligible women aged 15-49 years and 3,363 eligible men aged 15-59 years, regardless of their marital status, were selected for further interview. The inclusion of unmarried women and men in this survey enabled analysts to examine the existing knowledge held and attitude of young women and men about STIs, and HIV/AIDS, and their related risk behaviour. The inclusion of married men in the survey enabled analysts to obtain information on the participation of husbands in decision making about fertility and family planning.

Table 1.1 shows the number of households and the number of women and men sampled and interviewed. Response rates for households, women and men are relatively high and close to 100 per cent.

## **Questionnaires and target respondents**

The survey questionnaires used in the LRHS 2005 are almost identical to those used in the LRHS 2000. The earlier survey questionnaires were adapted from the 1994 Lao Fertility and Spacing Survey and the 1997 Mongolia Reproductive Health Survey. In many ways, the questionnaires resemble the International Standard of the Demographic and Health Surveys (DHS). The questionnaires have been adjusted for the local situation. The LRHS 2005 survey questionnaires consisted of three different parts: Household Questionnaire, Women's Questionnaire and Men's Questionnaire.

Table 1.1 Results of household and individual interviews								
Number of households, number of interviews, and response rates, LRHS 2005								
	Results							
Household interviews Households sampled Households interviewed <b>Household response rate</b>	21,600 21,368 <b>98.9%</b>							
Interviews of women Number of eligible women Number of eligible women interviewed <b>Eligible women response rate</b>	13,135 13,107 <b>99.8%</b>							
Interviews of men Number of eligible men Number of eligible men interviewed <b>Eligible men response rate</b>	3,363 3,327 <b>98.9%</b>							

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The Household Questionnaire was used to list all residing members in the selected households. Basic information collected for each person listed includes the following: age, sex, relationship to the head of the household, marital status, education and economic activity. The main purpose of the Household Questionnaire is to identify women and men who are eligible for the individual interview. In addition, the Household Questionnaire contains questions about the characteristics of housing, such as electricity, wall, roof and floor materials, water supply, toilet and energy used for cooking. It also contains questions on whether during the 12 months before the survey there occurred any births, deaths, deaths of pregnant women, deaths of women during childbirth or deaths of women within 42 days after giving birth in the household.

The Women's Questionnaire was used to ask eligible women aged 15-49 years, regardless of their marital status, for information on:

- Reproduction: whether they ever had a live birth, where their children were living, experience of miscarriage or stillbirth, birth history, dates of births of children and age of death of children
- Fertility preference
- Knowledge and use of family planning
- Antenatal, delivery and post-natal care
- Breastfeeding and infant feeding practices
- Childhood illness and treatment
- Knowledge on STIs and HIV/AIDS

The Men's Questionnaire was administered to men aged 15-59 years, regardless of their marital status, and obtained information on:

- Respondents' background: age, sex, media exposure, economic activity
- Fertility: number of children, birth of last child, sexual intercourse
- Knowledge on contraceptives and their use
- Fertility preference and communication with spouse
- Knowledge on STIs and HIV/AIDS

## **Organisation of the Survey**

The National Statistical Centre (NSC) of the Lao PDR was responsible for conducting the Survey with the support of UNFPA. The preparatory activities were initiated in early 2004 and included the development of the sampling design, drafting, pre-testing and printing of the questionnaires and the preparation of the manuals for supervisors and enumerators. NSC and local government staff served as supervisors and enumerators and their work determined the quality of data collected. Therefore, training was a highly important activity before the fieldwork started. Training was conducted in Vientiane Capital for 36 supervisors in 2005. The duration of the training was 10 days and focused on providing information on responsibilities including preparation, organisation and supervision of the field work; maintenance of field work control sheets; monitoring of enumerator performance and editing of the questionnaires. Two hundred and twenty nine enumerators were trained at the Provincial level in September 2005 for 1 week. The training concentrated on explaining survey objectives, sample of the survey, questionnaires, the role of enumerators, preparatory activities and introduction of the questionnaires to respondents, conducting the interview, recording the responses and checking of completed questionnaires. The training was organised as classroom teaching and included role plays and field exercises. The fieldwork took place in October 2005. An optical scanner was used to speed up data entry, which was then stored as a database using the MySQL format. Tabulation of data was mainly done using the SPSS package programme and technical assistance was provided to the analysis and for the write up of the report.

#### **Limitations of the LRHS 2005**

The LRHS 2005 provides information on the current demographic and reproductive health conditions of the Lao population. Although some questions are asked about a respondent's histories, such as birth histories, children ever born, etc., the natural characteristic of the Survey is a fact finding activity and thus the outcome will provide an illustration or snapshot, reflecting the situation at the exact time of the Survey. It is a Survey with a questionnaire administered by an enumerator. Thus, it is not designed for the purpose of directly monitoring programmes that are conducted by the government or other institutions. The results of the Survey cannot be directly linked with programme implementation at the grassroots level.

However, findings of this Survey can be a very powerful tool to evaluate past programme implementation, such as for the reproductive health programme or iron pill supplementation for pregnant women. In this case, evaluation of the performance of past programme implementation can be done by comparing similar data found in the previous Survey, that is, with results of the LRHS 2000. For example: it can be suggested that the performance of the Ministry of Health in family planning programme implementation during the past 5 years improved because the proportion of married women who were using any family planning method increased from 32.2 per cent in 2000 to 38.6 per cent in 2005.

Programme evaluation may also be conducted from the results of one survey. An example is the comparison of pregnant women's behaviour among cohorts of younger and older women. The LRHS 2005 found that women aged less than 24 years tend to have antenatal care more regularly than women aged 35 years or older. This finding indicates that there is a change in behaviour among cohorts of women, in this case an increase in awareness among young mothers about the importance of antenatal care in making pregnancy safer.

Thus, findings of this Survey are highly important in providing indicators reflecting trends in reproductive health status, reproductive health behaviour and its outcomes, such as fertility and mortality changes over the past years.



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# **Chapter 2**

## CHARACTERISTICS OF HOUSEHOLD POPULATION AND HOUSING

This chapter presents information on selected demographic and social characteristics of the population in the sample households. It also presents information on household members, where they usually live, housing conditions, materials used for the construction of the dwelling, availability of electricity, source of drinking water, energy for cooking, and sanitation. Information on these characteristics illustrates the socio-economic background of the respondents, which is often perceived as influencing their attitudes and behaviour, especially in the interpretation of survey findings concerning reproductive health matters as well as further other issues.

For the purpose of the LRHS 2005, a household is defined as a person or a group of persons, related or unrelated, who live together in the same dwelling unit and share a common source of food and other life necessities<sup>7</sup>.

## Household Population by Age, Sex and Residence

Age and sex are important demographic variables and are the primary demographic classification in censuses, surveys and vital statistics. They are also important variables in the study of mortality, fertility and nuptiality (ORC/Macro, 2000). Table 2.1 shows the population of the sample households, containing a total of 120,324 persons, of which 59,584 are men and 60,740 are women. Similar to many other countries, the overall sex ratio is 98, meaning that for every 100 women there are 98 men (table 2.2). Except in urban areas, sex ratios among children under 10 years of age are above 100, meaning that there are more boys than girls. As the sex ratio at birth is normally about 105 boys per 100 girls, these sex ratios are about as anticipated. The 2005 Population and Housing Census found similar ratios (National Statistics Centre/ Committee for Planning and Investment, 2005). The higher sex ratio for the 5-9 age group than the 0-4 age group could result if there was a tendency to report more 4-year old boys than girls as being 5 years old.

The population pyramid of the sample household (figure 2.1) has a wide base and a narrow top showing a typical pattern of countries with high fertility in the past. However, by examining the two bottom bars of the pyramid, it is evident that the age 0-4 bar is shorter than the age 5-9 bar for each sex. The decline in the number of 0-4 year olds compared to 5-9 year olds can most likely be attributed to a recent decline in fertility rather a change in mortality levels. This is because change in fertility has greater effect than mortality on

<sup>7</sup> The definition of a household used by the LRHS 2005 is the same as the definition used in the 2005 Population and Housing Census (National Statistics Centre/ Committee for Planning and Investment 2005)

these specific age groups. A decline in fertility is also consistent with findings in chapter four.

Further examination of the age structure of the household population in the LRHS 2005 implies that, although fertility is declining, the population of Lao PDR is still relatively young. This is shown by the fact that 41.7 per cent of the total

population is under 15 years of age. Rural areas without road (45.2 per cent) and rural areas with road (43.1 per cent) have a larger proportion of the population under 15 years of age than urban areas (33.4 per cent). The proportion of the population between 15-64 years old is 54.5 per cent and the proportion of the population aged 65 years and older is only 3.9 per cent (table 2.1).

TABLE 2.1 HOUSEHOLD POPULATION BY AGE, SEX AND RESIDENCE													
Percentage distribution of household population by five-year age group according to sex and residence, LRHS 2005													
Age	Urban			Rural with road			Rural without road			All			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
00-04	8.7	8.1	8.4	12.7	12.5	12.6	14.1	14.5	14.3	12.3	12.1	12.2	
05-09	11.5	10.6	11.0	15.7	14.9	15.3	16.7	15.6	16.2	15.1	14.2	14.7	
10-14	13.9	14.1	14.0	15.5	14.9	15.2	14.7	14.6	14.7	15.0	14.7	14.8	
15-19	12.6	12.1	12.3	10.4	10.1	10.2	9.1	9.2	9.2	10.5	10.2	10.4	
20-24	8.0	9.3	8.6	6.8	7.7	7.2	6.6	7.6	7.1	7.0	8.0	7.5	
25-29	7.1	8.4	7.8	6.6	7.2	6.9	7.2	7.2	7.2	6.9	7.5	7.2	
30-34	6.4	7.1	6.7	6.1	6.2	6.2	6.2	5.8	6.0	6.2	6.3	6.2	
35-39	7.1	7.1	7.1	5.8	6.1	5.9	5.7	5.6	5.7	6.0	6.2	6.1	
40-44	5.9	5.7	5.8	4.9	4.7	4.8	4.5	4.3	4.4	5.0	4.8	4.9	
45-49	5.8	4.7	5.3	4.6	3.7	4.2	4.3	3.6	3.9	4.8	3.9	4.3	
50-54	3.9	3.9	3.9	2.9	3.7	3.3	3.0	3.9	3.5	3.2	3.8	3.5	
55-59	2.8	2.7	2.8	2.3	2.5	2.4	2.1	2.3	2.2	2.3	2.5	2.4	
60-64	2.2	2.0	2.1	2.1	1.9	2.0	2.0	2.2	2.1	2.1	2.0	2.0	
65-69	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.5	
70-74	1.1	1.1	1.1	0.9	1.0	0.9	1.0	1.0	1.0	0.9	1.0	1.0	
75-79	0.8	0.7	0.8	0.6	0.7	0.6	0.7	0.6	0.6	0.7	0.7	0.7	
80+	0.7	0.9	0.8	0.7	0.8	0.7	0.6	0.5	0.6	0.6	0.8	0.7	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number	11,885	12,190	24,075	32,077	32,338	64,415	15,622	16,212	31,834	59,584	60,740	120,324	
Figure 2.1 Population pyramid of the LRHS 2005



			,				
TABLE 2.2 SEX RATIO							
Sex ratio of household population, by residence and age group, LRHS 2005							
Age group	Urban	Rural with road	Rural without road	Total			
4-9	107	102	97	101			
5-9	108	105	107	106			
0-9	99	104	101	102			
All ages	97	99	96	98			

The dependency ratio can be defined as the number of persons under age 15 and age 65 or older per 100 persons of working age (15-64 years old). Table 2.3 shows that in this household population, the dependency ratio is 83.6. The dependency ratio in the LRHS 2000 was 89, indicating that fertility decline has slightly changed the age structure of the Lao population. If the fertility rate continues to decline, it will yield an older population. From the LRHS 2005, it is seen that the dependency ratio is only 60.4 among the urban population, reflecting both lower fertility in urban areas and in-migration of adults. However the dependency ratio remains high in rural areas especially in rural areas without road.

TABLE 2.3 AGE DEPENDENCY RATIO								
Age dependency ratio according to age and residence, LRHS 2005 and LRHS 2000								
		LRHS 2005						
Dependency ratio	Urban	Rural with road	Rural without road	Total	Total			
Youth (0-14 years) Old (65+ years) <b>Total</b>	53.6 6.8 <b>60.4</b>	81.1 7.2 <b>88.3</b>	88.1 7.0 <b>95.1</b>	76.6 7.0 <b>83.6</b>	82.4 6.6 <b>89.0</b>			

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# **Household Composition**

As was stated earlier, in this Survey a household is defined as a person or a group of persons, related or unrelated, who live together in the same dwelling unit and share a common source of food and other life necessities. The head of household usually is someone who takes charge of household matters but is not necessarily the person generating the income of the family. Table 2.4 presents the 2005 household composition and compares it with that found in the LRHS 2000. In 2005, most Lao households (92.7 per cent) were headed by a male, which is common in most countries. The percentage of female-headed households increased from 6.8 per cent in 2000 to 7.3 per cent in 2005. This increase can mainly be attributed to an increase in urban areas which in 2005 had the highest percentage of female-headed households at almost 11 per cent. Some of the increase in female-headed households in urban areas probably results from in-migration of young, single women from other parts of the country for employment.

The average household size in 2005 was 5.6 persons. Households with one or two members are not common in Lao PDR, in either rural or urban areas. Most households have 4, 5 or 6 members. However, there is also high percentage of households with eight or nine members. Urban areas have the smallest household size, with an average of 5.2 members, while the household size in rural areas without a road was 5.9 members on average. Compared with the size of households in 2000, the recent survey indicates a slight decline in the number of household members, possibly owing to declining fertility in the past five years.

# Educational Attainment of Household Population

Despite government efforts to invest more to improve education levels of people, the LRHS 2005

#### **TABLE 2.4 HOUSEHOLD COMPOSITION**

Percentage distribution of households by sex of head of household and by household size and mean size of household according to residence, LRHS 2000 and LRHS 2005

	LRH	HS 2000 Resid	ence		LRHS 2	005 Residence			
Characteristics	Urban	Rural	Total	Urban	Rural with road	Rural without road	Total		
Sex of head of house	hold								
Male Female Total	91.4 8.6 100.0	93.6 6.4 100.0	93.2 6.8 100.0	89.4 10.6 100.0	93.2 6.8 100.0	94.2 5.8 100.0	92.7 7.3 100.0		
Number of usual members									
1 2 3 4 5 6 7 8 9+ Total	0.4 2.9 7.9 18.0 19.6 18.8 13.7 8.0 10.8 100.0	0.5 3.5 9.4 14.6 17.0 16.9 13.9 10.0 14.3 100.0	0.5 3.4 9.0 15.3 17.5 17.3 13.8 9.6 13.6 100.0	0.9 4.0 12.3 21.8 22.2 16.4 10.2 5.6 6.5 100.0	0.6 4.1 10.6 18.1 18.5 17.2 12.7 7.9 10.3 100.0	0.5 4.1 10.4 15.5 18.0 16.9 12.2 9.3 13.2 100.0	0.6 4.1 10.9 18.3 19.2 16.9 12.0 7.8 10.2 100.0		
Number of households	4.314	16.753	21.067	4.587	11.376	5.402	21.365		
Mean size	5.8	6.0	6.0	5.2	5.7	5.9	5.6		

still reported low educational attainment. Tables 2.5 and 2.6 show that the percentage of women who have only finished primary school is higher than that of men at 66.4 per cent and 59.6 per cent, respectively. Fewer women than men have completed higher levels of education. Among all males aged 6-64 years, 18.3 per cent have completed lower secondary school and 8.7 per cent have completed upper secondary school. For females, those proportions are 16.5 per cent and 7.4 per cent, respectively. The patterns of gender gap in schooling exist in all areas: urban, rural with a road and rural without a road and in the Northern, Central and Southern regions of the country. In urban areas, a higher proportion of females (24.0 per cent) than of males (21.3 per cent) has completed only lower secondary school but higher proportions of males have completed each of the higher levels of education.

The gender gap in schooling begins at an early age. The column "No grade" for children aged 6-9 years in tables 2.5 and 2.6 shows the percentage of children who are attending primary school (grades 1 and 2). A slightly higher proportion of boys than girls of that age are in school, 31.0 per cent and 28.8 per cent, respectively.

### TTABLE 2.5 EDUCATIONAL ATTAINMENT OF THE MALE HOUSEHOLD POPULATION

Percentage distribution of male household population aged 6-64 years by highest level of education attended or completed, according to background characteristics\*, LRHS 2005

				M	ALE POPUL	TION					
Background characteristics	No grade	Primary	Lower secondary	Upper secondary	First level	Middle level	High/ university	Higher university	Other	Total	Number
Age											
6-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54	31.0 3.2 0.4 0.2 0.4 0.4 0.4 0.2 0.2 0.2 0.3	68.9 79.0 37.8 44.7 52.9 51.4 50.2 53.7 61.8 67.7	0.1 16.9 34.8 23.9 23.3 25.1 21.9 17.5 13.5 8.3	0.0 0.9 26.6 23.7 11.4 8.3 7.6 5.2 3.0 2.0	0.0 0.0 0.1 1.8 3.2 5.4 7.2 9.6 9.0 9.1	0.0 0.0 0.3 4.1 5.9 6.9 9.4 9.8 9.0 8.5	0.0 0.0 1.4 2.6 2.2 3.0 3.7 3.2 3.6	0.0 0.0 0.2 0.2 0.2 0.3 0.3 0.3 0.5	0.0 0.0 0.0 0.2 0.1 0.1 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	5,094 8,174 5,709 3,601 3,444 3,014 2,932 2,477 2,382 1,463
55-59 60-64	0.1 0.8	69.9 76.2	8.4 6.7	1.1 1.6	8.1 5.9	8.8 6.1	3.3 2.4	0.3 0.2	0.0 0.1	100.0 100.0	1,006 1,768
Urban Rural with road Rural without road	2.0 5.4 5.9	37.7 62.2 76.5	21.3 19.3 12.5	17.5 7.3 2.6	5.8 2.8 1.4	10.5 2.3 1.0	4.6 0.6 0.1	0.5 0.0 0.0	0.2 0.0 0.0	100.0 100.0 100.0	9,859 22,141 9,064
Region											
Northern Central Southern	3.8 4.1 7.5	65.2 52.7 62.8	17.1 21.0 15.0	6.4 12.0 6.5	3.5 3.0 3.3	3.3 4.7 3.8	0.8 2.3 1.0	0.1 0.3 0.0	0.0 0.1 0.0	100.0 100.0 100.0	15,265 17,057 8,742
Total	4.7	59.5	18.3	8.7	3.2	4.0	1.4	0.1	0.1	100.0	41,064
*Excluding those	who have	*Eveluting these who have never attended school									

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#### TABLE 2.6 EDUCATIONAL ATTAINMENT OF THE FEMALE HOUSEHOLD POPULATION

Percentage distribution of female household population aged 6-64 years by highest level of education attended or completed, according to background characteristics\*, LRHS 2005

	FEMALE POPULATION										
Background characteristics	No grade	Primary	Lower secondary	Upper secondary	First level	Middle level	High/ university	Higher university	Other	Total	Number
Age	Age										
6-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59	28.8 2.7 0.6 0.5 0.9 0.4 0.8 0.9 1.4 1.4	71.1 75.4 46.4 56.0 63.3 62.7 66.9 70.6 80.1 84.3 84.7	0.0 20.1 27.4 20.7 19.4 21.0 18.4 13.6 7.1 4.1 3.1	0.0 1.8 25.0 14.8 8.0 6.9 3.8 3.1 1.7 0.4 1.2	0.0 0.0 0.1 1.6 2.7 4.5 5.1 6.0 5.4 6.0 6.1	0.0 0.0 0.5 4.8 4.2 3.0 4.4 4.8 3.5 2.8 2.9	0.0 0.0 0.1 1.6 1.6 0.9 0.9 0.9 0.9 1.2 0.6 0.6	0.0 0.0 0.1 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0	0.0 0.0 0.1 0.1 0.1 0.1 0.0 0.2 0.0 0.3 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	4,744 7,737 5,065 3,553 2,999 2,558 2,597 1,957 1,392 924 509
60-64	4.7	88.4	2.9	0.2	2.4	0.9	0.5	0.0	0.0	100.0	553
Residence											
Urban Rural with road Rural without road	1.8 6.0	45.5 71.2 82.2	24.0 15.6 8.5	16.5 4.9	4.7 1.1	5.4 0.9	1.8 0.2	0.1	0.1	100.0 100.0	9,352 18,476 6 760
Region	0.0	02.2	0.5	1.5	0.5	0.4	0.0	0.0	0.0	100.0	0,700
Northern Central Southern	4.7 4.1 7.4	71.3 60.0 71.2	14.4 20.1 12.9	5.6 10.3 4.6	2.1 1.9 1.9	1.6 2.6 1.8	0.3 1.0 0.3	0.0 0.1 0.0	0.0 0.1 0.0	100.0 100.0 100.0	12,157 14,834 7,597
Total	5.0	66.4	16.5	7.4	2.0	2.0	0.6	0.0	0.1	100.0	34,588

\*Excluding those who have never attended school

# **Housing Characteristics**

The household questionnaire also collected information on the characteristics of housing, especially those reflecting the welfare status of the owners, such as materials used for the roof, wall, and floor of the building; whether the house has electricity; energy used for cooking; source of drinking water; and toilet facilities.

Table 2.7 presents the percentage distribution of households according to housing characteristics by residence. From these tables it can be seen that half of the sample households use zinc for the roof, and about one third of houses in the rural areas use grass (thatch). Wood is commonly used for walls and the floor, but in rural areas without road and most likely among poorer households, the use of bamboo is widespread. A high percentage of urban houses use cement and wood for their walls.

Almost all sample households in urban areas have electricity, whether they have their own meter or it is shared with another household. About 34.5 per cent of households in the rural areas with a road have their own metered electricity but another 42.3 per cent have no electricity from any source. In the rural areas without a road, only 8.1 per cent of households have their own metered electricity, while 66.7 per cent of them have no electricity

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from any source. Wood is the most common fuel for cooking, used by 87.5 per cent of all households. In urban households only 64 per cent use wood for cooking and 31.1 per cent use charcoal.

Toilet facilities are important for the health and hygiene of members of the household as well as for maintaining a sanitary environment. Table 2.7 shows that 46.9 per cent of sample household have no toilet facilities. This is evident for about 11 per cent of households in urban areas, 49.5 per cent in rural areas with a road, and 71.9 per cent in rural areas without a road (figure 2.2). This situation, nevertheless, has improved compared to five years before the survey. The percentage of households without toilet facilities declined from 63.8 per cent in 2000 to 46.9 per cent in 2005. In urban areas, the percentage has decreased from 22.3 per cent to 11 per cent. Thus, it can be stated that, although the current situation is not yet satisfactory, the Survey shows an improvement in both urban and rural areas.

In Lao PDR people usually boil water for drinking if bottled water is not readily accessible or affordable. About 14 per cent of households drink bottled or piped water, 38.3 per cent have a well with or without a cover, 29.8 per cent use rainwater, and the rest get their drinking water from a bore, river or other source.

Television is common in urban households, but is found in only 32.7 per cent of households in rural areas with a road and in 11.7 per cent of households in rural areas without a road. Roughly 40 per cent of households in each of the strata own a radio. Access to and or use of print media is very limited, as only 1.8 per cent of households regularly read a newspaper.

The above paragraphs show that classification of housing characteristics according to urban, rural with a road and rural without a road provides useful insights into the conditions of the people who live in each of the areas. Further, categorising household population or individual respondents using this residence classification would allow development planners and programme implementers to more easily determine necessary interventions to improve the welfare of the people.



Figure 2.2 Toilet facilities by residence

# TABLE 2.7 HOUSING CHARACTERISTICS (Continues on next page)

Percentage distribution of households by household characteristics, according to residence, LRHS 2005

		Resi	dence					
Household characteristics	Urban	Rural with road	Rural without road	Total				
Housing materials								
Roof								
Tile	27.3	11.4	5.5	13.4				
Zinc	63.6	52.8	40.6	52.0				
Wood	0.7	28	5 7	3.1				
Bamboo	1.5	7.2	11.6	71				
Grass	6.4	25.6	34.6	23.7				
Other	0.3	0.3	2.0	0.7				
Not stated	0.5	0.5	0.2	0.7				
Total	100.0	100.0	100.0	100.0				
	100.0	100.0	100.0	100.0				
Wall								
Cement	44.1	9.5	2.4	15.1				
Wood	39.5	47.1	43.3	44.5				
Bamboo	15.5	41.8	52.4	38.8				
Other	0.9	1.6	1.9	1.5				
Not stated	0.5	0.2	0.3	0.3				
Total	100.0	100.0	100.0	100.0				
Floor								
Tile	14.2	1.1	0.3	3.7				
Cement	38.7	11.6	3.0	15.2				
Wood	39.9	60.7	53.2	54 3				
Bamboo	<u>лл</u>	16.1	31.6	17.5				
Other	20	10.6	11.0	0.3				
Not stated	0.5	0.2	0.2	0.3				
Total	100.0	100.0	100.0	100.0				
Electricity	100.0	100.0	100.0	100.0				
Electricity								
Own meter	79.8	34.5	8.1	37.6				
Share with other HH	12.6	9.5	2.6	8.4				
Generator	1.3	4.0	5.9	3.9				
Other	2.2	9.8	16.8	10.0				
No electricity	4.0	42.3	66.7	40.2				
Not stated	0.2	0.4	0.5	0.3				
Total	100.0	100.0	100.0	100.0				
Number	4,588	11,376	5,404	21,368				
Energy for cooking								
Electricity	2.7	0.1	0.0	0.6				
Fuel	0.0	0.1	0.0	0.1				
Wood	64.0	92.1	97.7	87.5				
Sawdust	0.0	0.0	0.0	0.0				
Coal	0.1	0.0	0.0	0.0				
Charcoal	31.1	7.7	2.3	11.4				
Gas	1.9	0.0	0.0	0.4				
Other	0.1	0.0	0.0	0.0				
Not Stated	0.2	0.4	0.4	0.3				
Total	100.0	100.0	100.0	100.0				

## TABLE 2.7 HOUSING CHARACTERISTICS (Continued)

Percentage distribution of households by household characteristics, according to residence, LRHS 2005

	Residence								
Household characteristics	Urban	Rural with road	Rural without road	Total					
Type of toilet									
Modern toilet	5.7	0.5	0.2	1.5					
Normal toilet	76.7	39.0	17.5	41.7					
Other	6.6	11.0	10.4	9.9					
No toilet	11.0	49.5	71.9	46.9					
Not stated	1.0	1.4	1.2	1.3					
Total	100.0	100.0	100.0	100.0					
Source of drinking water									
Mineral/piped water	57.5	3.2	0.1	14.1					
Well with cover	17.8	26.4	12.7	21.1					
Rainwater	10.3	34.7	36.0	29.8					
Bore	2.8	12.2	39.5	17.1					
Well without cover	11.3	22.5	10.8	17.2					
River/stream/dam	0.2	0.6	0.8	0.6					
Other	0.1	0.3	0.1	0.2					
Not Stated	1.5	1.4	1.3	1.4					
Total	100.0	100.0	100.0	100.0					
Number	4,588	11,376	5,404	21,368					
Household ownership of durable	goods (multiple answ	vers)							
Radio	40.8	43.4	42.7	42.7					
Television	79.5	32.7	11.7	37.4					
Newspaper	5.4	0.9	0.5	1.8					
Other	27.0	23.4	22.9	24.0					
None	5.9	24.3	31.5	22.2					

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# **Chapter 3**

# CHARACTERISTICS OF WOMEN RESPONDENTS

The purpose of this chapter is to provide information on the characteristics of women respondents in the LRHS 2005. This information is important for analysing the results on fertility, mortality, reproductive health status and behaviour, and other measurements derived from the Survey. The characteristics of women respondents were obtained from the survey questionnaire form 2: The Women's Questionnaire, for respondents aged 15-49 years. Unlike most other reproductive health surveys, the LRHS 2005 includes unmarried women as respondents. Therefore, the marital status of women may be taken into account when analysing the Survey results.

# Characteristics of the Survey Respondents

After editing and cleaning the data set, records of 13,074 of the 13,107 women interviewed entered the analysis. Table 3.1 shows that among these, 21.8 per cent, or 2,846 women, are never-married women. Another 74.3 per cent, or 9,714 women, are currently married women, and the remaining 3.9 per cent, or 514 women, are widowed or divorced. As would be expected, the never-married women in the sample are younger, with 67.5 per cent aged 15-19 years and 20.3 per cent aged 20-24 years. The age distribution of the married women in the sample is concentrated between 20 and 44 years of age, while the divorced and widowed women are generally older.

Half of the Survey respondents (51.3 per cent) live in rural areas with a road, while 23.1 per cent of them live in urban areas and 25.6 per cent live in rural areas without a road. A higher percentage of never-married women (32.6 per cent) compared with married and widowed or divorced women live in urban areas. The percentages of respondents who live in Northern and Central areas are about the same, 38.6 per cent and 38.9 per cent, respectively, while only 22.5 per cent live in the Southern provinces. According to marital status, 40.5 per cent of the married women live in the Northern region, while 43 per cent of the nevermarried women live in the Central region.

# **Educational Attainment**

The Survey recorded the highest level of education that respondents had completed. Therefore, the category "no education" presented in the tables and text of this report would include some persons who had attended primary school but not completed it.

Table 3.2 shows the percentage distribution of women respondents by highest educational attainment according to their age and background characteristics. On average, the educational attainment of the women respondents is low; 43.7 per cent of them have completed only primary school and another 28.8 per cent either have no education or did not complete primary school. Only 16.2 per cent and 10.5 per cent, respectively, have completed lower secondary and upper secondary school (see also figure 3.1). Married, widowed and divorced women have lower levels of education than non-married women. Some 32.2 per cent of currently married women have never been to school or have not completed primary school, and 47.1 per cent have finished only primary school. A similar situation prevails among the divorced or widowed women, among whom 40.5 per cent either have no education or have not completed primary school and another 40.5 per cent have finished only primary school.

TABLE 3.1 WOMEN BY	MARITAL S	TATUS								
Percentage distrib	oution of w	omen by n	narital status	according	to backgrou	und charac	teristics, LR	HS 2005		
	Never-	married	Currently	married	Divorced and	d widowed	Tot	al		
Background characteristics	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number		
Age										
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 <b>Education</b> None Primary Lower secondary	67.5 20.3 5.9 2.5 1.5 1.5 0.7 15.4 32.5 22.3	1,922 577 169 72 44 43 19 438 926 636	6.2 15.9 20.1 18.1 17.5 12.6 9.4 32.2 47.1 14.6	607 1,547 1,957 1,760 1,701 1,228 914 3,124 4,579 1,417	5.1 11.3 11.7 12.8 17.5 20.6 21.0 40.5 40.5 13.8	26 58 60 66 90 106 108 208 208 208 71	19.5 16.7 14.5 14.0 10.5 8.0 28.8 43.7 16.2	2,555 2,182 2,186 1,898 1,835 1,377 1,041 3,770 5,714 2,123		
Upper secondary Higher education	28.2 1.5	804 42	5.6 0.5	540 53	4.7 0.6	24 3	10.5 0.7	1,369 98		
Residence										
Urban Rural with road Rural without road	32.6 46.2 21.3	927 1,314 605	20.5 52.6 26.9	1,990 5,112 2,612	20.4 54.1 25.5	105 278 131	23.1 51.3 25.6	3,022 6,704 3,348		
Region										
Northern Central Southern	33.3 43.1 23.5	948 1,228 670	40.5 37.5 22	3,932 3,647 2,135	33.5 39.9 26.7	172 205 137	38.6 38.9 22.5	5,052 5,080 2,942		
Total	100	2,846	100	9,714	100	514	100	13,074		
Percentage of all women	21	1.8	74	.3	3.9		100			

# Figure 3.1 Percentage distribution of women respondents by educational attainment



The unmarried women have higher educational attainment, as indicated by the higher percentage who have completed lower and upper secondary school, but there is a lower percentage who have completed primary school or who have no education at all when compared with married, widowed and divorced women. Table 3.2 shows that 22.3 per cent and 28.3 per cent, respectively, of unmarried women have finished lower and upper secondary school, compared with only 14.6 per cent and 5.6 per cent, respectively, of married women, and 13.8 per cent and 4.7 per cent, respectively, of widowed and divorced women. On the other hand, only 15.4 per cent and 32.5 per cent, respectively, of the unmarried women have no education or only finished primary school, compared with the much higher percentages of other women in these categories.

Table 3.2 shows that younger respondents have higher educational attainment than older women. The percentages of women who have no education and who completed only primary school are lower for younger women, especially those aged 15-19 years. Higher percentages of women aged 15-29 years have completed lower or upper secondary schooling. This indicates that there has been rapid improvement in access to education for women in Lao PDR. Women who live in urban areas have higher educational attainment than those who live in rural areas, and women who live in a rural area with a road have more education than those who live in a rural area without road. Women who live in a rural area without a road have the highest percentage with no education (50.5 per cent), and the lowest percentage that have completed lower or upper secondary school. About 72 per cent of

#### TABLE 3. 2 WOMEN BY EDUCATIONAL ATTAINMENT

Percentage distribution of women by highest level of education attended or completed according background characteristics, LRHS 2005

			Women's educat	ion		Total			
Background characteristics	None	Primary	Lover secondary	Upper secondary	Higher education	Per cent	Number		
Age									
15 – 19 20 – 24 25 – 29 30 – 34 35 – 39 40 – 44 45 – 49	17.8 26.1 34.8 31.3 30.3 31.8 38.2	37.1 42.7 41.5 44.7 46.7 50.0 51.0	22.6 16.0 14.3 16.8 17.2 13.2 6.5	22.4 13.7 8.1 6.7 5.2 4.4 3.6	0.1 1.4 1.2 0.5 0.7 0.7 0.7	100 100 100 100 100 100 100	2,555 2,182 2,186 1,898 1,835 1,377 1,041		
Marital status									
Never-married Married Divorced/widowed	15.4 32.2 40.5	32.5 47.1 40.5	22.3 14.6 13.8	28.3 5.6 4.7	1.5 0.5 0.6	100 100 100	2,846 9,713 514		
Residence									
Urban Rural with road Rural without road	7.2 27.8 50.5	32.7 49.5 42.0	27.8 16.2 6.0	29.5 6.4 1.6	2.9 0.2 0.0	100 100 100	3,022 6,704 3,348		
Region									
Northern Central Southern	37.1 20.4 29.3	43.0 41.1 49.4	13.0 21.0 13.7	6.6 16.3 7.1	0.3 1.2 0.6	100 100 100	5,052 5,080 2,942		
Total	28.8	43.7	16.2	10.5	0.8	100	13,074		

pleted primary school or more, compared with only 50 per cent of those in rural areas without a road. Women in the Central region, which includes Vientiane Capital, have the highest level of education. Roughly similar patterns of distribution of respondents by education were found in the Northern and Southern regions.

# **Economic Activity of Women** Respondents

the women in rural areas with a road have com-

Table 3.3 shows that 89.5 per cent of women aged 15-49 years are in the labour force. Such a high participation rate implies that most women in Lao PDR work to contribute to family income. About 3.4 per cent work in the government sector and 1.8 per cent work in state or private enterprise, parastatal institutions or as an employer. The women employed in either of these categories are in principle protected by labour laws and may be covered by some social benefits. In comparison 65.6 per cent work as own account workers and 18.0 per cent work as unpaid family workers. These last two occupations show that most of the respondents have jobs in the informal sector, including agriculture, which is usually characterised by an uncertain income and no social benefits. About 7.5 per cent of the women are students and about 2.4 per cent are housewives who are not economically active. The patterns of distribution of respondents by economic activity are roughly consistent among the types of residence, especially in the rural areas with and without a road. The urban areas have higher percentages of students, housewives and those working with the government or in parastatal institutions.

TABLE 3.3 WOMEN BY ECONOMIC ACTIVITY							
Percentage distribution of women by economic activity according to residence, LRHS 2005							
		Residence	e	Total			
Activity	Urban	Rural with road	Rural without road	Per cent	Number		
Government	9.6	2.1	0.6	3.4	450		
State enterprise	0.7	0.1	0.0	0.2	27		
Private	0.8	0.1	0.0	0.2	28		
Parastatal	3.8	0.1	0.1	1.0	128		
Employer	1.3	0.1	0.1	0.4	52		
Own account worker	45.9	72.8	69.0	65.6	8,579		
Unpaid family worker	12.9	16.4	25.7	18.0	2,350		
Looking for work/unemployed	2.4	0.3	0.0	0.7	89		
Student	14.3	6.5	3.3	7.5	979		
Housewife	7.2	1.2	0.4	2.4	308		
Retired person /sick/too old	0.3	0.1	0.0	0.1	13		
Others	0.6	0.1	0.1	0.2	26		
Missing	0.4	0.3	0.5	0.3	45		
Total	100	100	100	100	13.074		

# Distribution of Women Respondents by Residence and Province

Table 3.4 shows the distribution of women by residence and provinces where they live. This information will be useful for locating areas with challenges related to fertility, family planning, mortality and reproductive health identified by the Survey.

The table shows that 23.1 per cent of women live in urban areas and that 51.3 per cent and 25.6 per cent of women respectively live in rural areas with road and rural areas without a road. About 84.8 per cent of the urban women respondents live in Vientiane Capital. In all other provinces the majority of women respondents live in rural areas with a road or rural areas without a road. The proportion in rural areas with a road is especially high in the provinces of Luangnamtha, Bokeo, Huaphanh, Xayaboury, Xiengkuang, Vientiane, Borikhamxay, Khammuane, Savannakhet, Saravane and Xaysomboon Special Zone. The province of Phongsaly has the highest percentage of women who live in rural areas without a road, followed by the provinces of Attapeu, Lunagprabang, Bokeo, Huaphanh, Oudomxay, Xaysomboon Special Zone, Champasack, Sekong, Khammuane, Saravane and Xiengkuang.

### TABLE 3.4 WOMEN BY RESIDENCE AND PROVINCE

Percentage distribution of women by residence and province, LRHS 2005

		Residence	e	Total		
Province	Urban	Rural with road	Rural without road	Per cent	No.	
Vientiane Capital	84.8	15.2	-	100.0	866	
Phongsaly	13.2	28.5	58.4	100.0	706	
Luangnamtha	27.1	53.7	19.2	100.0	756	
Oudomxay	21.3	43.9	34.7	100.0	717	
Bokeo	9.1	52.5	38.3	100.0	668	
Luangprabang	13.8	45.4	40.8	100.0	745	
Huaphanh	8.2	55.4	36.4	100.0	711	
Xayaboury	23.2	59.9	16.8	100.0	749	
Xiengkhuang	22.0	57.8	20.2	100.0	699	
Vientiane	24.5	69.4	6.1	100.0	1,069	
Borikhamxay	27.8	54.5	17.7	100.0	706	
Khammuane	21.5	52.5	26.0	100.0	651	
Savannakhet	17.0	75.3	7.6	100.0	693	
Saravane	8.5	68.9	22.7	100.0	649	
Sekong	23.7	48.9	27.3	100.0	809	
Champasack	23.1	49.5	27.4	100.0	727	
Attapeu	13.3	40.6	46.1	100.0	757	
Xaysomboon Special Zone	13.9	53.5	32.6	100.0	396	
Total	23.1	51.3	25.6	100.0	100	
Number	3,022	6,703	3,349		13,074	



# FERTILITY

# **Chapter 4**

This chapter presents fertility and related indicators derived from the Women's Questionnaires, Section 1: Reproduction. Indicators of fertility were obtained from the birth histories, which recorded all births by the respondents aged 15-49 years, and information on whether the child was still alive or dead. Women were asked a series of questions on all of their live births. Each live birth was recorded in the birth history with information on the child's birth date, birth status, sex, and survival status. For the children who had died, age at death was recorded. Current fertility, i.e., age-specific fertility rates (ASFR) and total fertility rates (TFR), was derived from information recorded in the birth histories. Completed fertility, i.e., number of children ever born alive to the women, and other fertility indicators, such as age at first birth, birth intervals, and teenage childbearing, were also obtained from this section.

The estimation of fertility rates in the LRHS 2005 is based on the direct method using birth history data. Estimates were derived for the period of 1-36 months before the Survey, which corresponds roughly from September 2002 to September 2005. This method is also used by the Demographic and Health Surveys. Fertility information for the threeyear period before the survey is considered to be more accurate because respondents may still have an accurate recollection of the births and deaths of children that occurred during that period. The longer the time before the survey, the more likely it is that respondents would suffer from memory lapse, which affects the accuracy of birth reporting. In fertility surveys of this type, under-reporting of births is common, especially of live births that resulted in death during infancy. Another source of inaccuracy in birth reporting is misreporting of the date of birth. Errors in under-reporting of births affect the level of estimated fertility, while misreporting of dates of birth can distort estimates of fertility trends.

# Current Fertility Levels and Trends

Age-specific fertility rates (ASFR) and total fertility rates (TFR) are the most widely used indicators of current fertility. ASFRs are the current fertility, calculated as the total number of births by women in a particular age group (for example 20-24 years) in one particular year (for example 2002) divided by the number of women in that age group in that year. In the absence of family planning, the pattern of ASFRs by age of women reflects the fecundity pattern of the women. This is shown by the lower fertility at the youngest age group, peak fertility at ages 20-35, and a decline in fertility along with the declining fecundity of women at older ages. This pattern will change with increasing age at first marriage, the use of contraceptives or other changes in reproductive behaviour.

The total fertility rate is the sum of the ASFRs from age group 15-19 to age group 45-49 (seven age groups) multiplied by 5 because each ASFR is for a 5-year age group. The TFR denotes the average number of births women would have during their reproductive period, from age 15 through 49 years, if they followed the current ASFRs pattern throughout.

Table 4.1 shows fertility indicators derived from the birth histories reported in the LRHS 2005. The figures for 0-4 years and 1-36 months prior to the Survey indicate that current fertility is about 4 children per woman in Lao PDR. This represents a decline from nearly 4.5 children per woman for the period 5 to 10 years before the Survey.

The lower estimate of ASFR among women aged 15-19 years and 20-24 years recorded for the period 5-10 years before the Survey, compared with the more recent estimates, may result from women's memory lapse, in which respondents underreported the number of births occurring a longer time before the Survey. The peak childbearing of Lao women occurred between 20 and 29 years of age, and after age 30 fertility dropped significantly, which may be a reflection of fertility control be-

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of the same ages in 1995-1999. In section 6.2 it will be seen that use of contraceptive methods has increased for all age groups but especially among women aged 35-44 years.

From the birth histories, it is calculated that the crude birth rate (CBR) during the period 2002-2005 was 29.9, meaning that on average there were 30 births annually per 1,000 total population.

Age-specific fertility rate, total fertility rate and crude birth rate 5-10 years, 0-4 years and 1-36 months before the survey, LRHS 2005									
Age group	5- 10 years before the Survey (1995-1999)	1-36 months before the Survey (2002-2005)							
15 – 19	0.001	0.048	0.076						
20 – 24	0.048	0.201	0.228						
25 – 29	0.212	0.206	0.206						
30 – 34	0.257	0.149	0.135						
35 – 39	0.214	0.100	0.097						
40 - 44	0.161	0.059	0.051						
45 – 49	0.000	0.031	0.022						
TFR	4.46	3.96	4.07						
CBR		-	29.9						

haviour. The difference between the TFR for the period 2000-2004 (3.96) and that for the period 2002-2005 (4.07) is negligible. The slight increase for the latter period could reflect some misreporting of dates of birth.

Further comparison of age-specific fertility rates of older women during the periods 1995-1999 and 2002-2005 suggests that there may be changes in childbearing behaviour among Lao women, who are now finishing childbearing at younger ages than before. This is evident from the fact there were 214 births per 1,000 women aged 35-39 years in 1995-1999 but only 97 births per 1,000 women in the same age group in 2002-2005. A similar pattern is also observed among women aged 30-34 years and those aged 40-44 years in the two periods. During the period 1995-1999 there were 161 births per 1,000 women aged 40-44 years, compared with only 51 births per 1,000 women aged 40-44 years during the period 2002-2005. This may show that older women (30-44 years) in 2002-2005 wanted to stop childbearing earlier than women

# Comparison with Findings from the LRHS 2000

Table 4.2 presents a comparison of fertility rates derived from two independent sources, namely the LRHS 2000 and 2005. The total fertility rate for 1995-1999 from the two surveys is slightly different; it was reported as 4.88 per woman by the 2000 Survey and 4.46 per woman by the 2005 Survey. The reported crude birth rate declined from 34 births per 1,000 population in 1999 to 29.9 births per 1,000 per year during 2002-2005. These results imply that the two data sources are reliable and comparable.

# Fertility by Background of Women

Table 4.3 shows the ASFR, TFR and CBR by type of residence. The differences by residence are quite consistent for both the ASFR and TFR. Women

Comparison of ASFR ,TFR and CBR derived from the LRHS 2000 and the LRHS 2005								
	LRHS	2000	LRHS 2005					
Age group	1995-1999	1999	1995-1999	2002-2005				
15 – 19	0.102	0.096	0.001	0.076				
20 – 24	0.228	0.261	0.048	0.228				
25 – 29	0.224	0.210	0.212	0.206				
30 – 34	0.172	0.180	0.257	0.135				
35 – 39	0.127	0.109	0.214	0.097				
40 – 44	0.070	0.071	0.161	0.051				
45 – 49	0.053	0.049	0.000	0.022				
TFR	4.88	4.84	4.46	4.07				
CBR	-	34	-	29.9				

who live in urban areas have the lowest fertility (TFR = 2.04), while the TFR is 3.70 for those who live in rural areas with a road. Women who live in the least developed areas, i.e., rural areas without a road, have the highest fertility, at 4.74 children per woman (see also figure 4.1). Thus, it may be concluded that fertility is strongly and negatively related to development, modernisation and communication. In urban areas, there are more information and services about birth planning, as well as more education and employment opportunities etc. for women. In the rural areas, especially those without a road, family planning information and services may be limited.

TABLE 4.2 COMPARISON OF ASFR, TFR AND CBR FROM TWO SURVEYS

The differences in ASFR by residence are also consistent. For each age group, the ASFR is the lowest among urban women and the highest among women in rural areas without a road. Each ASFR for women in rural areas with a road is in between those of the other domains. At the youngest ages, these differences may be largely explained by the fact that urban women tend to marry later, although the use of a modern method of contraception by women aged 15-19 years might also be a factor. After the age of 30, the ASFRs of women in each of the three geographical areas decline sharply, mostly because of high levels of contraceptive usage.



## Figure 4.1 Total fertility rate (2000-2005) by women's background characteristics

#### TABLE 4.3 ASFR, TFR AND CBR BY RESIDENCE

Age-specific fertility rate, total fertility rate and crude birth rate by residence (1-36 months before the Survey), LRHS 2005

	Residence									
Age group	Urban	Rural with road	Rural without road							
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44	0.058 0.128 0.105 0.076 0.027 0.013	0.133 0.220 0.178 0.100 0.067 0.033 0.008	0.196 0.248 0.200 0.151 0.101 0.046							
45 – 49 TFR	2.04	3.70	<b>4.74</b>							
CBR	18.11	27.79	34.67							

The differences in crude birth rate by type of residence are also consistent, with the urban areas having the lowest CBR, at 18 births per 1,000 urban population, followed by the rural areas with a road, with a CBR of 28. Rural areas without a road reported a CBR of 35 births per 1,000 population.

Differentials in fertility by the region where the respondents live also show a consistent pattern (table 4.4 and figure 4.1). Women who live in the Central region, which is the most developed region, have the lowest total fertility rate (3.07); followed by women who live in the Northern areas (3.37). The highest birth rates are for women from the Southern areas (4.84). Figure 4.2 shows much higher ASFR for women in age groups 15- 44 years old living in the Southern region compared to women living in the Northern and Central regions. The figure also shows a slightly different pattern of childbearing behaviour among women living in the Northern and Central regions. Compared to women living in the Central region, women in the Northern region tend to start child bearing earlier and peak at a higher level at age 20-24 years before fertility drops to levels similar to women living in the Central region.

The crude birth rates reported by the Survey are consistent with this pattern; they are 26.37, 24.46

TABLE 4.4 ASFR, TFR AND CBR BY REGION									
Age-specific fertility rate, total fertility rate and crude birth rate by region (1-36 months before the Survey), LRHS 2005									
Region									
Age group	Northern	Central	Southern						
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	0.144 0.207 0.148 0.085 0.054 0.026 0.011	0.106 0.174 0.159 0.092 0.059 0.024 0.001	0.151 0.267 0.217 0.174 0.099 0.053 0.008						
TFR	3.37	3.07	4.84						
CBR	26.37	24.46	35.75						

#### Figure 4.2 ASFR by region



and 35.75 births per 1,000 population, respectively, for the Northern, Central and Southern regions.

Table 4.5 and figure 4.1 show fertility of women by their education. The estimated total fertility rates are lower for higher levels of education. At current levels of fertility, women who have no completed education would have, on the average, 5.43 children during their reproductive life. Women who have completed only primary education would have 3.82 children and women with lower secondary education would have only 2.65 children. The lowest level of fertility was reported by women with higher secondary school education, only 2.02 children<sup>8</sup>. These findings demonstrate that education plays an important role in determining the level of fertility. Further investigation should be conducted on the relationship of education to age at first marriage and contraceptive usage, and their combined effects on total fertility.

The childbearing pattern by age of women (ASFRs) is also consistent among the education groups. Women with no education marry and start childbearing early, as indicated by their ASFR of 0.125. Women with no education also finish childbearing later than women with some education. This is shown by their ASFRs of 0.082 at ages 40-44 and 0.034 at ages 45-49. In contrast, higher educated

TABLE 4.5 ASFR AND TFR BY EDUCATION OF WOMEN										
Age-specific fertility rate and total fertility rate by women's education (1-36 months before the Survey), LRHS 2005										
Women's education										
Age group	None	Primary	Lower secondary	Upper secondary	Higher education (n<20)					
15 – 19	0.125	0.073	0.027	0.009	0.000					
20 – 24	0.267	0.234	0.166	0.076	0.095					
25 – 29	0.247	0.187	0.159	0.155	0.079					
30 – 34	0.185	0.125	0.080	0.106	0.219					
35 – 39	0.146	0.084	0.063	0.058	0.060					
40 – 44	0.082	0.045	0.015	0.000	0.000					
45 – 49	0.034	0.017	0.020	0.000	0.000					
TFR	5.43	3.82	2.65	2.02	2.26					

<sup>8</sup> The estimates of fertility of women who have higher education have to be treated cautiously as there were fewer than 20 such women in the sample

women start childbearing at a later age and finish at younger ages than women with less education. The peak childbearing of higher educated women was in the age group 30-34 years, but for women with no education, primary only or lower secondary education, peak fertility occurred in the age group 20-24 years.

# Summary of Fertility Indicators Derived from the Lao Reproductive Health Survey 2005

Table 4.6 shows a consistent decline in fertility by background characteristics of women between the periods 1995-1999 and 2002-2005.

# Children Ever Born and Children Still Living

The number of children ever born (CEB) may be recorded for women at any age. Unlike ASFRs, CEB is a cumulative measure of fertility. Women were asked how many children they had had at the time of the Survey. Thus, women who are older would generally have more children than those who are younger. Figure 4.3 and the last column in table 4.6 show the average number of children ever born to women aged 45-49 years at the time of the 2005 Survey. This approximates the completed parity of the older women because few will have another birth and it reflects the result of their childbearing behaviour in the past. The data may be subject to some recall error, which typically is greater for older than for younger women.

Table 4.7 shows the percentage distribution of women by number of children ever born by age group. The mean number of children ever born increases with the age of the women. Thus, among all women, those aged 20-24 years had an average of 1.2 births while those aged 45-49 years had 4.7 births. Among currently married women, those aged 20-24 years had an average of 1.6 births while those aged 45-49 years had an average of 4.8 births. The average number of children ever born for all women was 2.5, compared with an average of 3.2 for currently married women.

#### TABLE 4.6 SUMMARY OF FERTILITY INDICATORS

Total fertility rate 5-10 years and 1-36 months before the survey and completed parity (number of children ever born to women aged 45-49 years old) by background characteristics, LRHS 2005

Background characteristics	TFR 5-10 years before the Survey (1995-1999)	TFR 1-36 months before the Survey (2002-2005)	Completed parity (CEB 45-49)
Education			
None Primary Lower secondary Upper secondary Higher education	6.23 4.67 3.3 <sup>1)</sup> -	5.43 3.82 2.65 2.02 2.26	4.8 5.0 4.2 3.4
Residence			
Urban Rural with road Rural without road	2.76 5.37 <sup>2)</sup>	2.04 3.70 4.74	4.2 5.0 4.9
Region			
Northern Central Southern	5.14 4.50 5.39	3.37 3.07 4.84	5.0 4.6 4.8
Total	4.5	4.1	4.8

Notes: 1) Lower secondary education and above 2) All rural areas.

Figure 4.3 Completed parity of women aged 45-49 years old



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Among currently married women aged 15-19 years, 45.3 per cent had no children and 39.8 per cent had one birth. Among those aged 20-24 years, 15.5 per cent had no children and 33.3 per cent had one birth. A majority of married women aged 25-29 years had either two or three births. A majority of all the married women above age 35 had at least four births. Naturally, those women with seven or more births were in the older age groups.

Not all of the children born were alive at the time of the survey. The mean number of children still living (CSL) is presented in table 4.7. The difference between CEB and CSL indicates the average number of children per woman who have died. Dividing the number who have died by the CEB yields the proportion of all births who have died. That proportion increases with age of mother. From table 4.7 it may be calculated that for married women aged 15-19 years the proportion of children who have died is 0. For married women aged 20-24 years the proportion is 0.06; it then equals 0.08, 0.09, 0.12, 0.16 and 0.15 for the successive age groups, respectively. The proportion of children who have died, by age of mother, is a useful statistic for calculating an indirect estimate of the infant mortality rate, as an alternative to the direct measure derived from birth history data.

# Differentials in Children Ever Born

Table 4.8 presents the average number of children ever born by selected background characteristic of women. The differentials in CEB show a consistent pattern in which higher educated women have a lower number of children ever born, while women with no education have about 3.6 children each. The CEB of urban women is 2.7 while those who live in the rural areas have more than 3.3 children each.

#### TABLE 4.7 CHILDREN EVER BORN AND CHILDREN STILL LIVING BY AGE OF WOMEN

Percentage distribution of all women and currently married women by number of children ever born (CEB), and mean number of children ever born and mean number of children still living according to age group, LRHS 2005

	Number of children ever born									Total		Mean	Mean no. of		
	0	1	2	3	4	5	6	7	8	9	10+	Per cent	Number	no. of CEB	living children
Age	ALL WOMEN														
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 <b>Total</b>	86.5 37.6 13.6 6.5 5.5 5.5 5.4 <b>28.1</b>	9.9 25.3 18.0 7.0 4.9 4.7 6.0	2.9 23.4 28.5 20.9 13.7 9.8 10.2 <b>16.1</b>	0.5 9.8 20.2 23.3 18.8 15.1 13.6 <b>13.8</b>	0.1 3.0 11.4 17.2 18.0 16.8 16.6 <b>10.5</b>	0.1 0.6 6.0 12.3 15.3 15.0 11.6 <b>7.5</b>	0.0 0.1 1.6 7.5 11.5 11.4 12.8 <b>5.2</b>	0.0 0.1 0.5 3.2 6.1 7.9 9.0 <b>3.0</b>	0.0 0.0 1.5 3.3 5.8 6.3 <b>1.8</b>	0.0 0.0 0.7 1.6 4.1 2.8 <b>1.0</b>	0.0 0.0 0.2 1.3 4.1 5.7 <b>1.1</b>	100 100 100 100 100 100 100	2,549 2,178 2,201 1,902 1,828 1,374 1,042 <b>13,074</b>	0.2 1.2 2.3 3.4 4.0 4.6 4.7 <b>2.5</b>	0.2 1.1 2.1 3.0 3.6 3.9 4.0 <b>2.2</b>
						CURF	RENTLY	MARRI	ED WO	MEN					
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	45.3 15.5 6.2 2.8 3.1 2.2 3.6	<ul> <li>39.8</li> <li>33.3</li> <li>18.6</li> <li>6.2</li> <li>4.0</li> <li>4.2</li> <li>5.4</li> </ul>	12.3 32.1 31.1 21.7 13.6 9.5 9.9	2.0 13.7 22.4 24.1 19.6 14.7 14.1	0.3 4.2 12.6 18.2 18.7 17.4 17.5	0.3 0.8 6.6 13.0 16.1 16.1 11.8	0.0 0.2 1.8 8.0 12.0 12.1 12.9	0.0 0.2 0.6 3.4 6.3 8.6 9.4	0.0 0.0 0.2 1.5 3.4 6.3 6.6	0.0 0.0 0.7 1.7 4.6 2.9	0.0 0.0 0.17 1.36 4.40 5.81	100 100 100 100 100 100 100	601 1,547 1,967 1,766 1,694 1,227 912	0.7 1.6 2.5 3.5 4.2 4.9 4.8	0.7 1.5 2.3 3.2 3.7 4.1 4.1
Total	8.2	14.4	20.6	17.8	13.7	9.8	6.7	3.8	2.3	1.3	1.37	100	9,714	3.2	2.9

#### TABLE 4.8 CHILDREN EVER BORN BY BACKGROUND OF WOMEN

Mean number of children ever born (CEB) to currently married women according to background characteristics, LRHS 2005

Background characteristics	Mean no. of CEB (all ages of women)				
Education					
None Primary Lower secondary Upper secondary	3.58 3.32 2.62 1.92				
Residence					
Urban Rural with road Rural without road	2.73 3.35 3.33				
Region					
Northern Central Southern	3.17 3.17 3.40				
Total	3.22				

# Trends in Number of Children Ever Born and Children Still Living

Table 4.9 shows that the mean number of children ever born by all women declined from 2.8 children in 2000 to 2.5 in 2005. For married women it declined from 3.6 to 3.2 children in 2005. The completed parity of married women aged 45-49 years (the approximate end of the period of fecundity) declined by about one child, that is from 5.7 children in 2000 to 4.8 children in 2005. The percentage decline is greater at the older ages, showing an increased tendency of women to limit their childbearing at these ages. Table 6.3 confirms an increase in the use of contraception between 2000 and 2005.

The last row of table 4.9 shows that, with the declining CEB, the average proportion of children dying also declined, from 0.139 (3.6 CEB and 3.1 CSL) in 2000, to only 0.093 (3.2 CEB and 2.9 CSL) in 2005, reflecting a decline in child mortality.

Examination of the levels, trends and differentials in the number of children ever born (CEB) has confirmed a declining trend of fertility among Lao women, as noted in earlier sections.

#### TABLE 4.9 COMPARISON OF MEAN NUMBER OF CHILDREN EVER BORN AND OF CHILDREN STILL LIVING

Comparison of mean number of children ever born (CEB) and mean number of children still living by age of women, LRHS 2000 and LRHS 2005

	I	LRHS 2000	LRHS 2005							
Age	Mean no. of CEB	Mean no. of children still living	Mean no. of CEB	Mean no. of children still living						
ALL WOMEN										
15 – 19	0.2	0.2	0.2	0.2						
20 – 24	1.2	1.0	1.2	1.1						
25 – 29	2.5	2.2	2.3	2.1						
30 – 34	3.6	3.2	3.4	3.0						
35 – 39	4.6	4.0	4.0	3.6						
40 – 44	5.3	4.4	4.6	3.9						
45 – 49	5.5	4.5	4.7	4.0						
Total	2.8	2.4	2.5	2.2						
		CURRENTLY MARRIED	WOMEN							
15 – 19	0.7	0.6	0.7	0.7						
20 – 24	1.6	1.4	1.6	1.5						
25 – 29	2.7	2.4	2.5	2.3						
30 – 34	3.8	3.3	3.5	3.2						
35 – 39	4.9	4.2	4.2	3.7						
40 – 44	5.4	4.5	4.9	4.1						
45 – 49	5.7	4.7	4.8	4.1						
Total	3.6	3.1	3.2	2.9						
Proportion of children dying	0.139		0.093							

# **Birth Interval**

## Median length of birth interval.

Birth interval is the length of time, usually stated in months, between a birth and the previous birth. Information on birth interval demonstrates the spacing pattern of childbearing among the women respondents. A short birth interval, of less than 24 months is among the factors that can contribute to complications during pregnancy and childbirth and may pose a risk to the newborn's as well as the mother's health.

Table 4.10 shows the distribution of second and higher-order births by number of months since the previous birth. The average number of months since the previous birth increases consistently with the increasing age of women. Some 45.2 per cent of non-first births to 15-19 year olds and 35.8 per cent of those to 20-24 year olds were spaced by less than 24 months.

The table also presents median birth intervals. The median interval from the preceding birth is 34 months, or almost three years. The term median denotes that half of the non-first births were delivered less than 34 months after the preceding birth and that half were delivered 34 months or more after the preceding one. The length of birth interval varies with the age and background characteristics of women. As illustrated in figure 4.4, non-first

births to women aged 15-19 had a median interval of 25 months. This interval increased to 28 months for births to women aged 20-24 years, to 37 months for births to women aged 30-34 years and to 42 months for births to women aged 40-44 years. This pattern indicates that fecundity declines as women get older.

There are no consistent differentials in birth interval by birth order, by sex of children and by region. Women who live in urban areas and women who have higher education have longer birth intervals. As can be expected, women who had experienced the death of the previous child had a shorter birth interval, which can indicate a strong desire for another child or that when a woman stops breastfeeding when the child dies her menstruation and fertile period resumes sooner.

#### **Comparison with the LRHS 2000**

Comparison with the previous LRHS found that the median birth interval had increased from 29 months in the LRHS 2000 to 34 months in the LRHS 2005 (table 4.11). The percentage distribution of non-first births by birth interval had shifted noticeably toward longer intervals in the 2005 Survey. Note that these birth intervals refer to all births reported in the respective surveys and not only to those occurring in the years 2000 and 2005.



# Figure 4.4 Lenght of birth inverval by age of the mother (non-first births)

## TABLES 4.10 BIRTH INTERVALS

Percentage distribution of non-first births by number of months since preceding birth and median number of months since preceding birth, according to background characteristics, LRHS 2005

		Months	since preced	ling birth		Number of non-	Median no of months		
Background characteristics	7-17	18-23	24-35	36-47	48+	Total	first births	preceding birth	
Age									
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	23.2 16.6 11.5 9.1 8.7 8.4 5.2	22.0 19.2 14.1 10.8 10.9 7.7 7.8	41.5 33.6 29.7 26.6 23.4 17.9 20.7	8.5 17.9 20.4 18.9 16.3 22.8 18.1	4.9 12.7 24.2 34.6 40.7 43.2 48.3	100 100 100 100 100 100 100	82 741 1,204 879 607 285 116	25 28 33 37 40 42 47	
Birth order									
2 - 3 4 - 6 7+	11.0 10.8 15.0	13.4 13.4 13.1	28.8 26.8 27.2	17.7 20.5 19.0	29.1 28.6 25.8	100 100 100	2,094 1,393 427	34 35 32	
Sex of preceding bin	rth								
Male Female	12.1 10.6	12.9 13.7	27.5 28.3	18.6 19.0	28.8 28.4	100 100	1,979 1,935	34 34	
Survival of precedir	ng birth								
Living Dead	10.9 21.4	13.4 12.6	27.8 29.7	19.1 14.3	28.9 22.0	100 100	3,732 182	34 28	
Residence									
Urban Rural with road Rural without road	9.8 11.7 11.4	8.4 13.9 14.4	23.0 28.1 29.5	17.8 18.6 19.7	41.1 27.8 25.0	100 100 100	501 2,158 1,255	39 34 33	
Education									
None Primary Lower secondary Upper secondary	12.8 11.1 8.5 7.5	14.9 13.0 10.4 8.8	28.7 27.9 25.9 25.9	20.4 17.1 20.7 17.7	23.2 31.0 34.6 40.1	100 100 100 100	1,583 1,759 425 147	32 34 38 42	
Region									
Northern Central Southern	10.2 10.7 13.8	14.3 12.0 13.9	27.6 27.6 28.7	20.0 17.5 18.9	27.9 32.2 24.7	100 100 100	1,443 1,404 1,067	34 35 33	
Total	11.3	13.3	27.9	18.8	28.6	100	3.914	34	

#### TABLE 4.11 COMPARISON OF BIRTH INTERVALS

Percentage distribution of non-first births by interval since preceding birth, and median birth interval, in months, LRHS 2000 and LRHS 2005

		Birth	interval in m				
Year of Survey	7-17	18-23	24-35	36-47	48+	Total	Median birth interval
LRHS 2000	15.9	15.1	31.3	14.7	23.0	100	29
LRHS 2005	11.3	13.3	27.9	18.8	28.6	100	34

# Age at First Birth

## Percentage of women who had a first birth by a specified exact age and median age at first birth

Age at first birth is an important indicator of fertility in the study of population and is closely related to age at first marriage. In a population where the women marry early, fertility is generally higher than in one in which the women marry later. Age at first birth is also highly related to the health of mother and the child. If a woman is of very young age (under 18 years old), she has a higher risk of experiencing complications during child birth than older women because her body is usually not yet fully developed physically. Early age at first birth is also related to an increased risk of neonatal mortality. Table 4.12 shows cumulative percentages of evermarried women who have had their first birth by the specified exact ages. For example, the last row of the table shows that among the 10,228 women ever-married respondents in the Survey, 10.1 per cent had already given birth before reaching age 15, whereas 37.3 per cent had their first birth before exact age 18 years. By the age of 25, most of the women (82.7 per cent) had given their first birth. Because 82.7 per cent of the women had given birth by age 25 and 9.0 per cent had not given birth, we know that 8.3 per cent of the respondents had their first birth after exact age 25.

Table 4.12 indicates that early childbearing among ever-married women is relatively high in Lao PDR. Among the women aged 15-19 years, 19.9 per cent had already become mothers by exact age 15 and about half of them (52.8 per cent) had their first

# TABLE 4.12 AGE AT FIRST BIRTH

Percentage of women who had a first birth by specified exact ages, percentage who have never given birth and median age at first birth according to current age, LRHS 2005

	Per	centage who	gave first bi	rth by exact	Percentage		Madian ago at	
Current age	15	18	20	22	25	who never gave birth	No. of women	first birth
15 – 19	19.9	52.8	NA	NA	NA	47.1	633	16
20 – 24	15.1	54.7	75.6	82.4	NA	16.7	1,605	18
25 – 29	10.9	41.1	64.4	80.2	90.8	7.1	2,017	19
30 – 34	10.2	39.4	64.2	78.9	90.8	3.6	1,826	19
35 – 39	7.1	29.4	52.2	69.2	86.2	3.4	1,791	20
40 – 44	6.0	24.6	45.0	62.0	81.1	3.0	1,334	21
45 – 49	4.9	19.6	35.4	49.6	68.1	4.1	1,022	22
Total	10.1	37.3	57.8	71.1	82.7	9.0	10.228	19

*Notes: NA* = *Not applicable* 

child by exact age 18. By the age of 25 years, almost all ever-married women (90.8 per cent) currently ages 25-34 years had become mothers for the first time. The table also appears to indicate that early childbearing is becoming more common. If only women currently at least 25 years old are considered, it may be seen that women in younger age groups reported higher percentages than those in older age groups of having their first birth by each specified exact age. This finding may, in fact, result from recall error or lack of knowledge of precise age among older women.

## Differentials in age at first birth

The median age at first birth is the age by which 50 per cent of women have had their first birth. Among women aged 15-49 years old, the median age at first birth is 19 years. The figures in table 4.12 and table 4.13 do not show a clear pattern of differentials in age at first birth by current age or by background characteristics of women, except that among women with some education, the mean age at first birth increases with higher levels

of education. Both tables indicate that, as noted above, older women reported higher ages at first birth, which may be due to recall lapse, since for older women their first birth would have occurred many years in the past.

# **Teenage Fertility**

#### Incidence of teenage fertility

The incidence of teenage fertility is a cause of concern because teenage pregnancy carries higher risks of complications that could lead ill health or the death of the mother and/or the newborn. Teenage fertility is often highly related to low education, early marriage and poverty and girls experiencing teenage fertility are less likely to have sufficient information about pregnancy and childrearing.

The LRHS 2005 found that 13 per cent of all women aged 15-19 years had given birth, meaning that they already had children while they were still teenagers (table 4.14). Another 3.8 per cent of them were pregnant with their first baby at

#### TABLE 4.13 DIFFERENTIALS IN MEDIAN AGE AT FIRST BIRTH

Median age at first birth among women aged 25-49 years, by current age, according to background characteristics, LRHS 2005

			Women aged				
Background characteristics	25-29 30-34 35-39 40-45 45-49				45-49	25 - 49	
Residence							
Urban Rural with road Rural without road	20 19 19	20 19 19	21 20 20	21 21 21	22 22 23	20 19 20	
Education							
None Primary Lower secondary Upper secondary	19 18.5 19 22	19 19 20 22	20 20 21 23	21 20 21 23.5	22 22 23 23	20 19 20 22	
Region							
Northern Central Southern	19 19 19	19 19 19	20 20 21	21 21 21	22 22 23	20 20 20	
Total	19	19	20	21	22	20	

the time of the Survey. Thus, altogether 16.8 per cent of the women aged 15-19 in the Survey had started childbearing. The patterns of variation in teenage fertility by age and background of women are consistent. Some 28.5 per cent and 36.9 per cent, respectively, of women aged 18 and 19 years had begun childbearing. Among women 17 years of age, 12.5 per cent had begun childbearing; among those 16 years of age, 6.9 per cent had; and even among 15-year-olds, 1.9 per cent had started childbearing. As would be expected, the higher the age of the teenagers, the more likely it was that they had started their childbearing as illustrated in figure 4.5. A high incidence of teenage fertility was found among women who live in rural areas without a road, among women with no education, and among those who live in the Northern region (table 4.14). The incidence of teenage pregnancy is much lower among women who live in urban areas compared to those who live in rural areas. The incidence drops sharply for women with greater educational attainment. These patterns suggest that teenage pregnancy is closely related to low education and living in rural areas

#### TABLE 4.14 TEENAGE PREGNANCY AND MOTHERHOOD

Percentage of women aged 15-19 who were mothers or pregnant with their first child and percentage who have begun childbearing, by background characteristics, LRHS 2005

	Childbearing status		Percentage who have	Number of women			
Background characteristics	Mothers (1)	Pregnant with first child (2)	(3) = (1) + (2)	(4)			
Age							
15 16 17 18 19	1.3 4.6 8.5 22.4 30.4	0.6 2.4 4.0 6.0 6.5	1.9 6.9 12.5 28.5 36.9	535 548 471 548 447			
Residence							
Urban Rural with road Rural without road	5.1 15.2 15.9	1.2 4.3 5.3	6.3 19.5 21.2	605 1,307 637			
Education							
None Primary Lower secondary Upper secondary	22.6 17.7 8.9 1.7	5.3 4.9 4.0 0.7	27.9 22.5 12.9 2.4	455 945 572 577			
Region							
Northern Central Southern	15.0 12.0 11.1	4.7 3.5 2.7	19.6 15.6 13.8	1,003 989 557			
Total	13.0	3.8	16.8	2,549*			

\* Records for 6 persons were missing.



# Figure 4.5 Percentage of teenagers who are mothers, pregnant with first child and begun childbearing by age

## Trend in teenage fertility

Although this Survey found a high incidence of teenage fertility, comparison with the previous LRHS indicates a very slight decrease in teenage fertility between 2000 and 2005. Table 4.15 shows that the percentage of teenagers who had begun childbearing had decreased slightly from 18.4 per cent in 2000 to 16.8 per cent in 2005.

TABLE 4.15 TREND IN TEENAGE PREGNANCY							
Percentage of women aged 15-19 who were mothers or pregnant with their first child, LRHS 2000 and LRHS 2005							
	Childbearing status		Percentage who have	Number of women			
Year of Survey	Mothers (1)	Pregnant with first child(2)	(3) = (1) + (2)	Number of women			
LRHS 2000	14.7	3.7	18.4	2,579			
L RHS 2005	13.0	3.8	16.8	2 549			


## **Chapter 5**

## **KNOWLEDGE AND EVER USE OF CONTRACEPTION**

This chapter presents findings on women respondents' knowledge and ever use of contraception. Information on existing knowledge held and methods ever use of any specific contraceptive is crucial in order to monitor progress and achievements in the implementation of national family planning programmes. These findings are especially useful in reviewing the performance of service delivery and information, education and communication (IEC) and behaviour change communication (BCC) programmes and activities, and deciding whether the activities should be continued or redirected to other target groups.

In the same way as the Lao Reproductive Health Survey 2000, the LRHS 2005 collected information on women respondents' contraceptive knowledge and use. Section 4 of the Women's Questionnaire contains questions on whether the respondents had ever heard of the pill, the IUD, injection, diaphragm, condom, Norplant, female sterilisation, male sterilisation, rhythm or periodic abstinence, withdrawal, traditional medicine, emergency contraception and other methods. If the respondent knew at least one of the methods, she was then asked whether she had ever used any of the methods she had heard of.

## Knowledge of Family Planning Methods

Table 5.1 presents the percentage of women respondents, by marital status, who had knowledge about contraceptive methods. The term knowledge (heard of) of any method of contraception refers to a spontaneous mention of a method by a respondent or a positive response after the interviewer mentions the name of each of the contraceptive methods. The table shows that 89.4 per cent of all women respondents stated that they knew of at least one contraceptive method. Some 88.5 per cent of the women knew of any modern contraceptive methods and only 66.2 per cent knew of any traditional methods. Some 10.6 per cent of women said that they had never heard of any method of family planning.

Examination of the existing knowledge held of contraceptives found that a high proportion of women regardless of their marital status knew of at least one method of modern contraception. Nine in ten married women and over eight in ten divorced/widowed women knew of at least one modern method. The pill, condoms and injections were the best known methods among married as well as divorced/widowed respondents. Of never-married women 84.9 per cent knew of at least one modern contraceptive method. Condoms and pills are the most widely known methods, recognised by 79.1 per cent and 71.0 per cent respectively, of unmarried women in the Sample. This awareness is followed by knowledge about injections, female sterilisation and the IUD. These high percentages of contraceptive knowledge among unmarried women suggest that interventions should focus on this cohort of marriageable age to prepare them to use a healthy and effective contraceptive method before and when they become sexually active. The fact that most unmarried women stated they know/have heard of condoms could indicate a solid basis for the prevention of STIs and HIV. About 9.3 per cent of married women, 14.8 of divorced/widowed and 14.4 per cent of unmarried women remain uninformed about any contraceptive method.

Further examination of women's knowledge of contraceptives by age and background characteristics found a consistent pattern in which older women

#### TABLE 5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Percentage of women who knew any contraceptive method and specific methods by marital status, LRHS 2005 and LRHS 2000

		LF	RHS 2005		LRHS	2000
Contraceptive methods	Never- married	Currently married	Divorced and widowed	All women	Currently married	All women
Any method	85.6	90.7	85.2	89.4	79.4	77.6
Modern method	84.9	89.7	84.8	88.5	78.6	77.0
Pill IUD Injection Diaphragm/foam/jelly Condom	71.0 59.9 65.0 15.2 79.1	81.2 69.9 78.4 19.9 79.3	74.7 66.3 72.4 20.2 77.0	78.7 67.6 75.3 18.9 79.2	73.1 63.4 68.9 10.7 63.9	71.1 61.7 66.8 9.9 64.0
And the sterilisation Male sterilisation Norplant	63.0 36.5 18.1	69.1 45.0 26.9	64.0 40.9 28.4	67.5 43.0 25.0	62.2 37.1 25.1	61.2 35.6 24.1
Rhythm Withdrawal Traditional medicine	25.6 16.8 28.7	37.0 33.5 44.7	33.3 29.2 40.7	34.3 29.7 41.1	28.9 25.6 40.1	26.8 22.9 37.4
Other method						
Emergency Other	10.1 6.2	12.1 6.9	11.3 6.8	11.6 6.7	-	-
None	14.4	9.3	14.8	10.6	20.6	22.4
Number of women	2,846	9,714	514	13,074	9,439	12,759

(up to age group 35-39 years) were more likely to know of at least one method, either of traditional or modern contraception (table 5.2). Those who live in urban areas, who live in the Central region, and who are more educated are also more likely to have knowledge about contraceptives.

## Trends in Knowledge of Contraceptive Methods

The last two columns in table 5.1 show the level of contraceptive knowledge found by the LRHS 2000. Comparison with findings from the LRHS 2005 indicates that there is an increasing level of knowledge about contraceptives among women in Lao PDR. The table shows that the percentage of all women who knew of at least one method of contraception increased from 77.6 per cent in 2000 to 89.4 per cent in 2005. Among married women it increased from 79.4 per cent to 90.7 per cent and the proportion of married women who knew of at least one of the various types of modern contraceptive methods increased from 78.6 per cent to 89.7 per cent.

The percentage of all women who knew of at least one modern method also increased from 77.0 per cent in 2000 to 88.5 per cent in 2005 and as illustrated in figure 5.1, an increase in knowledge is also evident for all modern methods among all women.

The figures confirm that knowledge of contraceptive methods by Lao women is increasing, among all women and currently married women. The percentage of women who know of at least one of the various types of modern contraceptive methods has increased by about ten percentage points during the last five years. A large increase is also

#### TABLE 5.2. KNOWLEDGE OF CONTRACEPTIVE METHODS BY BACKGROUND CHARACTERISTICS

Percentage of all women who knew (had heard of) at least one contraceptive method, at least one modern method and at least one traditional method, according to background characteristics, LRHS 2005

Background characteristics	Knew any method	Knew any modern method	Knew any traditional method	Number of women
Age				
15 – 19 20 – 24 25 – 29 30 – 34 35 – 39 40 – 44 45 – 49	84.3 88.2 89.3 92.9 93.2 91.0 89.2	83.3 87.3 88.4 92.0 92.4 90.5 87.7	53.1 64.0 67.7 72.8 72.5 72.0 68.7	2,555 2,182 2,186 1,898 1,835 1,377 1,041
Region				
Northern Central Southern	86.7 94.7 84.8	85.6 93.8 84.0	58.1 77.3 60.7	5,052 5,080 2,942
Residence				
Urban Rural with road Rural without road	97.8 90.1 80.4	97.5 89.6 78.0	82.0 66.2 51.7	3,022 6,703 3,349
Education				
None Primary Lower secondary Upper secondary	77.7 92.3 97.0 97.3	75.3 91.8 97.0 97.1	50.5 69.0 77.3 79.4	3,770 5,714 2,123 1,467
Total	89.4	88.5	66.2	13.074

## Figure 5.1 Percentage of all women who have ever heard of specific methods of modern contraception, LRHS 2000 and LRHS 2005



found for women who know about traditional methods. In summary, modern contraceptives are widely known by the women respondents, even among the unmarried women. The pill, condoms, the IUD and sterilisation were well-known by the respondents.

### **Ever Use of Contraception**

While knowledge of contraceptives is high, table 5.3 shows that percentages of women who have ever used any contraceptive measure are much lower. The concept of 'ever use' of contraception includes women who had used a contraceptive but are not using one now and those who are currently using some form of contraceptive method. As expected, 'ever use' of contraception among unmarried women is very low, at only 2 per cent. Among unmarried women, 1.0 per cent have used a condom, another 0.5 per cent have ever used the pill,

and 0.4 per cent have used injections. About half of the currently married and divorced or widowed women have ever used contraception. The pill and injection are by far the most widely used methods followed by the IUD, condoms and female sterilisation. About 10 per cent of currently or formerly married women have used a traditional method of contraception at some period of their life.

Detailed examination of women's ever use of contraception by their age and background characteristics gives the impression that short-term contraceptives such as pills and injections are more widely used by younger women. On the other hand, long-term methods were used more by older women (tables 5.4 and 5.5). This may indicate that the younger women used contraception primarily for spacing their births, whereas older women wanted to limit their childbearing by using longer-term methods. This pattern of contraceptive mix, especially the use of pills and injections, was also found

#### TABLE 5.3 EVER USE OF CONTRACEPTION

Percentage of women who have ever used any contraceptive method by specific method, according to marital status, LRHS 2005 and LRHS 2000

		LI	RHS 2005		LRHS 2	2000
Contraceptive method	Never- married	Currently married	Ever- married	All women	Currently married	All women
Any method	2.0	51.4	50.0	39.6	40.5	30.9
Modern method	1.8	47.2	45.9	36.3	37.2	28.3
Pill IUD Injection Diaphragm/foam/jelly Condom Female sterilisation Male sterilisation Norplant Traditional method	0.5 0.1 0.4 0.0 1.0 0.2 0.1 0.2 <b>0.5</b>	29.0 6.1 19.5 0.3 4.3 5.1 0.2 0.3 <b>10.0</b>	28.1 5.9 18.9 0.3 4.3 4.9 0.2 0.4 <b>9.8</b>	22.1 4.6 14.9 0.2 3.6 3.9 0.2 0.3 <b>7.8</b>	22.3 5.3 13.7 0.2 2.2 4.7 0.3 0.4 <b>7.6</b>	17.1 4.0 10.4 0.2 1.7 3.5 0.3 0.3 0.3 5.8
Rhythm Withdrawal Traditional medicine	0.2 0.3 0.2	4.9 4.7 2.1	4.9 4.6 2.0	3.9 3.6 1.6	4.7 3.1 1.4	3.6 2.4 1.2
Emergency Other	0.1 0.0	0.4 0.3	0.4 0.3	0.3 0.2	-	-
Never used	98.0	48.6	50.0	60.4	59.5	69.1
Number of women	2,846	9,714	10,228	13,074	9,439	12,759

among women with different background characteristics. Higher proportions of urban women and more highly-educated women had ever used pills and injections. Women who live in the least developed areas, such as rural areas without a road and in the Southern region, and women with no education have the lowest percentage of ever use of contraception.

As expected, table 5.4 shows an increase in ever use of modern contraceptive methods by educational attainment for currently married women. In contrast, table 5.5 for all women shows that women with lower secondary education have a much higher ever use of modern contraceptives (43.4 per cent) than women with upper secondary education (25.5 per cent). The comparatively low percentage of all women with upper secondary education who have ever used modern contraceptives may be attributed to the high proportion of young women aged 15-24 years old in this educational category (see table 3.2). Since age at first sexual intercourse, age at first marriage and education levels are closely related, many of these young women with upper secondary education who are not married may not yet be sexually active and therefore have not started to use contraceptives.

## Trends in Ever Use of Contraception

Table 5.3 above contains information on the ever used of contraception by all women and by married women reported by the previous survey, the LRHS 2000. The table shows that the proportion of all women who had ever used any method of contraception increased by almost 9 percentage points from 30.9 per cent in 2000 to 39.6 per cent in 2005. The proportion of women who have ever used modern contraception increased from 28.3 per cent to 36.3 per cent during the same period. As shown in figure 5.2, the increase in ever use of contraception for married women was even higher. The proportion of married women who have ever used any type of contraception increased from 40.5 per cent to 51.4 per cent and the proportion of married women who had used modern contraception increased by 10 percentage points from 37.2 per cent in 2000 to 47.2 per cent in 2005. This is a remarkable achievement, confirmed by the decrease of women who have never used contraception, from 69.1 per cent in 2000 to 60.4 per cent in 2005.



## Figure 5.2: Percentage ever use of contraception among married women in 2000 and 2005

TABLE 5.4 EVER USE OF	CONTRACEP	TION BY MAI	RRIED WON	AEN												
Percentage of curren	tly marrie	d women	who have	ever use	d a any c	ontrace	eptive m	ethod b	y specif	ic metho	d, according	g to backg	ground cl	naracteri	istics, LRH9	\$ 2005
							0	CONTRACE	EPTIVE ME	THOD						
Background characteristics	Any method	Any modern method	Female sterili- sation	Male sterili- sation	Pill	QUI	Injec- tion	Nor- plant	Con- dom	Dia- phragm	Tradit- ional medicine	Rhythm	With- drawal	Other	Never used	No. of women
Age																
15 - 19	19.9	16.5	0.2	0.2	13.2	0.7	4.1	0.0	1.3	0.0	4.6	1.7	1.2	0.0	80.07	607
20 - 24	40.4	35.9	0.4	0.2	26.4	2.1	10.4	0.3	3.6	0.1	8.4	3.9	4.2	0.3	59.60	1547
25 – 29	49.0	44.8	2.6	0.1	30.2	4.1	16.7	0.4	5.2	0.5	9.9	4.9	5.2	0.2	51.00	1957
30 – 34	62.3	58.2	5.5	0.3	37.3	8.0	25.8	0.3	5.7	0.1	11.8	5.3	5.7	0.4	37.67	1760
35 – 39	62.3	58.6	8.8	0.1	32.0	9.6	28.2	0.5	4.5	0.5	11.0	5.9	5.1	0.4	37.68	1701
40 - 44	59.5	55.0	9.7	0.6	29.3	9.6	25.3	0.2	4.5	0.5	10.8	5.9	4.8	0.3	40.55	1228
45 – 49	44.3	39.0	7.9	0.1	18.8	5.9	15.1	0.4	1.6	0.1	10.2	5.1	3.6	0.2	55.69	914
Region																
Northern	54.7	52.3	6.8	0.2	31.4	7.2	20.7	0.4	3.0	0.4	7.2	3.3	3.1	0.4	45.35	3932
Central	55.4	49.5	4.3	0.2	32.3	6.5	19.5	0.3	6.3	0.3	13.4	7.2	5.9	0.1	44.61	3647
Southern	38.8	33.9	3.3	0.2	18.7	3.6	17.3	0.3	3.1	0.1	9.5	4.1	5.3	0.4	61.22	2135
Residence																
Urban	70.1	63.6	8.1	0.2	40.4	10.5	21.3	0.5	10.7	0.5	19.7	11.8	10.5	0.5	29.9	1990
Rural with road	52.5	48.2	4.6	0.3	30.8	5.7	20.5	0.4	3.2	0.3	8.8	4.1	3.7	0.2	47.47	5111
Rural without road	35.1	32.8	3.6	0.1	16.6	3.5	16.1	0.2	1.5	0.2	5.1	1.5	2.1	0.2	64.91	2613
Education																
None	30.2	27.3	2.9	0.1	13.4	3.4	13.3	0.2	1.1	0.3	4.2	1.4	1.9	0.1	69.85	3124
Primary	58.7	54.7	5.7	0.2	35.4	6.4	23.3	0.4	3.6	0.3	9.9	4.4	4.1	0.3	41.29	4580
Lower secondary	67.7	61.7	7.8	0.4	38.8	9.5	22.4	0.4	8.1	0.4	15.7	9.0	8.6	0.3	32.34	1416
Upper secondary	68.7	59.3	4.7	0.3	37.9	9.9	15.8	0.3	16.7	0.5	28.3	17.9	14.1	1.0	31.31	594
Total	51.44	47.19	5.08	0.21	28.95	6.1	19.5	0.34	4.25	0.29	10.01	4.94	4.66	0.28	48.56	9714

TABLE 5.5 EVER USE OF	CONTRACEPT	<b>TION BY ALL</b>	WOMEN,													
Percentage of all wo	men who l	have ever	used any	contrace	ptive me	ethod b	y specifi	c metho	d, accoi	ding to b	ackground	character	istics, LRI	HS 2005		
							U	CONTRACE	PTIVE ME	THOD						
Background characteristics	Any method	Any modern method	Female sterili- sation	Male sterili- sation	Pill	IUD	Injec- tion	Nor- plant	Con- dom	Dia- phragm	Tradit- ional medicine	Rhythm	With- drawal	Other	Never used	No. of women
Age																
15 – 19	6.4	5.3	0.2	0.1	3.6	0.3	1.2	0.2	1.0	0.0	1.5	0.5	0.4	0.0	93.6	2555
20 – 24	29.8	26.5	0.3	0.1	19.2	1.6	7.6	0.3	3.0	0.1	6.3	3.0	3.1	0.2	70.2	2182
25 – 29	44.9	41.0	2.3	0.1	27.6	3.7	15.2	0.4	5.0	0.4	9.3	4.6	4.9	0.2	55.1	2186
30 – 34	58.9	55.1	5.1	0.3	35.3	7.5	24.3	0.3	5.5	0.2	11.0	5.1	5.3	0.4	41.1	1898
35 – 39	59.2	55.4	8.2	0.1	30.4	9.1	26.5	0.4	4.4	0.4	10.4	5.7	4.8	0.3	41.0	1835
40 - 44	54.9	50.8	8.9	0.5	27.1	8.7	23.5	0.2	4.4	0.4	10.1	5.5	4.4	0.3	45.0	1377
45 - 49	40.6	35.5	7.3	0.1	17.1	5.4	13.8	0.4	1.6	0.1	9.7	5.0	3.5	0.2	59.4	1041
Region																
Northern	43.3	41.5	5.3	0.2	24.8	5.6	16.4	0.3	2.6	0.3	5.7	2.7	2.5	0.3	56.7	5052
Central	41.8	37.3	3.2	0.2	24.2	4.8	14.5	0.3	5.2	0.2	10.2	5.5	4.4	0.0	58.2	5080
Southern	29.4	25.6	2.6	0.2	14.0	2.7	12.9	0.4	2.5	0.1	7.3	3.1	4.1	0.3	70.6	2942
Residence																
Urban	48.5	44.0	5.6	0.2	24.5	7.1	14.8	0.4	7.9	0.3	13.6	8.2	7.2	0.3	51.5	3022
Rural with road	41.4	37.9	3.6	0.2	24.2	4.4	15.9	0.3	2.7	0.2	7.1	3.3	3.0	0.2	58.6	6703
Rural without road	27.9	26.1	2.9	0.1	13.2	2.8	12.7	0.2	1.3	0.2	4.0	1.2	1.6	0.2	72.1	3349
Education																
None	25.5	23.1	2.8	0.2	11.3	2.8	11.2	0.2	1.0	0.2	3.5	1.2	1.6	0.1	74.5	3770
Primary	48.4	45.0	4.7	0.1	29.0	5.2	19.1	0.4	3.2	0.2	8.3	3.8	3.4	0.3	51.6	5714
Lower secondary	47.6	43.4	5.3	0.3	26.9	9.9	15.6	0.4	6.5	0.2	11.2	6.4	6.1	0.2	52.4	2123
Upper secondary	29.9	25.9	2.0	0.3	16.2	4.2	6.8	0.3	7.5	0.2	12.0	7.6	5.9	0.4	70.7	1467
Total	39.6	36.3	3.9	0.2	22.1	4.6	14.9	0.3	3.6	0.2	7.8	3.9	3.6	0.2	60.4	13074



# **Chapter 6**

## **CURRENT USE OF FAMILY PLANNING**

This chapter presents results on current contraceptive usage. The information on contraceptive usage was obtained from the same source as for the previous chapter, that is, section 4 of the Women's Questionnaire, which collected information on the method currently being used, source of the method, main problems experienced by the users and other issues related to the use of family planning. The contraceptive prevalence rate (CPR) is a common indicator used to monitor the progress of a family planning programme. It denotes the number of women in any category who are using contraception at the time of the survey divided by the total number of women in that category in the Sample, expressed as a percentage.

The CPR and percentages of women using specific methods of contraception by age, number of living children and by other background characteristics will provide evidence for policy planning and monitoring. The results of the LRHS 2005 will be useful for continuing and strengthening, or redirecting current policy, strategy and efforts to provide family planning services. Trends in contraceptive usage are also presented by comparing the 2005 results with the LRHS 2000 results.

## **Current Use of Family Planning**

Table 6.1 shows percentages of ever-married women and currently married women using specific contraceptives according to the age of the women. From this table it is seen that 36.6 per cent of evermarried women and 38.4 per cent of currently married women were using some method to control fertility at the time of the Survey. The percentages of women using modern methods are slightly lower, at 33.4 per cent and 35 per cent for evermarried women and currently married women, respectively. The percentage of usage increases with the increasing age of women up to age group 40-44 years, for both ever-married and currently married women. Almost half of the currently married women were using contraception after their peak ages of childbearing, into their 30's. This finding implies that fertility regulation is not just a concept to Lao women but that it is practiced. Further examination should be carried out on whether contraception is used to space the next birth or to stop childbearing. This use would relate to changes in the perceived ideal number of children. The patterns of contraceptive mix (type of method) currently used by respondents resemble those of ever use. The pill and injections are the most popular contraceptives by far in Lao PDR. About 16 per cent of currently married women are using the pill and 10.6 per cent are using injections. The percentages of women using the pill are similar for all age groups between 20 and 44 years. In contrast, the number of women using injections, the IUD and female sterilisation increases markedly after age 30. These findings suggest that younger women prefer to use a short-term method while older women are more likely to use longer-term methods, such as IUD and female sterilisation. The use of male condoms reported by women across age groups including young women was very low.

Table 6.2 and figure 6.1 present differentials in contraceptive use among married women by their background characteristics. For modern methods, the highest percentages of users were found among women who live in urban areas (44.7 per cent) and among those who had completed at least primary education. The proportion using any modern method was 40.9 per cent for married women who had completed only primary school, 44.4 per cent for those with lower secondary schooling and 39.1 per cent for those with upper secondary schooling.

It is notable that 34 per cent of married women who have one or two children have already started to use a modern contraceptive. This proportion increases to 43.3 per cent among married women who have three or four living children. The pattern of specific contraceptive methods used (method mix) is as noted above. The pill and injections are the most popular methods, followed by the IUD and female sterilisation. The longer-term and permanent methods, such as IUD and female sterilisation, are used more by women who have three or more living children. Male sterilisation is rare in Lao PDR.

#### Figure 6.1 Contraceptive prevalence rate of currently married women by background characteristics



TABLE 6.1 C	<b>JRRENT USE</b>	OF CONTRA	<b>CEPTION L</b>	<b>BY AGE OF V</b>	VOMEN											
Percentag	e distributi	on of evel	r-married	and curre	ently ma	irried w	omen cur	rently u	sing specit	fic method of	<sup>c</sup> contracepti	on, accord	ing to ag	e, LRHS 20	05	
					Mo	dern met	pou			A	Traditi	ional methoo		÷ U		
Age	Any method	Any modern method	Male sterili- sation	Female sterili- sation	Pill	DU	Injec- tion	lm- plant	Male Con- dom	Any traditional method	Periodic abstinence	With- drawal	Others	uou currently using	Total	No. of women
							ш	VER-MAR	RIED WOME	N						
15 – 19	11.1	9.6	0.0	0.0	7.1	0.2	2.4	0.0	0.0	1.4	0.5	0.2	0.8	88.9	100.0	633
20 – 24	27.1	24.2	0.0	0.3	16.2	1.1	6.0	0.0	0.7	2.9	1.5	0.9	0.6	72.9	100.0	1,605
25 – 29	34.6	31.5	0.0	2.2	18.4	1.9	8.0	0.1	0.8	3.1	1.7	0.8	0.6	65.4	100.0	2,017
30 – 34	47.5	43.9	0.0	4.9	19.7	3.9	14.0	0.0	1.3	3.7	2.1	1.2	0.4	52.5	100.0	1,826
35 – 39	48.8	45.0	0.1	8.0	15.9	4.5	15.6	0.1	0.9	3.9	2.3	0.8	0.8	51.2	100.0	1,791
40 – 44	42.4	38.8	0.1	8.4	13.4	3.8	12.4	0.1	0.7	3.6	2.5	0.8	0.3	57.7	100.0	1,334
45 – 49	23.1	20.2	0.1	7.1	4.9	2.5	5.3	0.0	0.4	2.9	1.9	0.6	0.5	76.9	100.0	1,022
Total	36.6	33.4	0.0	4.6	15.2	2.8	10.0	0.0	0.8	3.3	1.9	0.8	0.5	63.4	100.0	10,228
							CURI	RENTLY N	ARRIED WC	DMEN						
15 – 19	11.4	9.9	0.0	0.0	7.3	0.2	2.5	0.0	0.0	1.5	0.5	0.2	0.8	88.6	100.0	607
20 – 24	28.1	25.0	0.0	0.3	16.7	1.1	6.2	0.0	0.7	3.0	1.6	0.9	0.6	72.0	100.0	1,547
25 – 29	35.5	32.4	0.0	2.3	19.0	1.9	8.3	0.1	0.7	3.2	1.8	0.8	0.6	64.5	100.0	1,957
30 – 34	49.1	45.3	0.0	5.1	20.3	4.1	14.4	0.0	1.4	3.8	2.2	1.2	0.4	50.9	100.0	1,760
35 – 39	51.3	47.3	0.1	8.4	16.7	4.7	16.4	0.1	0.9	4.1	2.4	0.8	0.8	48.7	100.0	1,701
40 – 44	45.7	41.8	0.1	9.0	14.4	4.1	13.4	0.1	0.7	3.9	2.7	0.9	0.3	54.3	100.0	1,228
45 – 49	25.2	22.1	0.1	7.4	5.5	2.7	5.9	0.0	0.4	3.1	2.0	0.7	0.4	74.8	100.0	914
Total	38.4	35.0	0.0	4.7	15.9	2.9	10.6	0.0	0.8	3.4	2.0	6.0	0.6	61.6	100.0	9,714
Note: if more	than one me	thod is used,	only the m	ost effective	method is	considere	d for this ta.	bulation.								

CURRENT USE OF FAMILY PLANNING

TABLE 6.2 CURRENT US	SE OF CONTI	RACEPTION	<b>BY BACKG</b>	ROUND OF	WOMEN											
Percentage distribu	ution of cu	urrently ma	arried wo	omen curr	ently us	ing spe	cific met	hod of c	ontracept	ion, accordi	ng to backgr	ound cha	aracteristi	ics, LRHS 2	005	
					Mo	dern metl	por				Traditi	ional metho	p			
Background characteristics	Any method	Any modern method	Male sterili- sation	Female sterili- sation	Pill	DUI	Injec- tion	lm- plant	Male Con- dom	traditional method	Periodic abstinence	With- drawal	Others	using	Total	No. of women
Residence																
Urban Rural with road Rural without road	51.6 39.2 26.6	44.7 36.0 25.6	0.0 0.1 0.0	7.7 4.3 3.3	20.2 17.3 10.0	4.6 2.7 2.1	10.1 11.0 10.1	0.0 0.1 0.0	2.1 0.6 0.2	6.9 3.3 1.0	4.7 1.7 0.5	2.0 0.8 0.1	0.2 0.8 0.4	48.4 60.8 73.4	100.0 100.0 100.0	1,990 5,111 2,613
Education																
None Primary Lower secondary Upper secondary	22.5 43.9 51.1 48.3	21.2 40.9 44.4 39.1	2.7 5.4 7.4 4.4	2.7 5.4 7.4 4.4	7.6 19.7 20.3 19.9	2.1 2.9 4.2	8.7 12.2 11.0 6.4	0.0 0.0 0.1	0.2 0.7 1.3 4.0	1.3 3.0 6.8 9.3	0.6 1.7 4.1 6.6	0.3 0.6 2.2 2.4	0.5 0.7 0.5 0.3	77.5 56.1 48.9 51.7	100.0 100.0 100.0 100.0	3,124 4,580 1,416 594
Number of living child	dren															
0	6.4	5.7	0.0	0.8	3.6	0.3	0.8	0.0	0.3	0.8	0.4	0.1	0.3	93.6	100.0	796
1 – 2 3 – 4	37.5 47.3	34.0 43.3	0.0	3.4 7.2	19.3 17.1	1.8 4.4	8.2 13.4	0.0	1.2 0.8	3.5 0.8	2.3 2.1	0.9	0.3	62.5 52.7	100.0 100.0	3,401 3,059
5+	38.8	35.5	0.0	4.8	13.3	3.4	13.4	0.0	0.5	0.5	2.0	0.7	0.6	61.2	100.0	2,459
Region																
Northern	44.0	42.6	0.1	6.5	19.1	3.5	13.1	0.0	0.4	1.4	0.8	0.3	0.3	56.0	100.0	3,932
Central Southern	39.2 26.6	33.8 22.8	0.0	4.0 2.9	16.4 9.2	3.1 1.6	9.0 8.5	0.1	1.3 0.6	5.4 3.8	3.4 1.7	1.1	0.9	60.8 73.4	100.0 100.0	3,647 2,135
Total	38.4	35.0	0.0	4.7	15.9	2.9	10.6	0.0	0.8	3.4	2.0	0.9	0.6	61.6	100.0	9.714

## **Trends in Contraceptive Usage**

Comparison with results of the previous LRHS found that the prevalence of modern contraceptive usage by married Lao women increased during the last five years (table 6.3). This increase is observed for all age groups and residence, region and education categories of the women. The increase in contraceptive usage was especially high for married women aged 15-19 years (59.4 per cent) and those aged 20-24 years (37.5 per cent). There were modest increases in usage by women 25-34 years of age but increases of about 25 per cent for women aged 35-44 years. The increases in contraceptive usage are also seen consistently by women's background characteristics. The highest increases in contraceptive usage are observed for women with no education (69.8 per cent) and by Northern women (45.4 per cent). The increase in CPR for women with no education is remarkable, considering that uneducated women are more likely to live in the least developed areas (rural areas without a road) and more likely to come from poor families, and thus are less likely to obtain information or services without some intervention from the government or its partners. Thus, this increase most likely reflects the results of the government's efforts to improve the reproductive health of women.

The significant progress in modern contraceptive usage indicates that during the past five years there has been a remarkable change in childbearing behaviour among Lao women. Family planning is becoming more popular and is practiced by more women, which is consistent with the decline in fertility presented in Chapter 4 of this report. The use of modern contraceptives for spacing and family limitation has no doubt contributed to the decline in fertility observed between 2000 and 2005. However, continued effort is required to increase further the prevalence of contraceptive usage in general and especially among rural and uneducated women, and women from the Southern region.

#### TABLE 6.3 TRENDS IN CURRENT USE OF CONTRACEPTION (Continues on next page)

Percentage of currently married women currently using contraception, by background characteristics, LRHS 2000 and LRHS 2005

	Any m	nethod		Mode	ern method
Background characteristics	2000	2005	2000	2005	Percentage increase in use of modern methods, 2000 - 2005
All currently married	32.2	38.4	28.9	35.0	21.0
Age group					
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	6.7 20.2 30.7 44.5 42.1 37.2 22.0	11.4 28.1 35.5 49.1 51.3 45.7 25.2	6.2 18.2 27.8 40.3 37.8 33.3 19.3	9.9 25.0 32.4 45.3 47.3 41.8 22.1	59.4 37.5 16.4 12.4 25.1 25.5 14.5
Residence					
Urban Rural Rural with road Rural without road	54.0 27.8 - -	51.6 - 39.2 26.6	42.3 26.3 -	44.7 - 36.0 25.6	5.6 - - -
Education					
None Primary Lower secondary Upper secondary Higher education	13.2 39.4 45.9 55.4 67.9	22.5 43.9 51.1 48.32* -	12.5 36.5 39.1 44.6 25.2	21.2 40.9 44.4 39.06*	69.8 12.1 13.4 -

#### TABLE 6.3 TRENDS IN CURRENT USE OF CONTRACEPTION (Continued)

Percentage of currently married women currently using contraception, by background characteristics, LRHS 2000 and LRHS 2005

	Any m	nethod		Mode	ern method
Background characteristics	2000	2005	2000	2005	Percentage increase in use of modern methods, 2000 - 2005
All currently married	32.2	38.4	28.9	35.0	21.0
Number of living children					
0 1 2 3+	2.7 20.3 38.3 38.1	6.4 28.1 44.1 43.5	2.7 17.1 34.2 34.7	5.7 22.3 40.0 39.8	111.1 30.4 16.9 14.6
Region					
Northern Central Southern	30.6 38.5 19.2	44.0 39.2 26.6	29.3 33.3 17.7	42.6 33.8 22.8	45.4 1.6 28.9
*Upper secondary and higher educat	tion				

Number of Children at First Use of Contraception

Information on the number of living children at first use of contraception provides further insights on childbearing behaviour of women. Women who use contraception when they have between one and two children may want to delay the next birth, but those who start to use contraception after having three or more children may want to limit childbearing. Further investigation into women's background characteristics should be carried out to ascertain the use of contraception as influenced by women's desire for more children and their ideal family size.

Table 6.4 shows a percentage distribution of evermarried women by number of living children at first use of contraception. The table shows that 5.1 per cent of the women started to use contraception when they had no children and 5.7 per cent started when they had one child. Another 11.1 per cent used their first contraception when they had two children and 28.2 per cent did so only after having three children. This pattern shows that women feel a greater need for contraceptive usage when they have more children. Comparison with the previous survey shows that by 2005 women not only were more likely to have used contraception but that they had started to do so with a slightly lower number of living children. In 2000 the percentage of women who used their first contraceptive before they had a child was only 2.3 per cent but this had increased to 5.1 per cent by 2005. The proportion of ever-married women who began to use contraception when they had two children increased from 7.6 per cent in 2000 to 11.1 per cent in 2005 and the proportion who began first use when they had three or more children increased from 22.5 per cent in 2000 to 28.2 per cent in 2005. These findings indicate a change among Lao women to start controlling their fertility slightly earlier either for spacing or stopping the next pregnancy.

#### TABLE 6.4 NUMBER OF CHILDREN AT FIRST USE OF CONTRACEPTION

Percentage distribution of ever-married women by number of living children at the time of first use of contraception, by age, LRHS 2005 and LRHS 2000

	١	Number of liv	ving children	at first use of	contraceptior	ı	
Current age	Never used	0	1	2	3+	Total	Number of ever-married women
				LRHS 20	05		
15 – 19	79.5	8.7	8.7	2.8	0.3	100.0	633
20 – 24 25 – 29	51.7	4.9 3.4	8.7	13.7	5.8 18.1	100.0	2,017
30 - 34	39.0	5.0	2.8	14.6	38.6	100.0	1,826
55 – 59 40 – 44	43.3	5.4 6.6	1.5	6.6 4.9	44.8 43.9	100.0	1,334
45 – 49	58.7	4.5	1.2	4.1	31.5	100.0	1,022
Total	50.0	5.1	5.7	11.1	28.2	100.0	
Number	5,110	523	587	1,132	2,876		10,228
				LRHS 20	00		
Total	60.6	2.3	7.0	7.6	22.5	100.0	9,934

## Age at First Use of Contraception

Table 6.5 shows that only 46 per cent of ever-married women have so far used contraception but that those who have used it started at relatively early ages. Furthermore, by examining the first column of table 6.5, it is evident that the age at first use of contraception is declining rapidly. The table indicates that among all ever-married women, including those who have never used contraception, 14.2 per cent first used a contraceptive when they were 20-24 years of age and 13.1 per cent first used one when they were 25-29 years of age. The patterns of first use have changed markedly from older to younger women. Among ever-married women currently aged 40-44 years, only 17.3 per cent had used a contraceptive before age 30. Among those currently aged 30-34 years, 47.3 per cent had used contraception before age 30. Among those currently aged 25-29 years, 45.7 per cent have already used contraception.

These very different patterns in initiation of the use of contraception for current age groups suggest that older women used contraception primarily to limit the number of their children and, thus, did not begin to use it until they were over age 30. The much earlier first use of contraception among younger women implies that many of them are using it to delay the first birth or to space subsequent births.

#### TABLE 6.5 AGE AT FIRST USE OF CONTRACEPTION

Percentage of ever-married women by age at first use of contraception, LRHS 2005

			Age	at first use	of contrace	otion			
Current age	15-19	20-24	25-29	30-34	35-39	40+	Don't know	Never used	No. of ever- married women
15 – 19	17.1	NA	NA	NA	NA	NA	2.7	79.5	633
20 – 24	13.6	23.7	NA	NA	NA	NA	2.4	60.1	1,605
25 – 29	5.4	24.9	15.4	NA	NA	NA	2.7	51.5	2,017
30 - 34	3.5	17.3	26.5	8.6	NA	NA	5.3	38.7	1,826
35 – 39	1.9	9.5	17.8	20.0	6.1	NA	5.3	39.3	1,791
40 - 44	1.0	4.5	11.8	15.5	14.0	3.4	6.7	43.1	1,334
45 – 49	1.4	2.2	6.3	9.9	9.2	7.7	5.0	58.5	1,022
Total	5.5	14.2	13.1	8.1	3.9	1.2	4.3	49.8	100.0
Number	560	1,453	1,338	829	394	125	440	5,089	10,228

## Source of Supply of Contraceptive Methods Currently Used

Table 6.6 shows that the source of contraceptives varies by type of contraceptive. Pills and condoms are most likely to be obtained from private clinics<sup>9</sup>. IUDs and female sterilisation are obtained mostly from central, provincial or district hospitals. Significant numbers of women have obtained these services abroad. Injections are frequently obtained from both district hospitals and health centres. Overall, district hospitals and health centres as well as private clinics are the major sources of modern contraceptive methods. These findings presented in table 6.6 reflect government efforts to use the available health network and system to provide family planning services. Continued efforts should be made to increase current use of contraception by, among other approaches, establishing more service delivery points closer to the clients' residence. The district hospital and Central/Provincial-level service delivery points may be too far to access easily, especially for those who live in rural areas, where roads may not exist. Outreach based information and distribution of contraceptives and home visits may further help to increase contraceptive usage among women and men who live in remote areas, including areas without a road.

#### TABLE 6.6 SOURCE OF CURRENT CONTRACEPTIVE METHOD

Percentage of currently married women using a modern method of contraception by source of supply, calculated separately for each method, LRHS 2005

Course of oursely			Ţ	ype of contra	aceptive		
(multiple sources are possible)	Pill	IUD	Ingection	Condom	Female sterilisation	Male sterilisation	Norplant
Cent./Prov. hospital	7.8	40.3	8.3	11.5	44.7	0.0	0.0
District hospital	30.4	32.5	39.3	26.9	17.2	33.3	25.0
Health centre	22.5	2.5	32.4	9.0	1.3	0.0	0.0
Mobile outreach	4.7	9.9	5.2	5.1	8.9	0.0	50.0
Private clinic	36.5	1.4	8.1	52.6	0.4	0.0	0.0
Pharmacy	2.0	1.8	5.5	5.1	0.0	0.0	0.0
Midwife on home visit	0.3	5.0	0.6	0.0	0.2	0.0	0.0
TBA*	2.3	0.0	7.4	3.9	0.0	0.0	0.0
Abroad	1.5	14.5	0.7	0.0	32.2	100.0	25.0
Others	1.0	0.0	0.4	1.3	0.9	0.0	0.0
Number of women	1,544	283	1,025	78	459	3	4

\*Traditional birth attendant

## Problems with Current Contraceptive Method

The women were asked whether they had any problem with the method they were currently using and, if so, what type of problem they were facing. Table 6.7 shows that most of the contraceptive users said they had no problem with the method they were using. The main problem cited was health concerns, which were experienced by 4.7 per cent of pill users, 5.3 per cent of IUD users, 6.2 per cent of women who had a contraceptive injection, 3.9 per cent whose husbands were using condoms, and 5.7 per cent of those who were sterilised.

<sup>&</sup>lt;sup>9</sup> Enumerators or respondents may not have been clear in all cases of the differences between the definition of a private clinic and a pharmacy.

### TABLE 6.7 PROBLEMS WITH CURRENT CONTRACEPTIVE METHOD USED

Percentage of currently married women using a modern method of contraception by main problems cited, calculated separately for each method, LRHS 2005

Droblem sited (multiple responses		Type of contraceptive									
possible)	Pill	IUD	Ingection	Condom	Female sterilisation	Male sterilisation	Norplant				
No side effect	94.1	93.6	92.4	93.6	93.3	100.0	100.0				
Husband's disapproval	0.1	1.1	0.1	0.0	0.0	0.0	0.0				
Accessibility	0.2	0.0	0.1	0.0	0.0	0.0	0.0				
Costs too much	0.2	0.4	0.3	1.3	0.0	0.0	0.0				
Inconvenient to use	0.7	0.7	0.7	0.0	0.7	0.0	0.0				
Want children	0.1	0.0	0.0	0.0	0.2	0.0	0.0				
Health concern	4.7	5.3	6.2	3.9	5.7	0.0	0.0				
Others	0.5	1.1	0.3	1.3	0.0	0.0	0.0				
Number of women	1,544	283	1,025	78	459	3	4				





# Chapter 7

## NON-USE AND INTENTION TO USE FAMILY PLANNING IN THE FUTURE

To better understand the childbearing behaviour of women and to ensure that women are able to make informed and independent decisions about contraceptive use, it is useful to know why some women do not use contraception, whether it is because they want or are expecting another child or because of other reasons. It is particularly important to understand the reasons why women of childbearing age who do not want another child choose not to use contraceptives. This knowledge can be used to develop appropriate strategies either to improve the quality of services provided or design IEC/BCC campaigns to increase the number of contraceptive users to prevent high risk or unwanted pregnancies. Knowledge about women's background characteristics can be used to develop specific strategies taking into account the needs of the target group.

This chapter presents findings on non-use of contraception: the never-use of any contraception, previous use, reasons for not using contraception, intention to use contraception in the future, choice of future contraceptive, and reasons for not intending to use in the future. This information is collected from the section on contraception, i.e., section 4 of the Women's Questionnaire.

## **Reasons for not Using Contra**ception

Table 7.1 shows the percentage of married women not currently using contraception who cited specific reasons for not doing so. These women include those who have used contraception before and those who have never used any method. The highest percentage who cited a reason for not using contraception (13.7 per cent) said it was because they wanted another child. This reason was cited especially by women under 30 years of age but less so by older women. The percentage of older women who still wanted another child is relatively high, considering that pregnancy by women above age 35 years is considered high-risk, especially if they already have 4 or more children and if the children are born with short birth intervals.

The second most-often cited reason for women not using contraception and most cited reason for women over age 35, is health concerns. Although detailed information concerning this response is not available, it can be suggested that longer term contraceptive choices especially for women above 30 years of age is limited. It can also include other reasons such as misinformation about side effects, traditional beliefs and lack of appropriate and correct information and counselling services. The high percentage of non-use of contraception owing to health concerns may enhance the number of women with an unmet need for family planning.

The next most-often cited reason for non-use of contraception was disapproval by husbands. About one out of ten non-users (9.7 per cent) cited this reason. This reason was given uniformly by women in all age groups, which may demonstrate a strong opposition by husbands, possibly reflecting the opposition by certain social groups to the use of contraception or family planning. This may also indicate that the small family size norm has not been fully accepted. The disapproval by husbands may be related to the high percentage of women who cited lack of knowledge as a reason for nonuse (7.7 per cent). Lack of knowledge was cited more often by older women than younger women and lack of knowledge could also be closely linked with the percentages of women who cited difficult to use as a reason for not using contraceptives.

#### TABLE 7.1 REASONS FOR NOT USING CONTRACEPTION BY AGE OF WOMEN

Percentage of currently married women not using contraception who cited specific reasons, by age group, LRHS 2005

Reason for non-use	Age of non-using women										
Reason for non-use	15-19	20-24	25-29	30-34	35-39	40-44	45-49	Iotai			
Husband disapproves Hard to get it Cost too much Inconvenient to use Want more children Health concern Fatalistic Other person's disapproval Difficult to get pregnant	9.9 1.5 0.6 2.1 17.8 2.2 2.1 0.0 0.0	10.0 2.7 1.6 2.0 18.3 4.3 1.8 0.1 0.5	9.6 3.2 2.7 3.6 17.2 6.4 1.9 0.1 0.9	9.6 2.8 2.8 6.1 13.7 12.7 1.2 0.0 1.0	11.0 2.7 3.0 7.4 12.8 17.4 2.0 0.2 2.3	10.0 2.8 2.4 8.6 6.4 23.1 1.3 0.6 2.7	7.5 2.4 2.1 7.5 4.6 22.8 0.9 0.4 2.1	9.7 2.7 2.3 5.1 13.7 11.8 1.6 0.2 1.3			
Menopausal Lack of knowledge	0.0 4.9	0.0 6.0	0.2 6.4	1.7 7.4	3.2 10.5	15.9 11.3	32.9 8.7	6.3 7.7			
Number of non-users	535	1,115	1,267	900	822	672	677	5,988			

The percentage of non-users who said they were not using contraception because it cost too much was small (2.3 per cent). The problem of cost is likely to be related to people's socio-economic status.

Further examination found very little variation by background characteristic among non-users who were not using contraception because they wanted another child (tables 7.2 and 7.3). This might suggest that, except for women who live in rural areas without a road, age has a stronger influence than education or residence in determining the desire for more children and the consequent non-use of contraception. Concern about contraceptive usage and health was perceived mostly by women who have completed primary education or higher and by those who live in urban areas or in the Central or Southern regions. This finding seems to indicate that concerns about the health effects of contraception were expressed more by women with higher socio-economic status, except for the women from the Southern region. Thus, it can be suggested that this issue might be related to the rising demand for quality of care in family planning services. To provide a more definitive explanation, however, would require a more detailed examination.

As was noted for the tabulation by age group, husbands' disapproval of contraceptive use is spread evenly among married women with different background characteristics. Lack of knowledge of family planning was cited by a significant number of non-users who have no education and who live in the Southern region or in rural areas without a road. Limited access to contraception (hard to get), was reported by non-users with little or no education and those who live in the Northern or Southern regions or in rural areas without road.

#### TABLE 7.2 REASONS FOR NOT USING CONTRACEPTION BY EDUCATION OF WOMEN

Percentage of currently married women not using contraception who cited specific reasons, by educational attainment, LRHS 2005

		Women's e	ducation		
Reason for non-use	None	Primary	Lower secondary	Upper secondary	Total
Husband disapproves Hard to get it Costs too much Inconvenient to use Want more children Health concern Fatalistic Other person's disapproval Difficult to get pregnant Menopausal	10.1 3.8 3.5 4.7 13.6 8.4 2.8 0.2 0.6 7.1	10.0 2.5 1.7 5.3 13.4 14.1 1.0 0.2 1.5 6.7	8.1 0.6 0.7 5.5 14.6 15.0 0.7 0.1 2.0 3.8	7.5 0.0 0.3 5.2 15.0 12.4 0.0 0.0 2.9 2.0	9.7 2.7 2.3 5.1 13.7 11.8 1.6 0.2 1.3 6.3
Lack of knowledge	11.0	6.6	2.6	2.6	7.7
Number of non-users	2,420	2,569	692	307	5,988

#### TABLE 7.3 REASONS FOR NOT USING CONTRACEPTION BY REGION AND RESIDENCE

Percentage of currently married women not using contraception who cited specific reasons, by region and residence, LRHS 2005

		Region				ce			
Reason for non-use	Northern	Central	Southern	Total	Urban	Rural with road	Rural without road	Total	
Husband disapproves	8.9	9.8	10.7	9.7	8.3	9.0	11.6	9.7	
Hard to get it	2.7	0.5	5.8	2.7	0.2	1.8	5.4	2.7	
Costs too much	2.5	0.5	4.4	2.3	1.1	1.9	3.4	2.3	
Inconvenient to use	3.4	5.5	6.8	5.1	7.3	4.7	4.6	5.1	
Want more children	14.2	14.3	12.1	13.7	11.8	13.0	15.6	13.7	
Health concern	8.8	13.7	13.3	11.8	18.0	12.0	8.4	11.8	
Fatalistic	1.1	0.7	3.7	1.6	0.1	1.9	1.9	1.6	
Other person's disapproval	0.1	0.4	0.1	0.2	0.4	0.2	0.1	0.2	
Difficult to get pregnant	0.6	1.4	2.0	1.3	2.2	1.1	1.2	1.3	
Menopausal	7.2	6.8	4.2	6.3	7.7	6.1	5.7	6.3	
Lack of knowledge	5.5	6.9	11.9	7.7	3.1	8.2	9.2	7.7	
Number of non-users	2,202	2,218	1,568	5,988	963	3,106	1,919	5,988	

## Intention to Use Contraception in the Future

In this Survey, women who were not using contraception at the time of Survey were asked whether they had an intention to use any contraceptive in the future. Table 7.4 shows that the percentage of all married non-users who did not intend to use contraception in the future was higher compared to those who did intend to use it in the future. About 43.9 per cent of non-users with no child and 55.8 per cent of those who had three or more children said that they did not intend to use contraception in the future. The great majority of current non-users have never used contraception and they bolster the proportion not intending to use it in the future. Women who have never used contraception and do not intend to use it in the future constitute a particular category and may include many women whose husbands or other family members oppose to the concept of family

#### TABLE 7.4 INTENTION TO USE CONTRACEPTION IN THE FUTURE

Percentage distribution of currently married women not using contraception by intention for future use, according to past use and number of living children, LRHS 2005

Contraceptive use and future		Number of livi	ing children		Number					
intention	0	1	2	3+	Number					
Never used*										
Intends to use Does not intend to use Not sure	17.3 39.6 26.2	18.4 32.5 21.2	18.2 36.4 22.1	15.2 43.8 21.6	1,002 2,360 1,335					
Previously used*										
Intends to use Does not intend to use Not sure	10.2 4.3 2.5	15.2 8.7 3.9	9.4 10.9 2.9	5.0 12.1 2.5	522 598 171					
All current non-users										
Intends to use Does not intend to use Not sure	27.4 43.9 28.7	33.7 41.2 25.2	27.6 47.4 25.0	20.1 55.8 24.0	1,524 2,958 1,506					
Number of non-users	886	1,248	1,134	2,720	5,988					
* D										

\* Percentages shown are of all current non-user.

planning. Among the women who have used contraception in the past and now have no child or only one child, a majority intend to use contraception in the future. They may be women who have interrupted use of contraception for the purpose of having a child but intend to resume it later for birth spacing or limitation.

## Reasons for not Intending to Use Contraception in the Future

Table 7.5 shows that among the non-users, the reasons for not intending to use contraception in the future are similar to the reasons they gave for not using it currently, as presented in table 7.1. It is difficult to know whether these answers are mainly repetition of answers from the previous question or whether they truly reflect strong opinions about reasons for not intending to use contraception in the future.

Table 7.5 shows that the main reason current non-users do not intend to use contraception in the future is because they would like to have more children. Some 27.4 per cent of all non-users gave

this reason and half (49.9 per cent) of the women under age 30 did so. Another reason commonly cited was health concerns, which was given by 23.7 per cent of all non-users and 29.1 per cent of those over age 30. Their husband's disapproval of family planning is fairly strong among these nonusers (table 7.3) and is an important reason they do not intend to use contraception in the future, as cited by 19.3 per cent of them. This disapproval was cited by a much higher proportion of younger women. This subject merits further field research to determine why those husbands, particularly of younger women, disapprove of family planning.

Lack of knowledge about contraceptives was cited by about one sixth of the non-users and almost equally by younger women (16.8 per cent) and older women (14.8 per cent). This highlights the importance of providing women and their partners with accurate and comprehensive information and counselling on family planning. A small proportion of non-users stated that they did not intend to use contraception in the future owing to problems of accessibility; 5.4 per cent said it was hard to get and 4.6 per cent said it cost too much. Again, the reason related to costs is most likely a reflection of people's socio-economic situation.

#### TABLE 7.5 REASONS FOR NOT INTENDING TO USE CONTRACEPTION IN THE FUTURE

Percentage of currently married women not using contraception and who do not intend to use in the future giving specific reasons for not intending to use it, according to broad age group, LRHS 2005

Reason for not intending to use (multiple		Age	Total		
responses are possible)	Under 30	30+	Ισται		
Husband disapproves	27.6	15.1	19.3		
Hard to get it	7.7	4.2	5.4		
Costs too much	5.4	4.1	4.6		
Inconvenient to use	7.8	11.6	10.2		
Wants more children	49.9	15.5	27.4		
Health concern	13.5	29.1	23.7		
Fatalistic	5.3	2.1	3.2		
Other person disapproval	0.2	0.5	0.4		
Difficult to get pregnant	1.6	3.1	2.6		
Menopausal	0.3	19.1	12.6		
Lack of knowledge	16.8	14.8	15.5		
Number	1,020	1,938	2,958		

In summary, this chapter found that reasons for not using contraception include desire for more children, health concerns, lack of knowledge, husband's disapproval, and problems with accessibility and affordability of contraceptives. Similar reasons were expressed by current non-users and by those who did not intend to use contraception in the future. These findings show that currently married family planning non-users have stronglyheld and consistent reasons for not currently using and not intending to use contraceptives in the future. If these women follow trough on their intention to not use contraception, improvement in the CPR may be limited. Therefore, to further increase CPR, the quality of family planning services should be improved. Accurate information and more counselling should be provided to address health concerns and lack of knowledge. Men should be encouraged to become more involved and targeted. IEC/BCC campaigns should be initiated to address the husband's disapproval. New strategies should also be put in place to address issues related to accessibility and affordability.



# **Chapter 8**

## **OTHER PROXIMATE DETERMINANTS OF FERTILITY**

Proximate determinants of fertility are the principal factors other than contraception that influence a woman's chance of becoming pregnant. This chapter presents information on selected proximate determinants of fertility including current marital status, age at first marriage and age at first sexual intercourse. Marriage is often perceived as the primary indicator of the proximate determinants since in most countries, marriage marks the beginning of regular exposure to pregnancy risk. More detailed knowledge related to timing of pregnancy risk is provided by examining age at first marriage and age at first sexual intercourse. Age at first marriage can be a particularly useful measure since countries where women tend to marry in their teens often have higher fertility compared to countries where women marry for the first time at an older age.

## **Current Marital Status**

Marital status is an important determinant of fertility, as most births occur within marriage, whether de jure (legal) or de facto marriage (unregistered). In the LRHS 2005 marriage is defined as a recognised union between a woman and a man. Table 8.1, which is a partial repeat of table 3.1, shows that 74. 3 per cent of the female respondents in the LRHS 2005 are married, 21.8 per cent are nevermarried, and the rest are divorced or widowed. As was stated earlier, the never-married women are concentrated at young ages, while the married women are more evenly distributed among the age groups from 20 to 44 years. A majority of the divorced and widowed women are older than 35 years.

### **Age at First Marriage**

The last column of table 8.2 shows that median age at first marriage by all ever-married women in the sample is between 18-19 years, with older women reporting somewhat higher ages at first marriage. About 8.9 per cent of women currently aged 25-49 years old were married by age 15 and by the age of 18 years almost half of the women were married (44.5 per cent). By the age of 25 years, 86.6 per cent of women were married. Of women currently

TABLE 8.1 WOMEN BY MARITAL STATUS AND AGE GROUP

Percentage distribution of women	by current marital status,	, according to age group, LRHS 2005
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Age	Never- married		Currently	/ married	Divorced	/ widowed	Total		
Age	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	
15 – 19	67.5	1,922	6.2	607	5.1	26	19.5	2,555	
20 – 24	20.3	577	15.9	1,547	11.3	58	16.7	2,182	
25 – 29	5.9	169	20.1	1,957	11.7	60	16.7	2,186	
30 – 34	2.5	72	18.1	1,760	12.8	66	14.5	1,898	
35 – 39	1.5	44	17.5	1,701	17.5	90	14.0	1,835	
40 – 44	1.5	43	12.6	1,228	20.6	106	10.5	1,377	
45 – 49	0.7	19	9.4	914	21.0	108	8.0	1,041	
Per cent of all women	21.8		74.3		3.9		100.0		
Number of women		2,846		9,714		514		13,074	

aged 25-49 years old, 4.2 per cent had not yet married. Thus it can be concluded that Lao women tend to marry early and that marriage is almost universal.

Further examination of differentials in age at marriage by background characteristics of women found that the median age of women who live in urban areas and those who have completed lower secondary school was 20 years, while that for women in rural areas and who had completed less education was 18 years (table 8.3). The median age at first marriage was 22 years for women with upper secondary schooling and 24 years for those with higher education. The pattern of a later age at marriage for urban women and for women with more education was consistent for all age groups. This suggests that if women stay in school longer, at least to complete lower secondary school, the prevalence of early marriage and teenage fertility could be reduced.

#### TABLE 8.2 AGE AT FIRST MARRIAGE AND MEDIAN AGE AT FIRST MARRIAGE

Percentage of women at first marriage by specified exact age, and median age at first marriage, according to current age group, LRHS 2005

		Percentage f	irst married by	y exact age:		Percentage		Median
Current age	15	18	20	22	25	never married	Number	age at first marriage
15 – 19	6.6	22.8	NA	NA	NA	75.4	2,549	16
20 – 24	10.6	46.8	64.5	70.8	NA	26.3	2,178	18
25 – 29	10.3	47.1	68.5	78.8	87.4	7.9	2,201	18
30 – 34	8.6	46.7	67.6	78.2	88.1	3.7	1,902	18
35 – 39	9.1	45.6	65.8	77.6	87.4	2.5	1,828	19
40 - 44	7.6	39.4	62.2	73.2	84.7	3.1	1,374	19
45 – 49	7.9	39.8	58.1	71.6	83.3	1.8	1,042	19
20-49	9.2	45	65.2	75.4	83.6	8.8	10,525	18
25-49	8.9	44.5	65.4	76.6	86.6	4.2	8,347	19

*Note: NA = Not applicable* 

#### TABLE 8.3 MEDIAN AGE AT FIRST MARRIAGE BY BACKGROUND CHARACTERISTICS

Median age at first marriage among women by five year age groups, age 25-49 years, according to residence and education, LRHS 2005

	*		Current age			25-49	
Background characteristics	25-29	30-34	35-39	40-44	45-49	25-49	
Residence							
Urban Rural with road Rural without road	19 18 18	19 18 18	20 18 18.5	20 19 19	20 19 20	20 18 18	
Education							
None Primary Lower secondary Upper secondary Higher education	18 18 19 21 23	18 18 19 22 24	18 18 20 22 23	19 18.5 20 22 23.5	19 19 21 21.5 26	18 18 20 22 24	
Total	18	18	19	19	19	19	

## Age at First Sexual Intercourse

As with age at first marriage, age at first sexual intercourse is a useful indicator of the onset of a woman's exposure to pregnancy risk. Like in many other countries in the world, the topic on sexual activities before and after marriage is relatively sensitive and often not openly discussed in Lao society. Therefore the likelihood of underreporting is high and data covering this topic needs to be interpreted with caution.

Table 8.4 presents the percentage of women who had sexual intercourse for the first time by specified exact ages. The figures show that 11.5 per cent of all women had first sexual intercourse before they were 15 years old. The percentage increases to 32.6 per cent by exact age 17. By the exact age of 19 years, half of all women in the sample had had their first sexual intercourse and 76 per cent of the women had sexual intercourse before the age of 30 years.

Higher percentages of women in rural areas and those with little or no education had their first sexual intercourse at younger ages, before exact ages 15 and 17 compared to women living in urban areas and women with primary and especially lower secondary or more education. This pattern

Rural without road

resembles that for age at first marriage (table 8.2), suggesting that sexual intercourse mostly takes place within marriage. This finding is supported by the evidence that only 1.4 per cent of the nevermarried women reported having had sexual intercourse.

Comparison with the LRHS 2000 implies that the percentage of women who reported having sex at young ages is increasing. In 2000, 5.2 per cent of women reported first intercourse by age 15, compared with 11.5 per cent in 2005. Significantly higher percentages of women also reported first intercourse by the ages of 17, 19 and 21 years. There are reasons to treat this finding with scepticism, however. It is unlikely that social change has been so rapid as to more than double within five years the proportion of women having first sexual intercourse by age 15. This is particularly the case when taking into account that the two surveys covered essentially the same cohorts of women. The age group of 15-49 years surveyed in 2000 would have been ages 20-54 in 2005, thus constituting about 80 per cent of the women ages 15-49 in 2005. The significantly lower ages at first intercourse reported in the LRHS 2005 may have resulted from more accurate reporting in the 2005 Survey which could indicate that reporting on sexual activities may have become more acceptable.

TABLE 8.4. AGE AT FIRST SEXU	TABLE 8.4. AGE AT FIRST SEXUAL INTERCOURSE (Continues on next page)											
Percentage of all women who had first sexual intercourse before specified exact age and never-married women who had intercourse according to background characteristics, LRHS 2005 and LRHS 2000												
		Percenta	age havii	ng first in	tercours	e before	exact age	5	Never-married who had intercourse	No. of		
Background characteristics	15	17	19	21	23	25	27	30		wome		
LRHS 2005												
Age												
15 – 19	9.2	22.5	27.2	NA	NA	NA	NA	NA	3.6	2,549		
20 – 24	13.5	36.4	61.2	71.3	74.1	74.3	NA	NA	2.4	2,178		
25 – 29	13.6	38.1	63.6	77.4	84.1	88.4	89.5	89.6	0.8	2,201		
30 – 34	11.4	35.5	62.5	76.1	83.7	89.3	90.8	92.5	0.5	1,902		
35 – 39	11.2	34.6	61	75.8	83.6	88.5	90.3	91.8	0.4	1,828		
40 – 44	10.4	30.9	56.7	71.5	79.8	85.8	88.3	90.5	0.4	1,374		
45 – 49	10.3	31.6	55.6	70.2	80.7	86.2	88.1	91.2	0.2	1,042		
Residence												
Urban	4.5	18.1	38.4	50.9	58.8	64.2	66.2	67.7	1.2	3,022		
Rural with road	13.4	36.1	58.8	69.3	74.4	77.2	77.9	78.7	1.4	6,703		

59.3

13.9

38.7

69.2

73.3

75.9

76.7

77.6

1.8

3,349

of en

#### TABLE 8.4. AGE AT FIRST SEXUAL INTERCOURSE (Continued)

Percentage of all women who had first sexual intercourse before specified exact age and never-married women who had intercourse according to background characteristics, LRHS 2005 and LRHS 2000

		Percenta	ige havir	ng first in	tercours	e before o	exact age	<u>+</u>	Never-married	No. of	
Background characteristics	15	17	19	21	23	25	27	30	who had intercourse	women	
LRHS 2005											
Education											
None	17.8	44.7	64.5	73.9	77.9	80.7	81.6	82.6	1.7	3,770	
Primary	12.5	36.6	61.7	72.9	77.9	80.6	81.4	82.3	1.2	5,714	
Lower secondary	5.2	19.5	42.9	56.1	63.7	67.5	68.4	69.5	1.5	2,123	
Upper secondary	0.5	5.0	15.0	24.4	32.7	39.2	41.7	42.9	1.8	1,467	
Region											
Northern	15.6	40.6	62.9	72.5	76.2	77.9	78.4	78.9	1.9	5,052	
Central	8.9	28.1	50.4	61.4	67.4	71.4	72.8	73.9	1.4	5,080	
Southern	8.9	26.7	45.8	58.5	66	71.0	72.5	74.0	0.7	2,942	
All women	11.5	32.6	54.2	65	70.5	73.8	74.9	75.9	1.4	13,074	
LRHS 2000											
All women	5.2	25.1	47.6	62.9	69.9	73.5	75.5	76.8	1.1	12,759	
Note: NA - Not applicable											

*Note: NA* = *Not applicable* 


# Chapter 9

# FERTILITY PREFERENCES

Data on women's fertility preferences provides information about women's intentions concerning childbearing in the future. The term fertility preferences is normally used to describe women's desire for additional children, women's desire to limit family size, their unmet need for family planning and their ideal number of children. Although the controversy about whether the preferences will be translated into related action remains valid, the information is useful to monitor the performance of family planning programmes.

This chapter presents information on fertility preferences reported by respondents from questions in section 6 of the Women's Questionnaire.

## **Desire for Additional Child**

Table 9.1 presents the percentage distribution of married women by their desire for an additional child. The figures are derived from answers to the questions on whether the women want to have another child and, if so, whether they wish to have another child within two years or to delay the birth for 2 or more years.

The last column of table 9.1 and figure 9.1 show that 33.4 per cent of married women stated that they still wanted to have another child. Of the 33.4 per cent, some 18.8 per cent of them said they wanted another child soon, that is, within the next two years, 6.2 per cent wanted a child but after two or more years, and 8.4 per cent were undecided about the timing of the next child. Another

#### TABLE 9.1 FERTILITY PREFERENCES BY NUMBER OF LIVING CHILDREN

Percentage distribution of currently married women by desire for an additional child, according to number of living children, LRHS 2005

Desire for additional			Number	of living child	dren <sup>1</sup>			Tatal
children	0	1	2	3	4	5	6+	Iotal
Have another soon <sup>2</sup> Have another later <sup>3</sup> Have another, undecided when Undecided Want no more Sterilised <sup>4</sup>	48.6 9.4 17.5 8.2 5.0 0.8	41.1 16.2 17.4 5.1 12.5 2.4	22.0 9.0 10.5 7.5 43.0 4.8	10.5 3.3 5.1 7.3 63.2 6.7	6.2 1.3 4.4 6.8 70.6 7.1	4.4 0.8 2 5.8 77.3 6.2	2.2 0.6 0.8 5.6 82.0 3.0	18.8 6.2 8.4 6.7 50.5 4.8
Total	10.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	858	1,397	2,228	1,904	1,420	931	976	9,714

1 Includes current pregnancy

2 Wants next birth within 2 years

3 Wants to delay next birth for 2 or more years

4 Includes both female and male sterilisation

#### Figure 9.1 Percentage distribution of currently married women by desire for children



6.7 per cent were undecided whether they wanted another child or to stop childbearing. Half of the women (50.5 per cent) stated that they did not want any more children, and another 4.8 per cent of married women reported that they or their husbands had already been sterilised<sup>10</sup>. The rest, or 4.6 per cent of the married women, believed that they would not be able to conceive, or were infecund.

As expected, table 9.1 shows that the percentages of women who wanted to have another child, especially within the next two years, are much higher for women who have two children or fewer. The percentage of women who wanted to have the next birth later reflects the desire for spacing of births, mostly demonstrated by women who have one child. Women who are undecided whether to have another child soon or later and those who are undecided on whether to have another child or to stop childbearing reflect ambiguity about childbearing behaviour. Such women may feel they have enough children but are uncertain about whether to stop childbearing because of many reasons such as: lack of knowledge or misinformation about family planning, not being ready to use contraceptives due to health concerns, limited accessibility to desired contraceptive method, facing opposition toward fertility regulation etc.

The percentages of women who want no more children and of those who have been sterilised increase along with the number of living children. The table shows that only 12.5 per cent of women who have one child said they did not want another child. Almost half (43 per cent) of married women with two children stated that they wanted to stop childbearing. This means that they were satisfied with having two children. Eighty-two per cent of women who have 6 or more children wanted to stop childbearing. This consistent pattern, however, should be translated into the use of contraception if they really want to stop childbearing, such as for those women who have been sterilised. Women who do not want to have another child but are not using contraception can be defined as having an unmet need for family planning, and are at risk of having unwanted pregnancies. Women who are undecided whether to have another child or to stop childbearing and those who declare themselves infecund (not being able to conceive) may finally not want to have another child.

Further examination of fertility preferences by age of women, presented in table 9.2, found a pattern similar to that of fertility preferences in line with the number of living children because the number of living children is closely related to the age of women. Young women (15-29 years of age) usually have fewer living children and, therefore, tend to want more children. The percentage of women in age groups 15-19 years old, 20-24 years old and 25-29 years old who did not want another child was 9.2 per cent, 21.5 per cent and 38.7 per cent respectively. For the age group 30-34 years the percentage increased to 62.2 and for women aged 40-44 years old the percentage was 72.7. The

<sup>&</sup>lt;sup>10</sup> Availability of male sterilisation in Lao PDR is limited outside Vientiane Capital.

#### TABLE 9.2 FERTILITY PREFERENCES BY AGE OF WOMEN

Percentage distribution of currently married women by desire for additional child, according to age group, LRHS 2005

Desire for additional			Ag	je of women				Tetal
child	15-19	20-24	25-29	30-34	35-39	40-45	45-49	Iotai
Have another soon <sup>1</sup> Have another later <sup>2</sup> Have another, undecided when Undecided Want no more Sterilised <sup>3</sup> Declared infecund	49.6 15.2 17 7.2 9.2 0.0 1.8	37.7 16.0 15.4 7.0 21.5 0.3 2.1	27.4 9.4 11.2 8.8 38.7 2.3 2.1	11.6 3.6 6.9 7.7 62.2 5.1 3	8.6 0.8 4.1 6.5 67.4 8.5 4.2	2.7 0.2 3.3 4.2 72.7 9.0 7 9	2.7 0.1 2.6 3.1 68.3 7.5	18.8 6.2 8.4 6.7 50.5 4.8 4.6
Total	100	100	100	100	100	100	100	100
Number of women	607	1,547	1,957	1,760	1,701	1,228	914	9,714

<sup>1</sup> Wants next birth within 2 years

<sup>2</sup> Wants to delay next birth for 2 or more years

<sup>3</sup> Includes both female and male sterilisation

patterns shown in tables 9.1 and 9.2 clearly demonstrate that the women respondents in the Survey have a demand for family planning, either to space or to stop having births.

### **Desire to Limit Childbearing**

Examination of the percentage of married women who wanted to stop childbearing, included those who (or whose husbands) were sterilised. As presented in table 9.3, it can be seen that there was very little variation by women's background characteristics. This may suggest that the new attitude toward limitation of childbearing before the reproductive period ends has already been widely spread among women. In all areas of residence and regions, and among all education groups, large proportions of women (often more than half) want to limit childbearing after they have two children. The percentage wanting no more children increases as the number of living children increases. More than 70 per cent (and frequently about 90 per cent) of the women in every residence and education category who had five children did not want to have another child. However these preferences may not necessarily be translated into contraceptive use.

## Unmet Need and Demand for Family Planning

This section provides information on the demand for family planning and whether women use contraception to fulfil their demand. The indicator that is often used to measure this behaviour is the percentage of women with unmet need and met need for family planning. Unmet need is a highly useful measurement for reviewing the performance of family planning programmes. Put in a simple way, unmet need is described as the percentage of married women who either do not want any more children or want to wait before having the next birth, but are not using any method of family planning. A more complex definition is used if one wants to identify all women with unmet need.

In this chapter, the more complex definition of unmet need is derived from the concept applied by Demographic and Health Surveys<sup>11</sup>. Unmet need can be divided into two catagories, namely unmet FERTILITY PREFERENCES

<sup>&</sup>lt;sup>11</sup> Please see for example DHS Cambodia 2000 and 2002/3 Report BPS and DHS/MACRO, 2002/3, pp. 85-87, table 7.3

#### TABLE 9.3. DESIRE TO LIMIT CHILDBEARING

Percentage of currently married women who want no more children or are sterilised, by number of living children, according to background characteristics, LRHS 2005

Background			Number	r of living chil	dren			Tetal
characteristics	0	1	2	3	4	5	6+	Iotai
Region								
Northern Central Southern	5.6 6.1 5.9	14.7 12.8 19.1	57.0 43.7 36.7	73.0 72.3 58.9	79.2 79.9 72.1	87.2 83.8 77.9	88.4 83.3 82.8	57.0 55.6 51.4
Residence								
Urban Rural with road Rural without road	9.5 4.9 5.0	18.4 15.0 11.4	59.2 46.4 38.9	85.6 70.9 53.7	89.7 80.0 64.5	87.9 86.2 76.8	91.4 86.7 79.7	61.4 57.2 46.8
Education								
None Primary Lower secondary Upper secondary	5.7 6.5 2.3 8.3	13.1 17.8 10.5 14.7	38.2 48.1 55.8 58.3	50.6 74.4 85.3 87.4	63.6 82.7 91.0 100.0	73.2 90.0 95.8 92.9	80.5 88.1 91.7 85.7	48.5 59.7 58.6 48.2
Total	5.8	14.9	47.8	69.9	77.8	83.6	84.9	55.2
Number of women	858	1,397	2,228	1,904	1,420	931	976	9,714

Note: Women who have been sterilised are considered to want no more children.

need for spacing, that is women who want to delay the next birth but are not using contraception, and unmet need for stopping or limiting family size, that is women who do not want to have another child (want to stop childbearing) but are not using contraception.

In the LRHS 2005, questions were developed to identify both of these types of unmet need. The methodology to derive indicators of unmet need from the LRHS 2005 is described below.

Married women with unmet need for spacing include:

- 1. Pregnant women whose pregnancy was mistimed
- 2. Amenorrheic women whose last birth was mistimed
- Fecund women who are neither pregnant nor amenorrheic who are not using any method of family planning and who want to wait two or more years for their next birth
- 4. Fecund women who are not using any method of family planning and are unsure whether they want another child
- 5. Fecund women who are not using any method

of family planning and want another child but are unsure when to have the birth

Married women with unmet need for limiting include:

- 1. Pregnant women whose pregnancy was unwanted
- 2. Amenorrheic women whose last child was unwanted
- Fecund women who are neither pregnant nor amenorrheic who want no more children but are not using any method of family planning

Results of these calculations are presented in table 9.4, which show the percentage of married and of all women with unmet need for family planning by type of unmet need, according to background characteristics of the women. From the last row of table 9.4 it may be seen that 11.0 per cent of married women have unmet need for spacing and 16.3 per cent of the have unmet need for limitation. Altogether, 27.3 per cent of married women respondents have an unmet need for contraception. Married women who do not want another child or want to delay the next birth and translate these expectations into the use of contraception, are con-

sidered to be meeting their needs. From the same table it is observed that 6.2 per cent of married women with a need for contraception for spacing and 30.4 per cent with a need for limitation were using contraception. Altogether the demand for family planning (the sum of unmet and met need) among married respondents is 63.9 per cent, of which 17.1 per cent is for spacing and 46.7 per cent is for limitation. Among the 63.9 per cent of married women with a demand for family planning, only slightly more than half of them (57.3 per cent) were meeting that need with the use of contraceptives.

Table 9.4 and figure 9.2 demonstrate that younger women primarily have an unmet need of contraception for spacing while older women have an unmet need for the purpose of family limitation. By age group, between 14 and 18 per cent of married women aged 15-29 years have an unmet need for spacing. The unmet need for contraception for family limitation increases rapidly by age, from 14.7 per cent for married women aged 30-34 years to 44 per cent for those aged 45-49 years.

Table 9.4 shows that a high percentage of unmet need is observed among women with no educa-

#### TABLE 9.4 UNMET NEED, MET NEED AND DEMAND FOR FAMILY PLANNING

Percentage of currently married women with unmet need for family planning, met need and demand for family planning, according to background characteristics, LRHS 2005

Background	U	nmet need		Met need	Met need = currently using		Dema	and for far planning	nily	Demand	No. of women
characteristics	Spacing	Limi- tation	Total	Spacing	Limi- tation	Total	Spacing	Limi- tation	Total	satisfied	women
				Currently r	narried w	omen					
Age											
15 – 19	18.0	2.1	20.1	6.4	4.3	10.7	24.3	6.4	30.8	34.7	607
20 – 24	16.0	3.9	19.9	15.0	12.0	27.0	31.0	15.9	46.9	57.5	1,547
25 – 29	14.1	8.2	22.3	11.4	23.2	34.6	25.4	31.4	56.8	60.8	1,957
30 – 34	10.1	14.7	24.8	4.4	43.1	47.5	14.5	57.8	72.3	65.7	1,760
35 – 39	8.4	18.3	26.6	1.3	47.6	49.0	9.7	65.9	75.6	64.8	1,701
40 – 44	5.9	30.6	36.5	0.8	41.2	42.0	6.6	71.9	78.5	53.5	1,228
45 – 49	4.8	44.0	48.8	0.4	23.2	23.6	5.2	67.1	72.3	32.6	914
Residence											
Urban	6.1	15.7	21.9	9.7	39.8	49.5	15.8	55.5	71.3	69.3	1,990
Rural with road	10.4	16.3	26.8	6.1	31.2	37.4	16.6	47.6	64.1	58.3	5,111
Rural without road	15.8	16.6	32.4	3.5	21.8	25.3	19.3	38.4	57.7	43.9	2,613
Education											
None	17.1	18.7	35.7	1.9	19.3	21.2	18.9	38.0	56.9	37.2	3,124
Primary	8.8	16.6	25.4	7.0	35.2	42.2	15.8	51.8	67.6	62.4	4,580
Lower secondary	6.9	12.4	19.3	9.8	39.1	49.0	16.7	51.5	68.2	71.7	1,416
Upper secondary	5.4	10.7	16.1	14.2	32.4	46.5	19.5	43.1	62.6	74.3	541
Region											
Northern	10.5	13.9	24.4	6.0	36.3	42.3	16.5	50.2	66.7	63.4	3,932
Central	10.0	16.7	26.7	7.3	30.0	37.4	17.4	46.7	64.0	58.3	3,647
Southern	13.5	20.0	33.5	4.4	20.7	25.1	18.0	40.6	58.6	42.9	2,135
Total	11.0	16.3	27.3	6.2	30.4	36.6	17.1	46.7	63.9	57.3	9,714

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tion, whether it is for spacing or for limitation, that is, 35.7 per cent, compared with only 16.1 per cent among those with upper secondary education. The proportion of women living in rural areas without a road who have unmet need is 32.4 per cent, compared with 21.9 per cent of those who live in urban areas. By region, women who live in the South have the highest unmet need, 33.5 per cent.

The percentage of married women whose demand for contraception is being satisfied is high among women aged 25-39 years and among those who live in urban areas (69.3 per cent), among those who have at least lower secondary education (more than 70 per cent), and among those who live in the Northern region (63.4 per cent). On the other hand, lower percentages of satisfied demand were found among young women aged 15-19 years (34.7 per cent), women aged 45-49 years (32.6 per cent), women who live in rural areas without a road (43.9 per cent) and women who live in the Southern region (42.9 per cent).

#### **Ideal Number of Children**

To gain a better understanding about women's childbearing behaviour, especially about their fertility preferences and demand for and use of contraception, the Survey collected information on women's perception of an ideal family size. In section 6 of the LRHS 2005 Women's Questionnaire, respondents were asked "if you could go back to the time when you had no children, could you choose exactly how many children you would want to have". The format of this question, "if you could go back...", is used to make sure that a women's answer purely reflects her "ideal number" and is not influenced by the number of living children she has at the time of the survey. Nevertheless, figures in table 9.5 show that the ideal number of children increases with the increasing number of living children. Women who have no, one or two children stated that their ideal number of children is 3.0 or 3.2. Women who currently have 3, 4, 5 and 6+ children stated that their ideal numbers are 3.6, 4.2, 4.6 and 5.1 children, respectively. Thus among women with more children, it is not clear if their stated ideal has been influenced by their actual number of children or if they have had their actual number of children because of their ideal from an early age. The mean ideal number of children among married respondents is 3.7 while the mean for all women is 3.5. The difference probably reflects a lower ideal family size among unmarried women, who are in fact younger. Perhaps the most reliable ideal number of children is that expressed by married women with two or fewer children, who said that their ideal family size is three children.

More detailed information on mean ideal number of children is presented in table 9.6. The mean

#### TABLE 9.5 IDEAL NUMBER OF CHILDREN ACCORDING TO NUMBER OF LIVING CHILDREN

Percentage distribution of all women by ideal number of children, and mean ideal number of children for all women and for currently married women, according to number of living children, LRHS 2005

			Number	of living child	dren <sup>1</sup>			Total	Total excl_NB	
	0	1	2	3	4	5	6+	IULdi	excl. NR	
Desire for children										
1 2 3 4 5	1.6 28.4 25.0 15.9 3.9	6.7 30.2 29.5 17.3 6.1	1.0 33.1 26.2 23.2 5.4	0.4 6.3 44.4 24.0 9.4	0.4 4.0 12.3 51.1 13.1	0.0 4.0 12.0 24.5 33.5	0.1 2.4 7.5 24.6 15.6	1.6 19.5 25.0 23.9 9.4	1.8 22.7 29.0 27.7 10.9	
6+ Non-numeric responses (NR)	1.4 23.7	3.5 6.7	3.6 7.5	4.9 10.6	9.7 9.5	13.0 12.9	33.0 16.8	6.8 13.9	-	
Total Number of women	100 3,751	100 1,558	100 2,331	100 1,981	100 1,469	100 963	100 1021	100 13,074	100 11,263	
Mean ideal number of children <sup>2</sup> <b>All women</b> Number	<b>3.0</b> 3,751	<b>3.0</b> 1,558	<b>3.2</b> 2,331	<b>3.6</b> 1,981	<b>4.2</b> 1,469	<b>4.6</b> 963	<b>5.1</b> 1021	<b>3.5</b> 13,074		
Currently married women Number	<b>3.1</b> 858	<b>3.1</b> 1,397	<b>3.2</b> 2,228	<b>3.6</b> 1,904	<b>4.2</b> 1,420	<b>4.6</b> 931	<b>5.1</b> 976	<b>3.7</b> 9,714		

1 Includes current pregnancy

2 Excludes women who gave non-numeric responses

ideal number of children is lower among younger women than among older women, which seems to reflect changes in Lao society concerning the ideal family size. Women with higher education, those who live in the Northern region and those who live in urban areas have lower ideal numbers of children. However, the lowest mean ideal number of children shown is 2.8, reported by women who have completed upper secondary or higher education.

Table 9.6 also presents results from the previous Survey. Comparison of the two Surveys indicates

that the ideal number of children has declined from 3.9 to 3.5. However, considering that there were still 13.9 per cent of women who were not able to express their ideal number of children in a numeric term, apparently the concept of ideal family size is not yet universal among women in Lao PDR (table 9.5).

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#### TABLE 9.6 IDEAL NUMBER OF CHILDREN BY BACKGROUND CHARACTERISTICS

#### Mean ideal number of children of all women, by background characteristics, LRHS 2000 and LRHS 2005\*

	LRHS	2005	LRH	S 2000
Background characteristics	ldeal number of children	Number	ldeal number of children	Number
Age				
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44	3.0 3.1 3.4 3.6 3.9 4.1	1,925 1,938 1,988 1,691 1,629 1,189	3.4 3.5 3.7 3.9 4.2 4.4	1,842 1,644 1,898 1,582 1,641 1,020
45 – 49	4.2	903	4.5	726
Education				
None Primary Lower secondary Upper secondary	4.0 3.6 3.1 2.8	3,127 5,039 1,857 1,240	4.4 3.9 3.2 3.4	3,052 4,763 2,143 315
Region				
Northern Central Southern	3.4 3.6 3.7	4,357 4,332 2,574	3.8 3.8 4.0	3,387 4,722 2,243
Residence				
Urban Rural Rural with road Rural without road	3.0 - 3.6 3.8	2,629 - 5,826 2,808	3.3 4.0 -	1,887 8,465 - -
Total	3.5	11,263	3.9	10.352
* Excluding non-numeric responses				





# Chapter 10

# MORTALITY AND LIFE EXPECTANCY

This chapter presents direct estimates of mortality indicators from information on deaths that occurred in the household during the 12-month period before the Survey and was obtained from the Household Questionnaire and from birth histories obtained in section 2 of the Women's Questionnaire. Results of these estimates, however, should be interpreted cautiously, as the deaths reported in the Survey may not represent the true number of deaths. Underreporting of deaths, especially infant deaths, often occurs in demographic surveys. This is a non-sampling error, in which the respondents do not wish to mention a death in the household, fail to remember the incidence of a death, or give the wrong date of a death. In addition, a large sample size is needed to obtain an accurate mortality estimate, especially in the condition of mortality decline. The sample size of the LRHS 2005 is sufficient to provide valid estimates of fertility and other indicators, but it is insufficient to provide a robust estimate of mortality<sup>12</sup>. In order to obtain a better understanding of the level of infant and child mortality, it is necessary to make calculations via an indirect method, employing Mortpak-Lite software, based on information on CEB and CSL since CEB and CSL are considered as more reliable than reports of birth histories.

### Demographic Indicators, LRHS 2005

Table 10.1 shows fertility and mortality indicators derived from reports on the number of births and

deaths that occurred in the household during the 12 months before the Survey and which was obtained from the Household Questionnaires. The number of cases recorded in the survey appears to be low, which would raise concern about the accuracy of the estimates. Nevertheless, the differences in fertility and mortality by location of the households are about as would be expected.

The LRHS 2005 sample covered a household population of 120,324 people. The sample households reported that 3,470 live births and 651 total deaths had occurred during the 12 months before the Survey. From these figures, the crude birth rate (CBR) was calculated as 28.8 per 1,000 population and the crude death rate (CDR) was calculated as 5.4 per 1000 population. The difference between these rates yields an estimate of a rate of natural increase of 2.34 per cent per annum. These estimates appear to be low when compared with those derived from the 2005 Census<sup>13</sup>. However, the differentials in birth and death rates by residence found in the Survey are as expected. The CBR and CDR are lower in urban areas and in the Northern and Central regions and higher in rural areas and in the South. Therefore it is suggested that policy makers and planners focus more on the differences in mortality by socio-economic background than on the national level of mortality.

<sup>&</sup>lt;sup>12</sup> For more accurate estimates of mortality, please see the Population and Housing Census of Lao PDR, 2005 (National Statistics Centre, 2006)

<sup>&</sup>lt;sup>13</sup> The 2005 Population and Housing census recorded 952,386 households, 5.6 million people,193,754 live births and 55,132 deaths which yield an estimated CBR of 34.6 and an estimated CDR of 9.8

#### TABLE 10.1 DEMOGRAPHIC INDICATORS DERIVED FROM INFORMATION ON BIRTHS AND DEATHS

Demographic indicators derived from information on births and deaths occurring in the household in the 12-month period before the Survey, by residence and region, LRHS 2005

Background	Household sample population	Number of live births	Number of deaths	CBR	CDR	Rate of natural increase
Residence						
Urban Rural with road Rural without road	24,075 64,415 31,834	449 1,894 1,127	108 367 176	18.7 29.4 35.4	4.5 5.7 5.5	1.42 2.37 2.99
Region						
Northern Central Southern	46,843 46,429 27,052	1,293 1,219 958	305 203 143	27.6 26.3 35.4	6.5 4.4 5.3	2.11 2.19 3.01
Total	120.324	3.470	651	28.8	5.4	2.34

## Levels of Infant and Childhood Mortality

Table 10.2 presents various estimates of infant and child mortality, specifically the neonatal mortality rate (NNMR, or probability of dying in the first month of life), post-neonatal mortality rate (PNMR, or probability of dying in the 2nd to 11th months of life), infant mortality rate (IMR, or probability of dying in the first year of life), child mortality rate (CMR, or probability of dying between exact age 1 year and exact age 5 years) and under-five mortality rate (U5MR, or probability of dying before exact age 5 years). In each case, the rate is based on 1,000 live births with the exception of child mortality which is based on the number of children between exact ages 1 and 5 years old. The mortality rates are derived from the LRHS 2005, LRHS 2000 and 2005 Census. The estimates of infant and child mortality in the LRHS 2005 were derived directly from the Child's file. The estimates from the LRHS 2005 are substantially lower than those calculated from the 2000 Survey and the 2005 Census. Because it is not certain which estimates are closer to the real situation, indirect estimates of infant and child mortality were made for the 2005 Survey, employing information on children ever born and children still living. The indirect estimates were obtained by using the Mortpak-Lite software.

From table 10.2 it is seen that the direct estimate of infant mortality rate (IMR) from the 2005 Survey (for the year 2002) is 56 deaths per 1,000 live births. When compared with the direct estimate derived from the LRHS 2000 (for the year 1997), which is 82 deaths per 1,000 live births, the speed of decline appears to be impossibly rapid. There is also a large difference with the IMR estimate as shown in the 2005 Census (70 deaths per 1,000 live births). Although infant mortality is probably declining, the estimate obtained from the LRHS 2005 may be too low. The indirect estimate of the IMR using the number of children ever born and the proportion dead from the LRHS 2005 is 63 per 1,000 live births. The number of children ever born and still living are usually better reported than the detailed information required for birth histories because they do not require any estimate of timing. Therefore, it is suggested that the indirect estimates of infant and child mortality are used.

The direct mortality estimates based on the birth histories produce indicators of the neonatal mortality rate (NNMR) and the post-neonatal mortality rate (PNMR), which are useful for examining the pattern of infant deaths by age. In table 10.2 it is seen that the IMR is 56 infant deaths per 1,000 live births, and that 26 of those deaths occur during the first month of life and 30 deaths occur in the 2nd to 11th month after birth. This means

#### Table 10.2 NNMR, PNMR, IMR, CMR and U5MR

Estimates of neonatal mortality rate (NNMR), post-neonatal mortality rate (PNMR), infant mortality rate (IMR), child mortality rate (CMR) and under-five mortality rate (U5MR) according to different Surveys, LRHS 2005, LRHS 2000 and Census 2005

Time reference		D	Direct estima	Indirect estimate* (Mortpak-Lite estimates)							
	NNMR	PNMR	IMR	CMR	U5MR	IMR	CMR	U5MR			
LRHS 2005											
0-4 years before the Survey (July 2002)	26	30	56	15	68	63*	25*	88*			
			LRH	S 2000							
0-4 years before the Survey (July 1997)	36	46	82	25	107	NA	NA	NA			
			Cens	us 2005							
Not available	NA	NA	NA	NA	NA	70	NA	98			

Note:

NNMR = probability of dying in first month of life, per 1,000 live births.

*PNMR* = probability of dying in 2nd to 11th months of life, per 1,000 live births (computed as the difference between IMR and NNMR).

*IMR* = probability of dying in first year of life, per 1,000 live births.

CMR = probability of dying between age 1-4 years, per 1,000 children aged 1-4 years old.

U5MR = probability of dying before exact age 5 years, per 1,000 live births.

NA = not available\*

It is suggested to use the indirect estimates because they are based on more accurately reported data, i.e., children ever born and children still living.

that nearly half of the infant deaths (46 per cent) are neonatal mortality.

# Infant and Child Mortality by Background Characteristics of Mothers

Table 10.3 presents estimates of infant and child mortality by background characteristics of mothers. As was noted for the crude death rate, differentials in infant and child mortality, estimated by both direct and indirect methods, are about as expected. The IMR is lower for mothers who live in urban areas (36 per 1,000 live births), live in the Central region (46 per 1,000) and have completed lower secondary (30 per 1,000) or upper secondary education (24 per 1,000). On the other hand, those who live in rural areas, especially rural areas without a road, who live in the Northern and Southern regions, and who have no education or have completed only primary school have higher infant and child mortality. Compared to infant mortality, a similar pattern of variation in child mortality levels according to background characteristics of mothers can be observed. These findings show that, although the reported level of infant and child mortality may be lower than other estimates, the pattern of differentials by women's background characteristics is consistent. Again, it is suggested to use the indirect estimates of infant and child mortality, that is, an IMR of 63 per 1,000 live births, a CMR of 25 and U5MR of 88.

# Life Expectancy Estimated from the LRHS 2005

The life expectancy at birth is estimated using the Mortpak-Lite programme, based on the indirect estimate of an infant mortality rate of 63 deaths per 1,000 live births. The estimated life expectancy equals 62.7 years and implies an increase from 59 years in 2000.

#### TABLE 10.3 INFANT AND CHILD MORTALITY BY BACKGROUND CHARACTERISTICS OF MOTHERS

Estimates of neonatal mortality rate (NNMR), post-neonatal mortality rate (PNMR), infant mortality rate (IMR), child mortality rate (CMR) and under-five mortality rate (U5MR), by background characteristics of mothers, LRHS 2005

Background characteristic		I	Direct estimat	е		Indirect estimate				
characteristic	NNMR	PNMR	IMR	CMR	U5MR	IMR	CMR			
Residence										
Urban Rural with road Rural without road	23 26 27	13 31 35	36 57 62	10 21 25	40 69 78	27 63 78	6 25 36			
Region										
Northern Central Souther <b>n</b>	31 24 22	33 22 35	64 46 57	27 12 25	80 52 72	78 44 65	36 14 26			
Education										
None Primary Lower secondary Upper secondary	26 30 14 18	37 29 16 6	64 58 30 24	26 20 8 12	78 70 37 29	70 72 30 24	30 31 7 5			

Note: The reference period is 0-4 years prior to the LRHS 2005, with a mid-point at July 2002.





# Chapter 11

# MATERNAL AND CHILD HEALTH

Maternal health services provided by medically trained personnel including delivery care, management of complications both during pregnancy, delivery and in the post natal period are essential for reducing maternal morbidity and mortality. Effective management of complications during birth can also reduce neonatal mortality since the health of the mother during pregnancy and childbirth is linked to the survival of newborns. Maternal health care consists of antenatal care, assistance during delivery, emergency obstetric care and post natal care. Information on the coverage of antenatal care for pregnant women is important since antenatal care offers an opportunity to monitor the health of the mother and to provide women with information and services which promote a healthy pregnancy and correct infant and child caring practices. Information on the place of birth and type of delivery assistance available is essential since most complications during childbirth can only be managed by skilled health personnel such as midwives, nurses or doctors within the context of a well functioning referral system. Low cost interventions can save the lives of many children. In this respect it is important to get information about the prevalence of common childhood illnesses and the care practices and treatments available.

This chapter presents information on maternal health care and indicators of child health. Information on maternal health care was obtained from the Women's Questionnaire. The first part of the chapter presents information on antenatal care and delivery care. Antenatal care covers prevalence of antenatal care, the type of assistance for antenatal care provided, the status of pregnancy when obtaining antenatal care for the first time and the use of iron pills. The section on delivery care covers the place of delivery, the type of delivery assistance and the delivery characteristics. Information on emergency obstetric care was not collected in this survey. The second part of the chapter deals with common childhood diseases. deaths. Focus is given to acute respiratory infection and diarrhoea, their prevalence and treatment. Acute respiratory infection and diarrhoea were singled out in this report for two reasons: they are leading causes of morbidity and mortality among children in many developing countries and early diagnosis and treatment can prevent many deaths.

### **Maternal Health Care**

#### Prevalence of antenatal care and type of assistance

Table 11.1 presents the percentage of births during the five years before the Survey by type of antenatal care received by the mother. The last row of the table shows that the percentage of children born to women who did not receive any antenatal care during pregnancy is high, at 71.5 per cent. Thus, about one third (28.5 per cent) of births were born to mothers who had received antenatal care. Some 15.7 per cent of the 8,238 births recorded were born to mothers who had obtained antenatal care from doctors. Nurses had provided the antenatal care for 8.7 per cent of the births, midwives for 4.3 per cent, health workers for 1.6 per cent and traditional birth attendants for 0.5 per cent. This distribution of births by type of antenatal care assistance shows that antenatal care was provided for the most part by doctors and nurses and may indicate limited availability of midwives or health workers.

Women living in the Central region were more likely to have antenatal care than those in the other regions. Doctors provided antenatal care for

#### TABLE 11.1 ANTENATAL CARE BY TYPE OF ASSISTANCE

Percentage of live births during five years before the Survey by type of assistance of antenatal care, according to background characteristics of mothers, LRHS 2005

Background	No antenatal	Тур	pe of assistar	nce of antena	tal care (mult	iple answers	5)s	Number		
characteristics	care	Doctor	Nurse	Midwife	Health worker	TBA	Other	of births		
Mother's age at birth										
< 20 20 – 34 35 – 49	71.5 69.9 82.4	15.4 16.7 9.6	9.6 8.9 5.9	3.9 4.6 2.3	1.2 1.8 0.8	0.4 0.5 0.5	0.2 0.3 0.2	1,827 5,576 835		
Birth order	Birth order									
1 2 - 3 4 - 5 6 +	59.8 68.9 81.1 85.7	23.7 16.3 10.4 7.5	12.0 9.8 6.0 4.1	5.9 4.9 2.3 2.5	1.9 1.9 1.4 0.5	0.5 0.5 0.5 0.5	0.2 0.3 0.4 0.3	2,059 3,301 1,697 1,181		
Residence										
Urban Rural with road Rural without road	24.8 71.5 91.1	47.3 14.7 4.0	22.9 8.9 2.6	11.7 4.1 1.4	2.4 1.5 1.3	0.1 0.7 0.3	0.7 0.3 0.1	1,107 4,477 2,654		
Region										
Northern Central Southern	78.0 61.6 75.1	11.8 22.6 12.2	6.8 11.9 7.4	4.8 3.3 4.7	0.9 1.9 2.1	0.1 0.5 1.1	0.1 0.4 0.4	3,086 2,856 2,296		
Education										
None Primary Lower secondary Upper secondary	90.4 70.3 35.5 11.2	4.6 15.6 36.0 60.4	3.2 8.9 20.9 24.5	1.3 4.9 10.2 8.9	0.8 1.9 2.6 2.9	0.2 0.8 0.5 0.5	0.3 0.2 0.2 1.0	3,289 3,610 955 384		
Total	71.5	15.7	8.7	4.3	1.6	0.5	0.3	8.238		

22.6 per cent of their births and nurses for 11.9 per cent. A related concern is linked to equity and accessibility of antenatal services for pregnant women who live in rural areas. Doctors and nurses may be more available in urban areas, where doctors provided antenatal care for 47.3 per cent of the births and nurses provided care for 22.9 per cent. In comparison, doctors provided antenatal care for 14.7 per cent of births to women living in rural areas with road and 4 per cent of births to women living in rural areas without road. A similar trend related to residence can be observed for antenatal care provided by nurses.

Examination by age of mother at delivery and birth order of the child shows that 82.4 per cent of births born to women aged 35-49 years did not

receive antenatal care. The percentage of births to women who did not receive antenatal care is also high for higher birth orders, that is, 81.1 per cent for children of the fourth or fifth birth order and 85.7 per cent for children of the sixth or higher order. On the other hand, the proportion of births to women not receiving antenatal care was lower for women aged 15-19 years, 71.5 per cent, and those aged 20-34 years, 69.9 per cent. Further, the proportion of births to women not receiving antenatal care was lower for first births, 59.8 per cent, compared to second and third births, 68.9 per cent.

These findings demonstrate that the coverage of antenatal care is still very low, at 30.3 per cent of births, and that antenatal care was provided for a majority of births to urban women and those with secondary education. The proportion of births to mothers who received some antenatal care increases sharply with the educational level of mothers. No antenatal care was provided for 90.4 per cent of births to women with no education, for 70.3 per cent of births to those with only primary schooling, for 35.5 per cent of births to those with lower secondary education and 11.2 per cent of births to women with upper secondary education. In summary, antenatal care was received for a higher percentage of births to younger women, of low birth order, and to women who live in urban areas and those with secondary education.

# Antenatal care by status of pregnancy at the first antenatal care visit and by number of visits

It is important that antenatal care be given to pregnant women at the early stages of pregnancy in order to provide women with information about healthy practices and services to decrease the likelihood of certain complications during delivery.

Table 11.2 and figure 11.1 present a percentage distribution of births within the five years before the Survey by the stage of pregnancy at the first visit for antenatal care. The last row of the table shows that among all births to women who obtained antenatal care, 66.2 per cent of mothers obtained antenatal care for the first time at 3-5 months of pregnancy, and 14.4 per cent at 6-7

months pregnancy. Another 6.0 per cent of mothers obtained antenatal care only after 8 months of pregnancy. About 10.9 per cent of births were to women who followed the recommendation to obtain antenatal care for the first time during the first 3 months of pregnancy.

The differentials in timing of antenatal care by demographic and background characteristics of women are mostly as expected (except for the percentage of early visits by women who live in the Southern region). The mother had obtained antenatal care before three months of pregnancy for 11.5 per cent of births to women aged 20-34 years; 11.6 per cent of first, second or third order births; 12.3 per cent of births to women who live in urban areas and 19.1 per cent of births to women with upper secondary education. These percentages are higher than for births to women aged 35-49 years (10.2 per cent), for fourth and fifth order births (7.8 per cent), for sixth or higher order births (9.5 per cent), for births to women who live in rural areas with a road (10.4 per cent) or rural areas without a road (8.9 per cent), and for births to women with no education (8.2 per cent) or only primary education (10.2 per cent).

To increase the coverage of antenatal care, it is necessary to further examine accessibility and perceived quality of services, the characteristics of women who received no antenatal care and those who made their first visit for antenatal care only after 8 months of pregnancy.



#### Figure 11.1 Percentage distribution of women at stage of pregnancy at first antenatal care

>3 months
3 - 5 months
6 - 7 months
8 + months
Don't know
missing

#### TABLE 11.2 STAGE OF PREGNANCY AT FIRST ANTENATAL VISIT

Percentage distribution of live births during five years before the Survey to women who received antenatal care by stage of pregnancy at the time of first antenatal care, according to background characteristics of mothers, LRHS 2005

	Stage of p	pregnancy at th	e first anten	atal visit			Total			
Background characteristics	< 3 months	3 – 5 months	6 – 7 months	8 + months	Don't know	Missing	Per cent	Number of births		
Mother's age at birth										
< 20 20 – 34 35 – 49	9.2 11.5 10.2	67.9 66.5 56.5	12.1 14.4 23.1	7.3 5.5 6.8	1.9 1.3 2.7	1.5 0.9 0.7	100 100 100	520 1,679 147		
Birth order										
1 2 - 3 4 - 5 6 +	11.6 11.6 7.8 9.5	68.2 68.3 61.7 51.5	13.8 12.2 18.7 23.1	4.3 6.0 7.2 11.2	1.2 1.1 3.1 3.0	0.8 0.9 1.6 1.8	100 100 100 100	828 1,028 321 169		
Residence										
Urban Rural with road Rural without road	12.3 10.4 8.9	76.7 61.3 55.1	7.7 18.6 15.3	1.7 6.8 16.5	1.2 1.4 3.4	0.5 1.4 0.8	100 100 100	832 1,278 236		
Region										
Northern Central Southern	9.9 10.9 12.2	68.6 68.9 58.0	13.4 12.1 19.9	4.9 5.9 7.3	2.2 1.5 0.9	1.0 0.7 1.6	100 100 100	678 1,096 572		
Education										
None Primary Lower secondary Upper secondary	8.2 10.2 9.1 19.1	50.0 65.0 73.7 71.3	19.3 15.9 13.0 7.6	13.6 7.1 2.6 1.5	6.0 0.9 0.8 0.6	2.8 0.9 0.8 0.0	100 100 100 100	316 1,073 616 341		
Total	10.9	66.2	14.4	6.0	1.5	1.0	100	2,346		

It is recommended that antenatal care should be provided at least four times during pregnancy: 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 (http:// www.who.int/reproductive-health/docs/antenatal\_care.pdf). Table 11.3 presents the distribution of births to women who received antenatal care by the number of antenatal visits. Among 2,346 such births, 60.7 per cent are to women who made at least four visits for antenatal care during their pregnancy. Another 27.4 per cent are births to women who made two or three antenatal visits. The high proportion of births to women making multiple visits appears to indicate that, among women who receive some antenatal care, awareness of the importance and frequency of antenatal care is high.

Differentials in the percentage of births to mothers who made at least four antenatal care visits by demographic and background characteristics of the mothers are as would be expected. At least four antenatal care visits were more likely for births to younger women, lower order births, and births to women from urban areas or from the Central region. The likelihood of making four or more visits for antenatal care were increased sharply in conjunction with the educational level of mother.

#### TABLE 11.3 NUMBER OF ANTENATAL CARE VISITS

Percentage distribution of births during the five years before the Survey to women who received antenatal care by number of antenatal visits, according to background characteristics of mothers, LRHS 2005

		Number of ante		Total						
Background characteristics	1	2-3	4+	Missing	Per cent	Number of births				
Mother's age at birth	I									
< 20 20 – 34 35 – 49	9.4 9.6 15.0	29.6 26.0 35.4	58.3 62.5 47.6	2.7 1.8 2.0	100 100 100	520 1,679 147				
Birth order										
1 2 - 3 4 - 5 6 +	6.9 8.6 16.8 19.5	24.4 25.9 35.2 36.7	67.3 63.3 44.9 42.0	1.4 2.2 3.1 1.8	100 100 100 100	828 1,028 321 169				
Residence	Residence									
Urban Rural with road Rural without road	2.4 12.3 23.3	17.7 30.3 46.2	78.6 54.9 28.8	1.3 2.6 1.7	100 100 100	832 1,278 236				
Region										
Northern Central Southern	9.1 7.6 15.2	30.1 22.8 33.0	59.7 67.2 49.1	1.0 2.4 2.6	100 100 100	678 1,096 572				
Education										
None Primary Lower secondary Upper secondary	23.4 11.5 4.5 2.1	39.2 29.8 22.4 17.9	34.2 56.7 71.1 78.9	3.2 2.1 1.9 1.2	100 100 100 100	316 1,073 616 341				
Total	9.9	27.4	60.7	2.0	100	2,346				

#### Usage of iron pills

Iron deficiency anaemia occurs when iron stores are exhausted and the supply of iron to the tissues is compromised. Pregnant women are especially at risk of resultant problems from iron deficiency anaemia which can contribute to the severity of complications during child birth such as haemorrhage and infection. It is also a cause of low birth weight of the baby. Iron deficiency anaemia among pregnant women is prevalent throughout Southeast Asia, however recent data concerning this problem does not exist for Lao PDR. To prevent iron deficiency anaemia, iron pills are usually supplied to pregnant women during their antenatal care visits. It is recommended that pregnant women take at least 90 iron pills during their pregnancy.

Table 11.4 shows the percentage of most recent births to mothers during the five years prior to the Survey whose mothers were given iron supplementation during pregnancy. The table shows, however, that more than three quarters of the births (76.4 per cent) were to women who did not take any iron pills during their pregnancy. Some 14.6 per cent of the births were to women who took fewer than 90 iron pills and only 5.9 per cent of the mothers had taken the recommended number of 90 pills or more. In other words, among the 23.5 per cent of births to women who took iron pills during pregnancy, only 25.1 per cent of the mothers had taken 90 or more pills, 62.1 per cent had taken fewer than 90 pills and another 12.8 per cent did not know how many pills they had taken.

The differentials in receiving the recommended level of iron supplementation by demographic and background characteristics of mothers are as expected. Some 15.5 per cent of mothers giving birth in the past five years in urban areas, 9.6 per cent of those in the Central region, 15.1 per cent of those with lower secondary schooling and 22.5 per cent of those with upper secondary schooling had taken at least 90 iron pills during their most recent pregnancy. Some 6.3 per cent of mothers aged 15-19 years, 6.6 per cent of those aged 20-34, 10.2 per cent having their first child and 6.6 per cent of those having their second or third child had taken at least 90 iron pills during their most recent pregnancy.

#### Place and assistance at delivery

To prevent maternal and neonatal morbidity and mortality, pregnant women should deliver their births at a hospital or within referral distance assisted by medically trained personnel. The LRHS 2005 contains questions to women about place of delivery, reasons for not having births in a hospital, and type of delivery assistance.

Table 11.5 presents the percentage distribution of births during the five years before the Survey by place of birth, according to demographic and background characteristics of mothers. Some 84.8 per cent of the births were delivered at home. About 1.8 per cent of the births occurred at the

#### TABLE 11.4 NUMBER OF IRON PILLS TAKEN DURING PREGNANCY

Percentage distribution of most recent live births during five years before the Survey by the number of iron pills taken during pregnancy, according to background characteristics of mothers, LRHS 2005

Background	Did not take	Numbe	er of iron pills t	aken during pre	gnancy	Тс	Total			
characteristics	any iron pill	< 90	90+	Don't know	Missing	Per cent	No. of births			
Mother's age at birth	1									
< 20 20 – 34 35 – 49	75.1 75.2 84.6	15.6 14.8 11.8	6.3 6.6 1.8	2.9 3.2 1.8	0.1 0.2	100 100 100	1,023 3,688 668			
Birth order										
1 2 - 3 4 - 5 6 +	64.0 74.5 84.3 87.5	20.7 15.3 10.5 9.8	10.2 6.6 3.4 1.7	4.8 3.4 1.7 1.1	0.3 0.1 0.2	100 100 100 100	1,157 2,232 1,151 839			
Residence	Residence									
Urban Rural with road Rural without road	40.5 76.8 93.7	37.0 13.9 4.5	15.5 6.1 0.7	6.8 3.0 1.0	0.2 0.1 0.1	100 100 100	838 2,889 1,652			
Region										
Northern Central Southern	81.9 68.6 79.2	11.3 16.9 16.2	4.1 9.6 3.4	2.5 4.8 1.1	0.2 0.1 0.2	100 100 100	2,028 1,964 1,387			
Education										
None Primary Lower secondary Upper secondary	92.9 75.4 51.6 32.6	5.3 16.0 26.8 36.6	1.2 5.1 15.1 22.5	0.6 3.3 6.6 8.1	0.1 0.3 0.3	100 100 100 100	1,988 2,391 702 298			
Total	76.4	14.6	5.9	3.0	0.2	100	5,379			

Central Hospital, 5.1 per cent at provincial hospitals, 4.8 per cent at district hospitals, 0.8 per cent at health centres and 0.3 per cent at private clinics. Some 2.3 per cent of births to women aged 20-24 years took place in the Central Hospital, as did 12.3 per cent of those to urban women, 5.0 per cent of those to women from the Central region, and 5.7 per cent and 15.6 per cent of those to women with lower and upper secondary education, respectively. These

# Figure 11.2 Percentage distribution of women by place of delivery



although the percentages are greater than for births

differentials are also apparent for the percentage of at the Central Hospital. births delivered in provincial and district hospitals,

#### TABLE 11.5 PLACE OF DELIVERY

Percentage distribution of births during the five years before the Survey by place of delivery, according to background characteristics of mothers, LRHS 2005

Deskansund	Place of delivery								Total		
characteristic	Central hospital	Province hospital	District hospital	Health centre	Private clinic	Home	Others	Missing	Per cent	No. of births	
Mother's age at birth											
< 20 20 – 34 35 – 49	0.9 2.3 1.0	5.0 5.6 2.8	6.4 4.5 3.6	1.3 0.7 0.5	0.5 0.3 0.2	83.1 84.5 90.5	1.4 1.3 0.5	1.4 1.0 1.0	100 100 100	1,827 5,576 835	
Birth order											
1 2 - 3 4 - 5 6 + <b>Residence</b> Urban Rural with road Rural with road Rural without road <b>Region</b> Northern Central	3.3 2.0 0.7 0.5 12.3 0.3 0.0 0.2 5.0	9.5 5.1 2.1 2.2 22.3 3.5 0.8 5.1 6.0	8.8 4.4 2.7 2.1 14.5 4.8 0.8 3.9 8.2	1.3 0.8 0.4 0.4 1.4 1.0 0.2 0.4 1.6	0.6 0.4 0.1 0.1 0.7 0.2 0.3 0.3 0.3 0.5	73.7 85.1 92.3 92.5 48.0 87.0 96.5 88.1 76.0	1.2 1.3 1.3 0.8 2.0 0.4 0.6 1.6	1.7 1.0 0.4 1.4 0.8 1.2 1.0 1.4 1.0	100 100 100 100 100 100 100 100	2,059 3,301 1,697 1,181 1,107 4,477 2,654 3,086 2,856	
Southern	0.1	4.1	1.8	0.4	0.1	91.2	1.5	0.7	100	2,296	
Education											
None Primary Lower secondary Upper secondary	0.1 1.0 5.7 15.6	1.5 3.2 15.1 30.2	1.8 4.7 11.8 14.3	0.5 0.9 1.0 1.6	0.2 0.2 0.6 1.3	92.7 88.3 63.8 35.9	1.9 0.7 0.7 0.5	1.2 1.0 1.3 0.5	100 100 100 100	3,289 3,610 955 384	
lotal	1.8	5.1	4.8	0.8	0.3	84.8	1.2	1.1	100	8,238	

Table 11.6 presents the percentage distribution of births delivered at home during the previous five years before the Survey by reasons for not delivering at a hospital. The figures show that for 75.7 per cent of the births the mother did not believe it was necessary to deliver in a hospital, while another 33.7 per cent of the births were delivered at home because of long distances from a hospital and 5.5 per cent because of cost considerations. Place of residence was an important factor in citing the distance as a reason for not delivering in a hospital. For 4.1 per cent of the births delivered at home in urban areas, distance was cited as the reason for not using a hospital, whereas distance was the main reason for 26.1 per cent of births in rural areas with a road and 51.5 per cent of births in rural areas without a road. The level of education also affected the reasons for not delivering in a hospital. Reasons of cost and of distance were lower for births to women with more education. Categories of women with a high percentage reporting that it is not necessary to deliver in a hospital may suggest that either information about the benefits of skilled delivery is insufficient and/or indicate that quality, the social and cultural acceptability and the range of maternal services provided are limited. A major issue identified by table 11.6 is that the distance involved was the main reason that one third of home deliveries had not taken place in a hospital. This suggests that women living in rural and remote areas have limited access to hospitals where skilled delivery during birth is provided.

#### TABLE 11.6 REASONS FOR NOT HAVING DELIVERY AT A HOSPITAL

Percentage distribution of live births delivered at home during the five years before the Survey by reason for not having delivery at a hospital, according to background characteristics of mothers, LRHS 2005

Background		Number of									
characteristics	Cost	Distance	Health services	Not necessary	Other	home					
Mother's age at birth	Mother's age at birth										
< 20 20 - 34 35 - 49	4.7 5.7 5.8	34.7 33.5 33.2	0.9 1.3 2.0	73.8 76.3 75.7	6.0 6.6 6.8	1,518 4,710 756					
Birth order											
1 2 - 3 4 - 5 6 +	4.8 4.7 6.3 7.5	33.3 30.7 37.4 36.6	1.0 1.3 1.5 1.3	74.4 76.5 75.7 75.3	7.3 6.8 5.4 5.9	1,518 2,808 1,566 1,092					
Residence											
Urban Rural with road Rural without road	2.5 5.6 6.1	4.1 26.1 51.5	1.7 1.2 1.3	85.7 77.0 71.6	10.9 8.2 2.9	531 3,893 2,560					
Region											
Northern Central Southern	4.6 1.7 10.7	38.7 28.8 32.3	0.2 0.1 3.8	75.4 72.9 78.9	3.9 10.7 5.3	2,719 2,170 2,095					
Education											
None Primary Lower secondary Upper secondary	7.6 4.3 2.3 2.9	42.3 29.6 16.9 13.0	1.2 1.5 0.7 1.5	73.3 77.1 80.3 76.1	4.5 6.9 12.0 15.9	3,050 3,187 609 138					
Total	5.5	33.7	1.3	75.7	6.5	6,984					

Table 11.7 shows the percentage distribution of births during the five years before the Survey by the most qualified person providing assistance with delivery. The WHO recommends that delivery should be assisted by skilled personnel in order to prevent maternal deaths. However, in Lao PDR health personnel only assisted at 18.5 per cent of all births: doctors at 8.1 per cent, nurses at 3.5 per cent, midwives at 3.0 per cent and other health workers at 3.9 per cent. Similar to the findings of the distribution of type of antenatal care assistance, the Survey found that the percentage of births assisted by a midwife was very low, supporting the indication that the availability of midwives is limited. Table 11.7 also shows that 63.4 per cent of births were delivered with the assistance of relatives. The high percentage of births assisted by relatives is probably related to the high percentage of births occurring at home, shown to be 84.8 per cent in table 11.5. About 12.1 per cent of births were assisted by traditional birth attendants (TBAs). The percentage of births assisted by TBAs was much higher in the Southern region at 30.4 per cent compared to the Northern Region and the Central regions at 4.1 per cent and 6.1 per cent respectively.

#### TABLE 11.7 TYPE OF ASSISTANCE DURING DELIVERY

Percentage distribution of live births in the five years preceding the Survey by the most qualified person providing assistance during delivery, according to background characteristics of mothers, LRHS 2005

Packground				RType of a	ssistance	e during deli	very			Number of	
characteristics	Doctor	Nurse	Mid- wife	Health worker	TBA	Relative	Other	Nobody	Missing	births	
Mother's age at birth											
< 20 20 – 34 35 – 49	7.2 8.9 4.7	4.3 3.5 2.0	4.0 2.8 2.2	3.8 4.1 3.1	11.1 12.3 13.2	63.8 62.7 67.8	2.1 1.6 2.3	3.0 3.5 3.7	0.8 0.6 1.1	1,827 5,576 835	
Birth order											
1 2 - 3 4 - 5 6 +	15.0 8.2 3.5 2.5	6.0 3.4 1.9 2.1	5.1 3.0 1.7 1.2	4.7 4.3 3.9 1.4	11.8 12.5 12.1 11.7	52.6 62.9 71.5 72.1	1.4 1.7 1.7 2.6	2.3 3.5 3.4 5.3	1.2 0.6 0.4 0.9	2,059 3,301 1,697 1,181	
Residence											
Urban Rural with road Rural without road	35.7 5.3 1.4	11.7 3.4 0.3	10.6 2.5 0.6	5.2 4.1 3.0	8.2 14.8 9.2	26.6 63.0 79.5	0.4 2.0 2.0	0.9 4.1 3.3	0.6 0.8 0.7	1,107 4,477 2,654	
Region											
Northern Central Southern	5.1 14.3 4.6	3.7 4.7 1.9	2.5 4.0 2.4	3.2 3.0 5.9	4.1 6.1 30.4	74.0 61.2 52.0	2.2 2.3 0.5	4.1 4.0 1.7	1.1 0.4 0.7	3,086 2,856 2,296	
Education											
None Primary Lower secondary Upper secondary	2.0 5.9 22.1 46.1	1.4 3.3 8.0 13.5	0.8 2.6 9.4 9.1	1.8 4.9 6.7 5.7	7.7 16.3 12.8 8.9	80.4 60.1 36.9 15.9	1.9 2.0 0.8 0.5	3.2 4.3 2.2	0.9 0.6 1.2 0.3	3,289 3,610 955 384	
Total	8.1	3.5	3.0	3.9	12.1	63.4	1.8	3.4	0.7	8,238	

#### **Characteristics of births**

Table 11.8 shows the percentage distribution of births by perception of the mothers on their timing, whether the birth was on time, premature or late. This information can provide an indication of pregnancy complications, although the questionnaire does not include a question on pregnancy difficulties or complications during delivery. The findings should be treated cautiously as the information on whether the birth was on time, premature or late is according to the mother's perception and not stated by skilled personnel, which may affect the accuracy of the data. Table 11.8 shows that a large proportion of births (78.2 per cent) occurred to women who said that the birth was on time, that is, at about 9 months and 11 days. Only 9.8 per cent of births were reported to be premature (born before 9 months and 11 days) and another 8.9 per cent were reported to be late births.

Babies weighing less than 2.5 kg at birth are considered to be of low birth weight. Studies have reported that babies with low birth weight are three times more likely to die in the first month of life (neonatal mortality). Ideally, a reproductive health survey should ask whether the baby was weighed at birth so that respondents are able to report the ex-

#### TABLE 11.8 TIMING OF BIRTHS

Percentage distribution of births during the five years before the Survey by timing of delivery, according to background characteristics of mothers, LRHS 2005

De alama an d		Timing of birt	hs according to I	mothers		Total					
characteristics	On time	Premature	Late	Don't know	Missing	Per cent	No. of births				
Mother's age at birth											
< 20 20 - 34 35 - 49	74.7 78.7 82.3	14.3 8.9 5.9	7.1 9.3 10.2	3.0 2.4 1.2	1.0 0.7 0.5	100 100 100	1,827 5,576 835				
Birth order											
1 2 - 3 4 - 5 6 +	74.0 78.6 81.0 79.9	14.6 9.5 7.1 6.3	7.8 8.5 9.2 11.5	2.6 2.8 2.2 1.5	1.1 0.6 0.5 0.8	100 100 100 100	2,059 3,301 1,697 1,181				
Residence											
Urban Rural with road Rural without road	73.4 79.5 77.9	14.3 8.7 9.8	10.8 9.0 7.8	1.1 2.0 3.7	0.4 0.8 0.8	100 100 100	1,107 4,477 2,654				
Region											
Northern Central Southern	70.1 81.8 84.5	14.9 6.9 6.6	10.5 8.5 7.2	3.5 2.3 1.1	0.9 0.6 0.6	100 100 100	3,086 2,856 2,296				
Education											
None Primary Lower secondary Upper secondary	76.0 80.3 78.2 76.0	10.2 9.1 10.3 12.2	8.7 8.7 9.3 10.9	4.2 1.4 0.9 0.5	0.9 0.5 1.3 0.3	100 100 100 100	3,289 3,610 955 384				
Total	78.2	9.8	8.9	2.4	0.7	100	8,238				

act birth weight. However, as a high percentage of births in Lao PDR occur at home, the likelihood that the babies are weighed is very low. Because the babies were not weighed, the quality of information on their size depends on the statements of the respondents. This report presents the perception of respondents concerning their judgment about whether the size of the baby was large, average or small. Table 11.9 shows the percent distribution of births during the five years before survey by the size of the baby. It indicates that 40.2 per cent of the births were considered to be of average size and 24.6 per cent were considered small. In 28.3 per cent of the cases, the respondent was unsure whether the babies were of average size, or were larger or smaller than usual.

#### TABLE 11.9 SIZE OF CHILD AT BIRTH

Percentage distribution of births during the five years before the Survey by size of baby, according to background characteristics of mothers, LRHS 2005

De elverre un el						То	tal
characteristics	Large	Average	Small	Don't know	Missing	Per cent	No. of births
Mother's age at birt	h						
< 20 20 – 34 35 – 49	4.3 5.7 5.4	39.7 40.4 39.9	27.3 24 23.1	27.2 28.4 30.2	1.4 1.6 1.4	100 100 100	1,827 5,576 835
Birth order							
1 2 - 3 4 - 5 6 +	5.3 5.8 4.4 5.3	42.4 40.0 40.1 37.3	28.1 23.8 22.1 24.5	22.2 28.8 32.2 31.7	2 1.5 1.2 1.3	100 100 100 100	2,059 3,301 1,697 1,181
Residence							
Urban Rural with road Rural without road	9.8 5.5 3.3	50.3 39.5 37.2	26.4 25 23.3	12.1 28.4 34.9	1.4 1.7 1.4	100 100 100	1,107 4,477 2,654
Region							
Northern Central Southern	6.3 5.1 4.4	41.5 40.4 38.3	20.8 19.2 36.5	30 34.2 18.6	1.5 1.1 2.2	100 100 100	3,086 2,856 2,296
Education							
None Primary Lower secondary Upper secondary	3.7 5.7 7.2 11.2	35.1 41.2 48.8 52.9	21.7 26.7 25.9 26.8	37.9 25 15.9 6.8	1.5 1.3 2.2 2.3	100 100 100 100	3,289 3,610 955 384
Total	5.3	40.2	24.6	28.3	1.6	100	8,238

### **Childhood Diseases**

Research has shown that acute lower respiratory tract infection, primarily pneumonia, is a common cause of morbidity and death among children less than 5 years old. Pneumonia is characterised by a cough with difficult or rapid breathing and chest indrawing.

The LRHS 2005 collected information on prevalence of fever, cough, and cough with breathing difficulty for children under five years old, and the treatment provided. Other important information concerning child health was collected from the questions on prevalence of diarrhoea and its treatment.

#### Acute respiratory infection (ARI)

From the last row in table 11.10 it is seen that 21.0 per cent of children aged less than 5 years had fever in the two weeks before the survey. Some 22.9 per cent had a cough and, included among them, 11.0 per cent of children had cough with rapid breathing, which could be a symptom of ARI. The prevalence of fever declined gradually with increasing age of the children. Some 29.7 per cent of children aged 6-11 months had a fever, as did 27.3 per cent of those aged 12-23 months, 22.2 per cent of those aged 36-47 months and 14.8 per cent of those at least four years old. The highest prevalence of fever was reported among children in the Southern

region (30.8 per cent). High prevalence of fever was also found among children of sixth or higher birth order (23.0 per cent) and among children of mothers aged 15-19 years (24.5 per cent). A high prevalence of fever was found among children of women with only primary education (24.0 per cent) and those with only lower secondary education (23.8 per cent).

There was comparatively little variation in the percentage of children having a cough, or a cough with rapid breathing, in the two weeks before the Survey by demographic characteristics of either the children or their mothers. The little variation that did occur roughly paralleled the findings on prevalence of fever. A cough with rapid breathing may be a symptom of pneumonia, and it was reported for 11.0 per cent of all the children. Especially high prevalence of a cough with rapid breathing was reported for children aged 6-11 months (17.5 per cent) and the children of mothers aged 15-19 years (14.9 per cent). It is notable that women living in rural areas without a road reported a low prevalence of a cough with rapid breathing for their children (7.6 per cent), as did women with no education (8.2 per cent). These figures may imply that rural women and those with no education were less likely to report minor symptoms of illness among their children.

The Survey found that 76.1 per cent of children who had a cough received treatment for the cough.

#### TABLE 11.10 PREVALENCE OF FEVER AND COUGH AND TREATMENT RECEIVED (Continues on next page)

Percentage of living children under five years of age who had fever or cough during the two weeks before the Survey, and percentage of children who received treatment for cough, by background characteristics of children and mothers, LRHS 2005

De alcana un d	Pe	rcentage of child	lren with:		Percentage of children	
characteristics	Fever	Cough	Cough with rapid breathing	No. of children	who received treatment for cough	
Child's age (months)						
< 6	23.8	23.1	10.8	715	68.5	
6 – 11	29.7	33.5	17.5	639	75.7	
12 – 23	27.3	27.9	12.1	1,247	77.3	
24 – 35	22.2	24.1	11.6	1,398	79.5	
36 – 47	19.3	22.1	11.0	1,340	75.7	
48 +	14.8	17.0	8.6	2,383	75.9	

#### TABLE 11.10 PREVALENCE OF FEVER AND COUGH AND TREATMENT RECEIVED (Continued)

Percentage of living children under five years of age who had fever or cough during the two weeks before the Survey, and percentage of children who received treatment for cough, by background characteristics of children and mothers, LRHS 2005

	Pe	ercentage of child	lren with:		Percentage of children
characteristics	Fever	Cough	Cough with rapid breathing	No. of children	who received treatment for cough
Sex of child					
Male Female	20.8 21.2	22.7 23.0	11.1 11.0	3,919 3,803	76.3 75.9
Birth order					
1 2 - 3 4 - 5 6 +	20.4 21.1 20.2 23.0	23.1 22.1 21.4 27.0	12.5 10.7 9.8 11.2	1,935 3,110 1,607 1,070	77.9 76.5 76.5 72.0
Mother's age					
15 – 19 20 – 24 25 – 29 30 – 34 35 – 39 40 – 44 45 – 49	24.5 21.5 20.4 20.0 21.6 23.3 14.7	28.2 23.5 21.1 23.4 21.7 27.2 18.8	14.9 11.4 10.9 10.6 11.5 4.7	404 1,943 2,334 1,502 961 408 170	73.7 80.0 74.8 73.6 76.1 75.7 78.1
Residence					
Urban Rural with road Rural without road	20.7 22.6 18.4	23.4 25.4 18.3	14.2 12.3 7.6	1,067 4,193 2,462	84.0 78.9 65.2
Mothers' education					
None Primary Lower secondary Upper secondary	17.0 24.0 23.8 20.2	18.9 26.1 24.8 21.0	8.2 12.7 14.1 12.1	3,055 3,376 919 372	66.4 78.5 88.2 85.9
Region					
Northern Central Southern	16.8 17.7 30.8	19.8 19.8 30.8	8.4 12.0 13.4	2,859 2,718 2,145	73.9 76.6 77.6
Total	21.0	22.9	11.0	7,722	76.1

Table 11.11 shows the type of health facility providing treatment to children who had a cough during the two weeks before the Survey. It shows that 25 per cent of the children who had a cough had been treated with drugs from a pharmacy, which indicates self-medication. Some 12.2 per cent were brought to a health centre, 10.4 per cent were treated at the district hospital, 2.3 per cent were brought to private clinics and only 1.8 per cent were brought to the Central Hospital. Traditional healers treated 11.7 per cent of children with a cough. The proportion of children with a cough treated by traditional healers was higher for fourth and fifth children (14.3 per cent) and sixth or higher birth order children (29.1 per cent). Women aged 40- 49 years old are by and large more likely to bring their sick child to a traditional healer than younger women. Women who had finished only primary and only lower secondary schooling were more likely to treat their ill child by buying medicine obtained from the pharmacy (33.4 per cent and 30.9 per cent, respectively).

#### TABLE 11.11 TYPE OF FACILITIES FOR TREATMENT OF COUGH

Percentage of living children who had cough during the two weeks before Survey receiving treatment by specified health facilities, according to background characteristics of children and mothers, LRHS 2005

Paskaround	Health facilities for cough treatment (multiple answers)								No. of			
characteristics	Central hosp.	Prov./ district hosp.	Health centre	Private clinic	Pharmacy	Traditional healer	Others	Missing	children			
Child's age (months)												
< 6 6 - 11 12 - 23 24 - 35 36 - 47 48 +	2.2 4.0 3.5 0.0 3.7 0.5	13.3 15.9 20.8 12.3 7.5 4.9	22.1 19.8 29.4 15.1 7.5 2.7	4.4 11.9 1.7 4.1 1.2 0.0	24.3 39.7 64.0 30.2 17.5 9.2	6.6 23.8 15.6 23.3 8.7 5.4	11.1 27.8 22.5 23.3 16.2 6.5	16.0 0.0 0.0 37.6 70.7	113 162 269 268 224 308			
Sex of child												
Male Female	0.9 2.8	12.8 7.8	13.3 11.0	3.1 1.4	27.4 22.5	8.4 15.2	15.9 14.3	18.2 25.1	679 665			
Birth order												
1 2 - 3 4 - 5 6 +	3.7 1.6 0.0 1.8	13.9 9.8 11.2 3.6	6.5 12.5 13.2 20.0	2.8 3.3 1.0 0.0	18.6 23.9 30.6 30.9	6.5 8.1 14.3 29.1	10.2 13.6 14.3 30.9	37.7 27.3 15.5 0.0	348 525 263 208			
Mother's age												
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	0.0 1.0 4.1 0.0 1.7 0.0 0.0	15.4 18.4 8.1 6.9 6.9 10.1 0.0	15.4 12.6 10.1 13.8 15.5 10.1 0.0	10.3 2.9 2.7 1.1 0.0 0.0 0.0	51.5 27.1 21.6 29.8 12.1 35.3 8.7	0.0 11.6 10.8 4.6 12.1 40.4 43.3	10.3 16.4 15.5 12.6 15.5 10.1 26.0	-2.9 10.1 27.0 31.1 36.3 0.0 22.1	84 365 368 259 159 84 25			
Residence												
Urban Rural with road Rural without road	11.1 1.0 0.0	27.7 11.9 2.9	0.0 21.0 4.9	5.5 3.3 0.0	16.6 39.2 9.7	0.0 13.9 11.2	3.7 15.8 15.5	35.4 0.0 55.9	210 840 294			
Mothers' education												
None Primary Lower secondary Upper secondary	0.8 1.2 4.8 9.7	5.3 11.5 21.4 24.2	11.1 13.4 11.9 0.0	0.8 4.3 0.0 4.8	16.5 33.4 30.9 14.5	11.5 14.6 0.0 0.0	15.2 16.4 4.8 4.8	38.7 5.3 26.2 41.9	384 692 201 67			
Region												
Northern Central Southern	1.0 2.8 1.1	5.1 13.4 13.4	8.7 12.3 16.7	0.5 3.4 3.3	22.0 19.0 37.9	9.2 5.6 26.8	19.4 6.1 20.1	34.0 37.4 0.0	418 413 513			
Total	1.8	10.4	12.2	2.3	25.0	11.7	15.1	21.6	1,344			

#### Diarrhoea

two weeks before the Survey. The table indicates that the prevalence of diarrhoea among children is lower than for fever and cough. About 5.7 per cent of the children under 5 years old were re-

Table 11.12 shows the percentage of children under 5 years old who had diarrhoea during the

#### TABLE 11.12 PREVALENCE OF DIARRHOEA

Percentage of living children under five years of age who had diarrhoea in the two weeks before the Survey and percentage who received treatment for diarrhoea, according to background characteristics of children and mothers, LRHS 2005

Background	Pre	evalence	Percentage who received	No. of childron	
characteristics	Diarrhoea	Diarrhoea with blood	treatment for diarrhoea	No. of children	
Child's age (months)					
< 6	8.0	0.8	61.4	715	
6 – I I 12 – 22	7.2	0.6	/3.9	639	
12 - 25	6.5	0.6	70.5	1,247	
24 - 55 36 - 47	4.6	0.5	72.5	1,398	
48 +	3.3	0.4	63.3	2,383	
Sex of child					
Male	6.0	0.6	70.6	3,919	
Female	5.4	0.5	71.8	3,803	
Birth order					
1	4.5	0.4	70.5	1,935	
2 – 3	5.3	0.5	72.3	3,110	
4 – 5	6.5	0.6	69.2	1,607	
6 +	7.8	1.0	72.3	1,070	
Mother's age					
15 – 19	6.7	0.2	70.4	404	
20 – 24	5.6	0.6	76.9	1,943	
25 – 29	5.8	0.6	69.6	2,334	
30 – 34	5.1	0.4	71.4	1,502	
35 – 39	6.1	0.6	61.0	961	
40 - 44	6.4	1.0	73.1	408	
45 – 49	5.3	0.6	88.9	170	
Residence					
Urban	3.7	0.3	84.6	1,067	
Rural with road	6.1	0.7	77.7	4,193	
Rural without road	5.9	0.4	56.2	2,462	
Mothers' education					
None	6.7	0.6	66.3	3,055	
Primary	5.5	0.6	73.3	3,376	
Lower secondary	3.9	0.5	83.3	919	
Upper secondary	3.5	0.3	84.6	372	
Region					
Northern	6.2	0.5	67.2	2,859	
Central	4.7	0.7	81.4	2,718	
Southern	6.3	0.5	66.7	2,145	
Total	5.7	0.6	71.2	7,722	

ported to have suffered from diarrhoea and 0.6 per cent of the children had diarrhoea accompanied by blood discharge. The findings show that it is the younger children who are mostly affected by diarrhoea. Eight per cent of the children less than six months of age and 8.5 per cent of those aged 12-23 months had had diarrhoea. A high prevalence of diarrhoea (7.8 per cent) was reported for children of the sixth or higher birth order.

There were no population groups with exceptionally high prevalence of diarrhoea among children under five years of age. Marginally higher prevalence was noted for children who live in rural areas with a road (6.1 per cent), in rural areas without a road (5.9 per cent), in the Northern region (6.2 per cent) and in the Southern region (6.3 per cent). Among the children whose mothers have no education, the prevalence was 6.7 per cent. The pattern of differentials in the prevalence of diarrhoea with blood in the stool by demographic and background characteristics of the children and mothers was similar to the pattern for diarrhoea alone. Among children who suffered diarrhoea in the two weeks before the survey, 71.2 per cent were reported to have had treatment.

From table 11.13 it may be seen that the pharmacy is the most likely facility from which to obtain treatment for diarrhoea (35.4 per cent), meaning that one third of the children were self-medicated (treated by their family), most likely without the advice or assistance of health personnel. Some 14.6 per cent of the children were treated by the

#### TABLE 11.13 FACILITIES FOR DIARRHOEA TREATMENT

Percentage of living children under five years of age who had diarrhoea by type of facility for treatment, according to background characteristics of mothers, LRHS 2005

De al anno 1		Тур	e of facility (m	ultiple respon	ses are possible	e)		
characteristics	Central hospital	Prov./district hosp.	Health centre	Private clinic	Pharmacy	Traditional healer	Others	Number
Mother's age								
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 <b>Residence</b> Urban	0.0 1.2 6.4 0.0 2.8 0.0 0.0 18.2	15.8 22.9 12.8 10.9 11.1 10.5 0.0 45.5 12.6	15.8 15.7 16.0 21.8 25.0 10.5 0.0	10.5 3.6 4.3 1.8 0.0 0.0 0.0 9.1 3.5	52.6 33.7 34.0 47.3 19.4 36.8 12.5 27.3 41.2	10.5 20.5 24.5 20.0 25.0 10.5 37.5	2.3 3.7 4.0 2.7 3.5 2.3 8.3 0.6 3.7	19 83 94 55 36 19 8 33
Rural without road	0.0	7.3	12.2	0.0	24.4	39.0	4.3	82
Education								
None Primary Lower secondary Upper secondary	1.5 1.5 6.7 18.2	9.6 13.9 30.0 45.5	19.9 16.1 16.7 0.0	1.5 5.1 0.0 9.1	29.4 40.1 43.3 27.3	27.2 19.7 6.7 9.1	5.4 3.2 0.7 0.8	136 137 30 11
Region								
Northern Central Southern	1.7 4.8 1.1	8.4 22.9 13.3	14.3 21.0 16.7	0.8 5.7 3.3	36.1 32.4 37.8	31.9 10.5 20.0	5.5 1.6 3.5	119 105 90
Total	2.5	14.6	17.2	3.2	35.4	21.3	3.5	314

District Hospital and 17.2 per cent by a health centre. Traditional healers were used for treatment of 21.3 per cent of the children. About 2.5 per cent of the children with diarrhoea were brought to the Central Hospital for treatment.

Table 11.14 shows the type of diarrhoea treatment received. It shows that 70.7 per cent of children

who suffered from diarrhoea were given pills, 26.8 per cent were treated with traditional medicine, 18.2 per cent were given oral rehydration therapy (ORT), 12.1 per cent were given injection and 14.6 per cent were given intravenous treatment. The total number of responses indicates that about 40 per cent of the children received more than one type of treatment.

#### TABLE 11.14 TREATMENT OF DIARRHOEA

Percentage of living children under five years of age who had diarrhoea in the two weeks before the Survey who received specified types of treatment, according to background characteristics of mothers, LRHS 2005

		(Multiple	responses are	possible)							
Background characteristics	Pills	Injection	Injection	ORT	Traditional medicine	Others	Number				
Mother's age											
15 – 19 20 – 24 25 – 29 30 – 34 35 – 39 40 – 44 45 – 49 <b>Residence</b> Urban	73.7 73.5 69.1 72.7 77.8 57.9 37.5 72.7 70.0	10.5 14.5 16.0 9.1 11.1 0.0 0.0 9.1	15.8 15.7 20.2 5.5 19.4 5.3 0.0	31.6 21.7 17.0 14.5 11.1 26.3 0.0 45.5	10.5 27.7 25.5 20.0 27.8 47.4 62.5 9.1 23.1	5.3 1.2 3.2 5.5 2.8 0.0 0.0 6.1	19 83 94 55 36 19 8 33				
Rural without road	69.5	12.0	6.1	7.3	42.7	3.0 1.2	82				
Education											
None Primary Lower secondary Upper secondary	64.7 72.3 90.0 72.7	11.0 10.9 20.0 18.2	14.7 14.6 13.3 18.2	11.0 19.7 26.7 63.6	30.9 27.7 13.3 0.0	1.5 4.4 3.3 0.0	136 137 30 11				
Region											
Northern Central Southern	65.5 78.1 68.9	8.4 16.2 12.2	7.6 27.6 8.9	9.2 33.3 12.2	30.3 15.2 35.6	5.0 2.9 0.0	119 105 90				
Total	70.7	12.1	14.6	18.2	26.8	2.9	314				




# Chapter 12

# BREASTFEEDING

# **Prevalence of Breastfeeding**

Breastfeeding affects an infant's health, development and growth and is a highly encouraged practice. Exclusive breastfeeding during the first six months of a baby's life is particularly important and after the first 6 months, it is recommended to start introducing nutritionally adequate, safe and appropriate complementary foods, in conjunction with continued breastfeeding (http://www.who. int/inf-pr-2001/en/note2001-07.html). Breastfeeding is also highly beneficial for the mother. Early initiation of breastfeeding stimulates breast milk production and causes the uterus to retract which can reduce post partum blood loss. Moreover, women who breastfeed have a reduced risk of ovarian cancer and premenopausal breast cancer (ORC\Marco, 2000 Demographic and Health Survey, Cambodia). Mothers who are breastfeeding their babies are also more likely to be amenorrheic, and thus insusceptible to pregnancy. Although there is some discussion of the impact, it is widely believed that breastfeeding delays pregnancy.

Table 12.1 shows the percentage of most-recent children under five years of age who were currently being breastfed at the time of the Survey. It shows that about 90 per cent of babies less than 9 months old were being breastfed by their mothers. This prevalence decreases gradually as the age of the children increases and drops significantly to 62.9 per cent when the children are 18-23 months old. Many children are fully weaned by the age of 24 months, as only 31.0 per cent of those aged 24-29 months and 30.9 per cent of those aged 30-36 months were still being breastfed. The percentage of babies being breastfed decreases steadily with the increase in mothers' age. Some 78.9 per cent of babies of mothers aged 15-19 years were being breastfed but the proportion decreases to 56.2 per cent for mothers aged 20-24 years and continues to decrease until only 29.7 per cent of the babies of mothers aged 45-49 years were being breastfed.

The table also shows that babies of urban women (31.0 per cent), women who finished lower secondary school (34.9 per cent) and upper secondary school (38.3 per cent), and women in the Central region (43.3 per cent) were less likely to be being currently breastfed than the babies of women in rural areas with a road (49.6 per cent), those in rural areas without a road (57.7 per cent), those with no education (59.0 per cent) or only primary education (46.6 per cent), and those who live in the Northern region (50.2 per cent) or the Southern region (56.0 per cent).

Table 12.2 shows that the median duration of breastfeeding is 16.6 months. Median duration of breastfeeding generally increases with the age of the mother. Urban mothers and those with more education breastfed for significantly shorter durations than did rural mothers and those with little or no education. The median duration of breastfeeding was only 15.3 months for urban women, 15.9 months for women with only lower secondary schooling and 14.4 months for those with upper secondary education (note that there is a considerable overlap between categories; i.e. the most educated women are most likely to live in urban areas). Only small variations in the duration of breastfeeding can be observed by region.

Modernisation and living in urban areas, with many options for baby food, such as milk powder, and opportunities for women to work outside of their home apparently shorten the average duration of breastfeeding.

### TABLE 12.1 PERCENTAGE CURRENTLY BEING BREASTFED

Percentage distribution of most recent births during the five years before the Survey by whether they were being breastfed at the time of Survey or not, according background characteristics of children and mothers, LRHS 2005

De alemanu d'ale au atoristica		Currently being breastf	ed	
Background characteristics	Yes	No	Missing	Number of births
Child's age (months)				
0 – 1	94.0	2.6	3.4	233
2 – 3	92.2	2.5	5.3	245
4 – 5	89.3	5.2	5.5	272
6 – 7	91.8	4.5	3.8	267
8 – 9	92.4	3.6	4.1	196
10 – 11	83.0	13.9	3.1	194
12 – 13	82.6	12.3	5.1	235
14 – 15	79.6	17.7	2.7	221
16 – 17	79.0	18.2	2.8	214
18 – 23	62.9	33.6	3.6	506
24 – 29	31.0	65.2	3.8	532
30 – 36	30.9	65.5	3.7	573
Sex of child				
Male	48.5	47.7	3.8	2,757
Female	49.9	45.9	4.2	2,622
Mother's age				
15 – 19	78.9	18.2	2.9	341
20 – 24	56.2	40.2	3.6	1,300
25 – 29	46.3	49.2	4.6	1,550
30 – 34	44.0	52.3	3.7	1,027
35 – 39	43.1	52.6	4.3	696
40 - 44	42.2	53.8	4.1	320
45 – 49	29.7	67.6	2.8	145
Residence				
Urban	31.0	62.4	6.6	838
Rural with road	49.6	46.9	3.5	2,889
Rural without road	57.7	38.8	3.5	1,652
Mothers' education				
None	59.0	38.1	2.9	1,988
Primary	46.6	49.6	3.8	2,391
Lower secondary	34.9	60.0	5.1	702
Upper secondary	38.3	52.0	9.7	298
Region				
Northern	50.2	46.1	3.8	2,028
Central	43.3	52.2	4.4	1,964
Southern	56.0	40.4	3.6	1,387
Total	49.2	46.9	4.0	5,379

### TABLE 12.2 MEDIAN DURATION OF BREASTFEEDING

Median duration of breastfeeding by background characteristics of mothers, LRHS 2005

Background characteristics	Median duration of breastfeeding (months)
Age	
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	13.7 15.0 16.4 17.3 17.2 18.1 19.3
Residence	
Urban Rural with road Rural without road	15.3 16.8 17.1
Education	
None Primary Lower secondary Upper secondary	17.5 16.5 15.9 14.4
Region	
Northern Central Southern	15.9 16.5 17.8
Total	16.6

Table 12.3 presents a percentage distribution of children less than five years old who were previously breastfed by reasons for stopping the breastfeeding. It shows that half of the children (50.1 per cent) were stopped being breastfed because their mothers weaned them, 23.3 per cent of them were stopped because their mothers work, and 4.4 per cent of them were stopped because their mothers became pregnant again. Another 6.1 per cent of children were stopped being breastfed because their mothers could not produce breast milk, and in 6.3 per cent of the cases the child refused. The fact that breastfeeding was stopped for 17.7 per cent of the mothers aged 15-19 years because the child died is an indication of high infant mortality among children born to teenage women.

### TABLE 12.3 REASONS FOR STOPPING BREASTFEEDING (Contines on next page)

Percentage distribution of most recent live births during five years before Survey who were previously breastfed by reasons for stopping breastfeeding, according to background characteristics of mothers LRHS 2005

Packaround				Reasons fo	or stopping	breastfeed	ng			No.of
characteristics	Child died	Child ill or weak	No milk	Mother works	Mother studies	Child refuses	Became pregnant	Weaning	Others	children
Age										
15 – 19	17.7	0.0	3.2	22.6	0.0	8.1	14.5	29.0	4.8	62
20 – 24	5.9	1.9	6.7	20.8	0.0	8.0	7.3	48.0	1.3	523
25 – 29	3.7	1.8	5.0	26.6	0.1	5.6	5.0	49.3	2.8	762
30 – 34	4.7	2.2	6.7	23.7	0.0	5.8	2.6	51.4	3.0	537
35 – 39	3.8	3.6	7.7	21.3	0.0	6.0	2.2	53.6	1.9	366
40 – 44	9.3	2.9	5.8	20.4	0.0	5.8	2.3	50.0	3.5	172
45 – 49	3.1	0.0	5.1	21.4	0.0	6.1	1.0	60.2	3.1	98
Residence										
Urban	1.5	2.7	6.7	26.2	0.0	7.3	2.1	50.1	3.4	523
Rural with road	5.2	2.1	5.4	22.8	0.1	5.8	5.0	51.6	2.1	1,356
Rural without road	7.8	1.9	7.2	22.0	0.0	6.7	5.2	46.8	2.5	641

#### TABLE 12.3 REASONS FOR STOPPING BREASTFEEDING (Continued)

Percentage distribution of most recent live births during five years before Survey who were previously breastfed by reasons for stopping breastfeeding, according to background characteristics of mothers LRHS 2005

De alemane d				Reasons fo	or stopping	breastfeed	ing			No. of
characteristics	Child died	Child ill or weak	No milk	Mother works	Mother studies	Child refuses	Became pregnant	Weaning	Others	children
Education										
None Primary Lower secondary Upper secondary	7.8 4.9 2.1 1.3	2.0 1.9 2.9 3.2	5.3 6.0 5.9 11.6	20.8 24.4 24.2 24.5	0.0 0.0 0.2 0.0	6.1 6.6 5.2 8.4	7.8 3.5 1.9 1.9	48.3 49.8 55.1 47.7	2.0 3.0 2.4 1.3	758 1,186 421 155
Region										
Northern Central Southern	5.8 3.6 6.6	2.5 1.6 2.7	6.8 5.5 6.3	25.6 23.9 18.4	0.1 0.0 0.0	4.9 6.2 8.8	4.7 4.0 4.8	46.5 53.3 50.2	3.2 2.0 2.3	934 1,026 560
Total	5.1	2.1	6.1	23.3	0.0	6.3	4.4	50.1	2.5	2,520

## **Breastfeeding with Food Sup**plementation

As was mentioned earlier, exclusive breastfeeding with no other food or water supplementation especially during the first six months after birth, is very important for a baby's health. Table 12.4 indicates, however, that only 3.9 per cent of the most recent births during the five years before the Survey who were currently being breastfed were being breastfed exclusively at the time of the Survey. The other 96.2 per cent were receiving food supplementation. Higher proportions of children less than six months were being breastfed exclusively: 12.8 per cent of those aged 0-1 months, 11.5 per cent of those aged 2-3 months and 9.9 per cent of those aged 4-5 months. There is also an indication that other food was given very early to the babies, however, as only 6.7 per cent of the children of women aged 15-19 years were being breastfed exclusively. The percentage of children being breastfed exclusively generally declines by age of mother. A higher-than-average proportion of children born to urban women are being breastfed exclusively (6.7 per cent). There is no other consistent pattern of exclusive breastfeeding according to background characteristics of mothers. The table demonstrates that there is no sex preference in feeding practices between girls and boys.

A more detailed analysis of child feeding is presented in table 12.5, which shows the percentage of most recent births during the five years before the Survey currently being breastfed who are being given specified types of food supplementation. The figures confirm that food supplementation is given very early in life. Besides breast milk, 70.3 per cent of babies less than two months old were given plain water, 39.7 per cent were given tinned or fresh milk, 37.4 per cent were given other liquids and 20.1 per cent were given solid or mushy food. Among those two or three months old, 79.2 per cent were given plain water, 38.5 per cent were given tinned or fresh milk, 45.6 per cent were given other liquids and 16.4 per cent were given solid or mushy food.

The findings presented in this chapter indicate that exclusive breastfeeding is not common among Lao women. Food supplementation to breast milk is given at very early ages, in many cases in the first one or two months of the baby's life, which might harm the health or hamper the growth and development of the baby.

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### TABLE 12.4 PATTERN OF BREASTFEEDING

# Percentage distribution of most recent births during five years before Survey who are currently being breastfed by type of breastfeeding, by background characteristics of children and mothers, LRHS 2005

Background characteristics	Exclusively breastfed	Breastfed with supplementation	No. of children
Child's age (months)			
0 - 1 2 - 3 4 - 5 6 - 7 8 - 9	12.8 11.5 9.9 3.3 1.7	87.2 88.5 90.1 96.7 98.3	219 226 243 245 181
10 - 11 12 - 13 14 - 15 16 - 17 18 - 23 24 - 29	0.7 0.6 1.8 0.7 0.7	99.4 100 99.4 98.2 99.3 99.4	161 194 176 169 318 165
30 - 30	2.3	97.7	177
Male Female	3.9 3.8	96.1 96.2	1,337 1,309
Mother's age			
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	6.7 4.4 3.9 2.7 1.7 4.4 2.3	93.3 95.6 96.1 97.4 98.3 95.6 97.7	269 730 717 452 300 135 43
Residence			
Urban Rural with road Rural without road	6.2 3.6 3.6	93.9 96.4 96.4	260 1,433 953
Mother's education			
None Primary Lower secondary Upper secondary	3.2 4.5 4.9 1.8	96.8 95.5 95.1 98.3	1,172 1,115 245 114
Region			
Northern Central Southern	5.4 4.5 1.2	94.6 95.5 98.8	1,018 851 777
Total	3.9	96.2	2,646

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### TABLE 12.5 TYPE OF FOOD SUPPLEMENTATION

Percentage of most recent live births during the five years before the Survey currently being breastfed who are receiving specified types of supplementation, according to background characteristics of children and mothers, LRHS 2005

	Туре о	of food supplementa	tion (multiple ansv	wers)	
Background characteristics	Plain water	Tinned/fresh milk	Other liquid	Solid/mushy food	No. of children
Child's age (months)					
0 – 1	70.3	39.7	37.4	20.1	219
2 – 3	79.2	38.5	45.6	16.4	226
4 – 5	80.3	44.0	44.4	22.2	243
6 – 7	90.2	31.8	54.3	35.1	245
8 – 9	96.1	44.2	51.9	38.7	181
10 – 11	95.0	31.7	55.3	60.3	161
12 – 13	95.9	28.9	56.2	61.3	194
14 – 15	92.6	35.2	56.3	64.2	176
16 – 17	96.5	34.9	53.9	61.5	169
18 – 23	95.9	30.8	54.4	65.1	318
24 – 29	97.0	26.1	51.5	74.6	165
30 - 36	96.1	23.7	49.7	76.8	177
37 +	97.7	20.9	51.7	76.2	172
Sex					
Male	91.5	32.8	51.4	51.8	1,337
Female	89.2	34.2	50.1	48.0	1,309
Mother's age					
15 – 19	86.6	34.9	50.2	39.4	269
20 – 24	89.3	36.7	49.5	44.7	730
25 – 29	90.0	31.1	48.7	48.5	717
30 – 34	91.6	33.9	54.7	54.9	452
35 – 39	94.7	31.7	53.7	61.7	300
40 – 44	90.4	30.4	51.1	60.7	135
45 – 49	95.4	27.9	48.8	60.5	43
Residence					
Urban	90.0	41.2	56.9	43.9	260
Rural with road	91.5	34.3	51.2	48.1	1,433
Rural without road	88.8	30.2	48.4	54.4	953
Mother's education					
None	88.7	31.8	51.6	49.4	1,172
Primary	91.5	31.6	49.2	53.3	1,115
Lower secondary	91.4	41.2	50.6	43.7	245
Upper secondary	94.7	52.6	57.9	36.0	114
Region					
Northern	86.1	35.2	47.8	46.4	1,018
Central	90.3	27.6	56.6	45.1	851
Southern	96.1	37.7	48.1	59.9	777
Total	90.4	33.5	50.8	49.9	2,646

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# Chapter 13

# **KNOWLEDGE OF STIS AND HIV/AIDS**

Acquired immune deficiency syndrome (AIDS) is caused by the human immunodeficiency virus (HIV) that weakens the immune system making the body susceptible to and unable to recover from other diseases (ORC/Macro 2000). At present, the prevalence of HIV in Lao PDR is low, at about 0.08 per cent of the adult population. However, as economic activities, transport and communications expand, human interaction with neighbouring countries is unavoidable. The Government of Lao PDR is committed to strengthen the HIV prevention efforts in order to maintain the low prevalence in the country. The National Committee for the Control of AIDS was restructured in 2003, and the 2002-2005 National Strategic Plan and National Plan of Action were enacted. The Plan of Action includes activities to expand condom promotion, an awareness campaign, peer education, life skills training in schools, community-based interventions, IEC, mass media campaigns etc. Efforts have also been made to increase awareness through open discussions about HIV/AIDS and other sensitive issues among politicians and the general public (National Committee for the Control of AIDS, 2006).

The Lao Reproductive Health Survey 2005 collected information on knowledge of sexually transmitted infections and on HIV/AIDS in section 8 of the Women's Questionnaire and section 4 of the Men's Questionnaire. Respondents were asked whether they had ever heard about STIs and HIV /AIDS, the sources of their information, and knowledge about specific STIs. They were also asked about how HIV transmits and if it is possible to recognise people with HIV/AIDS.

This chapter presents findings from the above questions and compares the findings for women and men.

### **Knowledge of STIs**

### Knowledge of STIs and sources of information

Table 13.1 presents the percentage of women who have heard of STIs by specified sources of information, according to background characteristics of the respondents.

The last row of the table shows that more than half of the women respondents (55.8 per cent) said that they have heard of STIs. There is little variation in these answers by age of respondents, except that a slightly higher proportion (about 58 per cent) of women aged 25-39 years knew about these infections, compared with only 53 per cent of the women aged 15-19 years, 55.9 per cent of those aged 20-24 years and 40-44 years, and only 51 per cent of those aged 45-49 years. There was no difference in knowledge of STIs by marital status. Although it is not clear the degree to which a positive answer to the question "have you ever heard" can be interpreted as "having knowledge", these findings can still be useful as a basis for policy making to strengthen the campaign against STIs.

The highest percentages of respondents who have ever heard about STIs are found among women who live in urban areas (78.1 per cent) or the Central region (69.5 per cent) and among women with lower secondary education (73.7 per cent) or upper secondary education (82.9 per cent). These findings suggest that, although the coverage of information may have been fairly high, with more than half of the women respondents (55.8 per cent) reporting that they had heard of STIs, the dissemination of such information is concentrated in urban areas and among women with secondary

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school education. This impression is supported by the evidence that the proportion of respondents living in rural areas without a road who had ever heard of STIs was only 31.8 per cent, and only 34 per cent of women with no education knew of STIs. It is also possible that information on STIs is disseminated in rural areas but that women with no education find it difficult to access the information.

Data on the sources of women's knowledge of STIs may help to explain their levels of knowledge. Table 13.1 shows that health workers were the primary source of information on STIs. Some 30.8 per cent of all women had heard of STIs from health workers, which may reflect the results of the government's efforts to create better awareness on STIs. Although the level of knowledge of STIs was low among women who live in rural areas without a road and those with no education, health workers were their most important source of such information, reported by 20.0 per cent and 19.5 per cent of them, respectively. Overall, radio (cited by 26.2 per cent of women) was the second most important source of information, followed by television (22.0 per cent). Women who live in rural areas without a road, live in the Southern region, or have no education have less access to radio and television. Among women living in rural areas without a road, 17.8 per cent had heard of STIs from radio and 4.4 per cent from television. For women in the Southern region, the percentages were 13.8 for radio and 15.6 for television. A low percentage (13.5 per cent) who has ever heard of STIs from television is also observed among women living in the Northern region. For women with no education, the percentages were 17.7 for radio and 6.4 for television. While radio was not the most important source of information on STIs for any group of women except those aged 15-19 years, it was a significant source for women with secondary school education and those living in urban areas, rural areas with a road or in the Central region. Television was by far the most important source of information for urban women and those with upper secondary education, and was the most important source for never-married women and those living in the Central region.

The role of school teachers in disseminating infor-

mation about STIs is low overall, with only 6.1 per cent of women respondents mentioning them. However, teachers were cited as a source of this information by 20.4 per cent of women aged 15-19 years, 21.2 per cent of never-married women, 12.4 per cent of urban women, 11.0 per cent of those with lower secondary education and 27.0 per cent of those with upper secondary education. These findings seem to show that the more recently introduced provision of reproductive health information in schools is on the right track and may continue to increase the knowledge of young people. The role of friends and relatives is also important as mentioned by 18.2 per cent of women.

The role of community in disseminating information about STIs is still low and was mentioned by 12 per cent of the women. The idea of providing information through the community for example by village volunteers might be an important source, especially for women who lack access to radio or television, those who live in rural and remote areas and those who have no or limited education. However, the table shows that the highest percentages of women obtaining information from the community are found in urban areas (20.9 per cent), in the Central region (16.4 per cent), and among women with lower secondary (17.8 per cent) and upper secondary education (18.5 per cent).

Table 13.2 presents the percentages of men who have ever heard of STIs from specified sources of information by background characteristics. The proportion of men who have heard of STIs (70.0 per cent) is greater than that of women (55.8 per cent). The pattern of differentials by background is slightly different from that of women; in the case of women, there was no difference in knowledge by marital status. High percentages of men who have heard about STIs were found among those aged 35-39 years (74.2 per cent), those aged 40-44 years (74.6 per cent), urban men (86.5 per cent), those living in rural areas with a road (73.0), those in the Central region (80.5 per cent), those with only lower secondary education (82.5 per cent) and those with upper secondary education (93.6 per cent).

Higher percentages of men than of women gained knowledge of STIs from most sources of informa-

TABLE 13.1 KNOWLEDG	E AND SOURCE	S OF INFORM	TION ABOUT	STIS WOMEN								
Percentage of wome	an who have	ever heard c	f STIs by spe	scified source	s of informa	ition, accordi	ing to backg	round charact	eristics, LRH	S 2005		
Background characteristics	Ever heard of STIs	Radio	ΣL	Newspaper /magazines	Posters	Health workers	School teachers	Community	Friends/ relatives	Work	Others	No. of women
Age												
15 – 19	53.0	25.8	20.2	4.4	9.3	23.8	20.4	8.2	17.0	0.7	0.5	2,549
20 - 24	55.9	27.1	23.6	4.3	7.8	29.7	6.2	11.7	18.7	2.3	0.6	2,178
25 – 29	57.1	26.3	22.6	4.0	8.7	32.3	2.5	13.3	18.4	1.8	0.6	2,201
30 – 34	58.7	27.4	21.5	4.7	8.1	34.8	1.7	13.7	20.0	1.9	1.2	1,902
35 – 39	57.6	24.5	22.0	3.3	9.6	34.6	1.2	13.9	18.9	1.3	1.0	1,828
40 - 44	55.9	26.8	22.0	3.4	8.1	32.8	1.4	12.8	18.0	1.4	1.1	1,374
45 – 49	51.3	24.8	22.6	3.4	7.0	30.5	1.1	12.1	16.0	1.2	0.5	1,042
Marital status												
Never-married	56.1	24.2	25.8	5.3	11.2	24.1	21.2	9.3	19.0	1.9	0.4	2,846
Married	56.0	27.0	21.0	3.7	7.8	33.0	1.9	12.8	18.0	1.5	0.8	9,714
Divorced	56.1	20.6	23.0	2.4	5.6	23.0	1.7	13.6	20.9	1.4	1.0	287
Widowed	43.6	22.5	15.9	2.2	7.5	27.8	0.9	9.3	16.3	0.0	0.4	227
Residence												
Urban	78.1	28.1	47.4	10.2	20.6	37.8	12.4	20.9	27.8	4.2	1.3	3,022
Rural with road	57.8	29.5	19.3	2.6	5.6	33.0	5.4	11.7	17.7	0.9	0.7	6,704
Rural without road	31.8	17.8	4.4	1.3	3.4	20.0	1.8	4.6	10.7	0.4	0.4	3,348
Region												
Northern	46.7	27.9	13.5	3.5	8.6	29.8	4.3	9.1	14.8	1.1	0.6	5,052
Central	69.5 47.0	31.7	34.1	4.5	9.6	32.6	8.2	16.4	22.6 16 F	1. 8	0.0	5,080
Southern	47.7	13.8	0.01	4	C.0	29.4	ů.	y.4	C.01	<u>}-</u>	0.0	2,942
Education												
None	34.0	17.7	6.4	0.7	3.3	19.5	0.7	6.6	10.6	0.5	0.3	3,770
Primary	56.4	28.0	20.0	2.5	7.2	34.2	2.5	11.8	18.8	0.7	0.8	5,714
Lower secondary	73.7	33.7	35.8	7.1	12.7	38.5	11.0	17.8	22.9	2.5	1.0	2,123
Upper secondary	83.9	30.0	49.7	14.0	20.7	35.1	27.0	18.5	28.7	6.3	1.5	1,467
Total	55.8	26.2	22.0	4.0	8.5	30.8	6.1	12.0	18.2	1.5	0.7	13,074

-		No. of men		263	330	508	556	534	405	379	222	7		427	2,829	22	39		702	1,753	862		1,312	1,280	725		479	1,572	766	500	3,317
		Others		1.5	1.5	1.2	1.4	1.7	2.7	2.4	3.2	0.0		1.6	1.9	0.0	0.0		2.1	1.9	1.3		2.0	1.8	1.5		0.8	1.6	2.6	2.2	1.8
	005	Work		0.8	2.7	1.2	2.9	5.8	4.0	4.5	3.6	4.4		2.3	3.5	0.0	5.1		8.1	2.4	1.3		1.9	4.1	4.6		0.6	1.2	6.0	8.4	3.3
	tics, LRHS 2	Friends/ relatives		25.5	24.2	21.1	28.6	24.5	21.0	21.1	18.0 5 5 5 5	0.02		30.9	22.5	13.6	18.0		29.5	24.2	16.8		21.5	27.0	20.7		13.4	21.4	29.1	30.6	23.4
	nd characteris	Community		7.2	7.3	14.6	15.3	19.1	15.8	14.8	14.0 12 E	0.41		8.7	15.0	9.1	18.0		22.7	13.4	8.9		12.3	18.1	10.8		6.5	13.4	16.3	20.6	14.2
	to backgrou	School teachers		30.0	8.8	3.7	3.8	2.4	2.7	1.6	0.0	0.0		24.4	2.7	4.6	0.0		8.6	6.0	1.9		4.7	6.6	4.8		0.6	1.7	9.1	16.2	5.5
	n, according	Health workers		24.0	30.0	33.7	35.3	40.6	41.5	41.7	39.6	/:IC		27.4	37.8	13.6	23.1		39.9	38.2	28.9		36.1	34.5	39.0		19.8	37.3	39.4	42.8	36.1
	f informatio	Posters		12.9	8.2	9.5	9.5	13.5	15.6	11.6	8.6 7.7 F	0.21		13.1	11.0	18.2	7.7		23.4	8.6	7.1		11.3	11.7	10.6		3.1	8.5	15.1	22.0	11.3
STIS: MEN	fied sources of	Newspaper /magazines		7.2	7.0	5.3	7.4	11.1	11.1	11.6	9.5	0.7		7.5	8.9	4.6	5.1		20.7	6.2	3.9		7.3	9.0	10.5		0.2	4.5	11.6	25.4	8.7
TION ABOUT	Tls by specif	Σ		25.5	23.3	24.2	24.1	30.5	32.4	26.4	25.2 21 7	7.17		29.3	26.1	27.3	20.5		54.4	24.5	7.5		15.0	39.7	23.7		6.1	19.4	36.3	53.0	26.4
S OF INFORMA	er heard of S	Radio		32.7	37.9	42.1	38.1	38.0	44.0	38.8	43.2 C AC	24.2		33.7	40.1	9.1	25.6		38.9	41.8	33.1		41.2	43.6	26.3		19.0	38.2	46.0	49.4	38.9
GE AND SOURCE	who have eve	Ever heard of STIs		65.8	67.0	67.5	71.8	74.2	74.6	70.4	66.2 60 0	0.00		70.0	70.4	50.0	48.7		86.5	73.0	50.3		62.0	80.8	65.2		35.5	60.9	82.5	93.6	70.0
TABLE 13.2 KNOWLED	Percentage of men	Background characteristics	Age	15 – 19	20 - 24	25 – 29	30 – 34	34 – 39	40 – 44	45 – 49	50 – 54 55 - 50	ec - cc	Marital status	Never-married	Married	Divorced	Widowed	Residence	Urban	Rural with road	Rural without road	Region	Northern	Central	Southern	Education	None	Primary	Lower secondary	Upper secondary	Total

tion, except for school teachers. Some 38.9 per cent of men said that they obtained information on STIs from radio, compared with only 26.2 per cent of women. Health workers were the second most important source of information for men and were cited by 36.1 per cent of them, compared with 30.8 per cent of women (table 13.1 and 13.2). Overall, more women (6.1 per cent) than men (5.5 per cent) had heard about STIs from school teachers but among those aged 15-19 years 30.0 per cent of the men and only 20.4 per cent of the women cited teachers as a source of information. On the other hand, more women than men with secondary education named teachers as a source of information about STIs. Among those with lower secondary education, 17.8 per cent of women and 9.1 per cent of men cited teachers as a source. Among those with upper secondary education, 18.5 per cent of women and 16.2 per cent of men cited teachers. For men as for women, the community was a more important source of information in urban areas. Among all respondents, 18.2 per cent of women but only 14.2 per cent of men cited the community as a source of information about STIs.

TABLE 13.3 KNOWLEDGE OF SPECIFIC STIS: WOMEN (Continues on next page)

### **Knowledge of specific STIs**

Table 13.3 shows the percentage of women who have ever heard of specific STIs, by background characteristics of the women. Gonorrhoea is the best known of the STIs; it was mentioned by 43.9 per cent of women. Some 22.9 per cent of the women had heard about warts and 4.0 per cent knew about syphilis. Some 11.5 per cent of women mentioned other types of STIs and 5.8 per cent stated that they did not know about any STIs.

Women were most likely to know about gonorrhoea among the STIs, including 66.9 per cent of those in urban areas, 53.8 per cent of those in the Central region, 59.9 per cent of those with only lower secondary education and 70.4 per cent of those with upper secondary education. In contrast, only 22.2 per cent of women in rural areas without a road and 24.6 per cent of those with no education have ever heard about this infection. The patterns of knowledge of syphilis and warts by background characteristics are similar to those of knowledge of gonorrhoea.

Percentage of wo characteristics, LF	omen who ha RHS 2005	ve ever hea	rd of STIs by se	elected types	of STIs, acco	ording to bac	ckground						
Background characteristics	Ever heard of STIs	Syphilis	Gonorrhoea	Warts	Others	Don't know	No. of women						
Age													
15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49	53.0 55.9 57.1 58.7 57.6 55.9 51.3	4.6 4.5 3.2 3.3 4.2 2.8	41.0 43.4 46.8 46.6 44.8 43.4 39.8	21.5 22.3 24.9 23.7 23.2 23.9 19.6	10.8 11.9 11.5 11.6 11.9 11.9 11.0	6.3 5.9 5.3 6.0 5.9 6.3 4.2	2,549 2,178 2,201 1,902 1,828 1,374 1,042						
Marital status													
Never-married Married Divorced Widowed	56.1 56.0 56.1 43.6	6.3 3.4 4.9 1.3	43.9 44.1 44.3 35.2	24.7 22.5 22.6 14.5	13.0 11.2 11.8 6.6	5.9 5.8 5.9 4.4	2,846 9,714 287 227						
Residence													
Urban Rural with road Rural without road	78.1 57.8 31.8	9.0 2.9 1.7	66.9 44.3 22.2	40.8 21.4 9.6	17.1 12.6 4.4	4.4 6.3 6.0	3,022 6,704 3,348						

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### TABLE 13.3 KNOWLEDGE OF SPECIFIC STIS: WOMEN (Continued )

Percentage of women who have ever heard of STIs by selected types of STIs, according to background characteristics, LRHS 2005

Background characteristics	Ever heard of STIs	Syphilis	Gonorrhoea	Warts	Others	Don't know	No. of women
Region							
Northern Central Southern	46.7 69.5 47.9	2.8 4.4 5.5	37.5 53.8 37.7	19.7 27.0 21.2	8.2 17.9 6.2	6.1 5.9 5.1	5,052 5,080 2,942
Education							
None Primary Lower secondary Upper secondary	34.0 56.4 73.7 83.9	1.4 2.9 6.4 11.9	24.6 43.8 59.9 70.4	9.9 22.0 34.2 43.3	5.4 11.2 16.0 22.2	5.5 6.1 5.7 5.2	3,770 5,714 2,123 1,467
Total	55.8	4.0	43.9	22.9	11.5	5.8	13,074

Table 13.4 shows the percentage of men who have heard of specific STIs. It indicates that more men than women have heard of these infections.

Sixty per cent of men have heard of gonorrhoea, compared with only 43.9 per cent of women. Some 35.8 per cent of men have heard about warts, compared with 22.9 per cent of women, and 5.4 per cent of men have heard of syphilis, compared with 4.0 per cent of women.

The patterns of knowledge by background characteristics of men are similar to those for women, but with higher percentages of men who have heard about the infections. The percentage of men who have heard of each of the STIs is higher in urban areas, in the Central region and among men with more education.

# Knowledge of HIV/AIDS, Sources of Information and HIV Transmission

The LRHS 2005 asked all women and men respondents whether they had heard of HIV/AIDS and the source from which they had heard. Respondents were also asked whether they knew how the HIV is transmitted and whether it is easy to recognise people with HIV.

### Knowledge of HIV/AIDS and sources of information

Table 13.5 presents the percentage of all women respondents who have ever heard of HIV/AIDS and the percentage who have heard about it from specified sources of information. Some 70.4 per cent of women respondents in the LRHS 2005 stated that they had heard of HIV/AIDS. This figure is higher than the 55.8 per cent of the same women who had heard STIs (table 13.1). The pattern of knowledge of HIV/AIDS according to background characteristics of respondents is similar to that found for the knowledge of STIs. Table 13.5 shows that the percentage of women who have heard of HIV/AIDS is the lowest among those who live in rural areas without a road, at only 46.3 per cent, compared with 90.5 per cent for women in urban areas and 73.4 per cent for those in rural areas with a road. By region, a lower proportion of women who live in the Northern (59.2 per cent) have heard of HIV/AIDS than of those who live in the Southern (67.2 per cent) or in the Central region (83.3 per cent). As would be expected, knowledge of HIV/AIDS increases with level of education of women. Only 45.9 per cent of those with no education had heard of it, compared with 74.4 per cent of those with only primary education, 86.9 per cent of those with only lower secondary education and 93.8 per cent of

### TABLE 13.4 KNOWLEDGE OF SPECIFIC STIS: MEN

Percentage of male respondents who have ever heard of STIs by selected types of STIs, according to background characteristics, LRHS 2005

Background characteristics	Ever heard of STIs	Syphilis	Gonorrhoea	Warts	Others	Don't know	No. of men
Age							
15 – 19 20 – 24 25 – 29 30 – 34 34 – 39	65.8 67.0 67.5 71.8 74.2	7.6 7.0 3.7 5.4 7.1	57.4 54.9 58.3 62.6 62.0	30.0 34.2 35.8 34.4 38.8	14.8 9.7 10.8 12.2 15.4	3.0 5.2 3.7 4.7 4.9	263 330 508 556 534
40 - 44 44 - 49 50 - 54 55 - 59	74.6 70.4 66.2 60.8	6.2 4.0 2.3 3.3	63.2 62.3 59.5 49.2	41.7 34.3 36.9 28.3	17.8 13.5 10.4 13.3	3.5 4.0 2.3 5.0	405 379 222 120
Marital status							
Never-married Married Divorced Widowed	70.0 70.4 50.0 48.7	8.7 5.0 4.6 2.6	61.1 60.2 40.9 43.6	36.3 35.8 31.8 30.8	14.3 13.1 13.6 7.7	3.5 4.3 0.0 0.0	427 2,829 22 39
Residence							
Urban Rural with road Rural without road	86.5 73.0 50.3	11.4 4.6 2.2	80.9 62.0 38.9	56.3 35.3 20.2	16.7 14.6 7.7	1.9 4.0 6.2	702 1,753 862
Region							
Northern Central Southern	62.0 80.8 65.2	4.3 4.9 8.1	52.1 71.3 54.3	28.4 43.8 34.9	10.4 19.8 6.8	5.2 2.8 4.4	1,312 1,280 725
Education							
None Primary Lower secondary Upper secondary	35.5 66.9 82.5 93.6	1.0 3.2 8.0 12.6	26.7 55.0 73.6 86.6	14.6 29.8 45.4 60.2	3.8 12.4 16.6 19.6	5.2 4.8 3.1 2.2	479 1,572 766 500
lotal	/0.0	5.4	60.0	55.8	13.2	4.1	3,317

those with upper secondary education. There are essentially no differences in knowledge of HIV/ AIDS by age group or marital status, except for a low level reported by the few widowed women.

Some 39.1 per cent of women respondents in the Survey had heard of HIV/AIDS from health workers, the most common source of information reported by the women. High proportions of married women (41.3 per cent), women aged 25-44 years (more than 40 per cent), urban women (44.6 per cent), women in rural areas with a road (42.6 per cent), women with only primary education (44.2 per cent) and women with only lower secondary (45.6 per cent) or upper secondary education (42.3 per cent) had heard about HIV/AIDS from health workers. Although levels of HIV/ AIDS knowledge were low among women living in rural areas without a road and among women with no education, health workers were the most important source of the information for them. Radio can be a valuable means of disseminating information about HIV/AIDS to women who lack access to other sources. Among women in rural areas and those with no education, nearly as many knew about HIV/AIDS from the radio as from

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	d characteristics, LRHS 2005 and LRHS 2000	ity Friends/ Work Others No. of women		24.1 0.8 1.1 2,549	24.7 1.9 0.9 2,178	25.3 1.8 1.2 2,201	27.6 1.7 1.6 1,902	24.9 1.6 1.9 1,828	22.9 1.8 1.7 1,374	22.6 1.1 0.6 1,042		26.1 2.1 1.1 2,846	24.2 1.4 1.3 9,714	31.0 0.3 1.0 287	24.2 0.4 0.4 227		35.7 4.1 1.8 3,022	24.1 0.8 1.3 6,704	16.2 0.5 0.7 3,348		19.8 1.1 1.1 5,052	28.6 1.9 1.6 5,080	26.6 1.7 0.9 2,942		16.3 0.5 0.5 3,770	26.5 0.6 1.3 5,714	28.7 2.3 1.9 2,123	34.3 6.6 2.1 1,467	24.8 1.5 1.3 13,074		
	ng to backgrou	nool Comm chers		4.4 8.6	.9 12.	.5 13.	.2 13.	.3 14.	.2 13.	.8 13.		4.7 10.	.7 13.	.8 14.	.3 7.9		4.3 21.	.7 11.	.9 5.1		.1 8.6	.7 15.	.0 12.		.5 7.0	.5 12.	3.0 16.	0.0 18.	.7 12.		
	nation, accordi	Health Sch vorkers teac		32.6 24	37.7 5	40.4 2	43.6 1	42.2 1	41.5 1	38.3 0		32.9 24	41.3 1	33.1 2	30.8 1		44.6 14	42.6 5	27.2 1		36.8 5	39.8 8	41.9 6		26.5 0	44.2 2	45.6 13	42.3 30	39.1 6	000	000
z	urces of inforr	Posters		14.4	12.8	13.2	13.7	14.1	13.2	9.7		16.8	12.4	11.1	9.3		28.4	10.5	5.2		11.5	16.6	10.6		5.3	12.6	19.3	27.7	13.3		
HIV/AIDS: WOME	oy specified so	Newspaper /magazines		5.6	5.6	5.3	4.9	3.9	5.0	4.0		6.8	4.6	5.2	2.2		12.2	3.5	1.6		4.3	5.8	5.1		0.7	3.5	8.9	16.6	5.0		
ATION ABOUT I	of HIV/AIDS k	Ę		28.3	29.6	28.9	28.1	28.1	27.9	29.6		35.2	26.8	30.7	21.1		58.1	26.5	6.2		17.0	43.9	22.3		8.8	27.8	45.0	59.1	28.6		
ES OF INFORM	ever heard	Radio		33.6	34.3	32.9	34.3	31.4	35.0	32.0		31.9	34.1	27.5	30.0		34.0	37.4	25.0		35.9	40.2	17.5		23.6	36.5	40.0	36.9	33.4		
GE AND SOURCE	en who have	Ever heard of HIV/AIDS		69.4	71.1	68.9	72.9	71.0	71.5	67.3		72.6	70.1	71.3	55.5		90.5	73.4	46.3		59.2	83.3	67.2		45.9	74.4	86.9	93.8	70.4		
TABLE 13.5 KNOWLED	Percentage of wom	Background characteristics	Age	15 – 19	20 – 24	25 – 29	30 – 34	35 – 39	40 – 44	45 – 49	Marital status	Never-married	Married	Divorced	Widowed	Residence	Urban	Rural with road	Rural without road	Region	Northern	Central	Southern	Education	None	Primary	Lower secondary	Upper secondary	Total		

health workers. The second most important source of information for all women is the radio (33.4 per cent), followed by television (28.6 per cent), relatives or friends (24.8 per cent), posters (13.3 per cent), the community (12.3 per cent), school or teachers (6.7 per cent) and lastly newspapers or magazines.

The accessibility of information by television requires that much of the population has access to TV sets but that is not the case in many parts of Lao PDR. Only 6.2 per cent of women in rural areas without a road had heard about HIV/AIDS from television. The proportions were also low among women with no education (8.8 per cent) and those in the Northern region (17.0 per cent) and Southern region (22.3 per cent).

Posters about HIV/AIDS were a significant source of information for never-married women (16.8 per cent), women who live in urban areas (28.4 per cent) and women who had finished only lower secondary (19.3 per cent) and upper secondary school (27.7 per cent). It may be recommended that posters should be more widely placed in rural areas and designed to reach women with a low level of education. Information from the community had informed 12.3 per cent of women about HIV/ AIDS but had reached higher proportions of those in urban areas and those with more education. It is highly recommended that the role of community leaders and village volunteers be strengthened in providing HIV/AIDS information in rural and remote areas that have low access to radio, television and health workers.

The role of schools and teachers in disseminating information on HIV/AIDS was low in general but important for particular groups of women. School and teachers were cited as a source of such information by 24.4 per cent of women aged 15-19 years, 24.7 per cent of never-married women, 14.3 per cent of urban women, 13.0 per cent of those with only lower secondary education and 30.0 of those with upper secondary education. Friends and or relatives are also a significant source of information.

Tables 13.6 shows the percentage of male respondents who had heard of HIV/AIDS. A higher proportion of men (84.9 per cent) than of women (70.4 per cent) had heard of HIV/AIDS. A higher proportion of men than women had heard from each of the sources except schools and teachers, from whom only 4.6 per cent of all men had obtained such information. Schools and teachers were important sources of information about HIV/AIDS for men aged 15-19 years, however. For this age group, a higher proportion of men (31.9 per cent) than of women (24.4 per cent) mentioned schools and teachers as a source of their information, probably indicating that more men than women in this age group are currently in school.

While the level of knowledge of HIV/AIDS is higher among men than women for all sources except schools and teachers, the differentials in knowledge by background characteristics are similar between men and women. Men and women who live in urban areas, live in the Central region, and have at least secondary education are more likely to have heard of HIV/AIDS.

The last row of table 13.5 and table 13.6 compares awareness about HIV/AIDS between the LRHS 2000 and the LRHS 2005. Table 13.5 shows that the proportion of women who have heard of HIV was virtually unchanged from 69.3 per cent in 2000 to 70.4 per cent in 2005. The proportion of men increased somewhat, from 77.5 per cent in 2000 to 84.9 per cent in 2005 (table 13.6). The proportion of both women and men knowing about HIV from health workers increased significantly, and there were smaller increases in awareness because of posters and school teachers. On the other hand, the proportion of women and men knowing about HIV/AIDS from radio, television, newspapers and magazines declined between 2000 and 2005, perhaps indicating a reduction in the government's information campaign or less use of media as a tool for dissemination of information.

### **Knowledge about HIV transmission**

The principal ways of HIV transmission are sexual intercourse, blood transfusion, sharing syringes and infection from mother to child during childbirth or breastfeeding. In the LRHS 2005, all women were asked if they knew ways in which HIV was transmitted and ideally, all respondents should be able to identify the principal means/ways of transmission.

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TABLE 13.6 KNOWLEDG	E AND SOURCE	S OF INFORMA	TION ABOUT H	IIV/AIDS: MEN								
Percentage of male re	spondents w	ho have ever	heard of HIV	/AIDS by speci	ified sources	of informatic	n, according	to background	characterist	ics, LRHS 200	)5 and LRHS	000
Background characteristics	Ever heard of HIV/AIDS	Radio	2L	Newspaper /magazines	Posters	Health workers	School teachers	Community	Friends/ relatives	Work	Others	No. of men
Age												
15 – 19	82.9	45.6	33.1	8.4	18.3	30.0	31.9	10.7	30.4	0.4	0	263
20 - 24	82.4	47.0	29.4	5.5	16.7	38.5	8.2	12.7	31.8	3.0	0	330
25 – 29	83.1	53.5	31.5	7.3	16.5	44.5	2.2	11.2	23.0	2.2	0	508
30 – 34	84.5	48.7	30.8	7.9	15.5	44.4	1.8	12.6	31.7	3.6	0	556
34 – 39	86.5	45.1	36.1	12.4	20.2	48.5	2.1	14.8	25.8	5.1	0	534
40 - 44	89.1	52.4	37.0	13.6	22.0	45.7	0.7	12.8	24.4	4.0	0	405
44 – 49	86.8	49.3	34.8	13.2	19.0	53.8	1.3	14.0	23.8	3.7	0	379
50 - 54	85.6	54.1	36.9	9.5	18.5	49.1	0.5	13.1	23.9	1.8	0	222
55 – 59	75.8	40.8	30.0	5.8	18.3	40.0	0.8	11.7	22.5	1.7	0	120
Marital status												
Never-married	83.8	44.5	37.9	7.3	19.7	32.3	24.4	11.7	34.2	2.3	0	427
Married	85.4	50.1	32.8	10.1	18.1	46.9	1.7	13.1	25.6	3.3	0	2,829
Divorced	68.2	22.7	31.8	4.6	9.1	31.8	4.6	0.0	31.8	0.0	0	22
Widowed	64.1	38.5	25.6	2.6	15.4	30.8	0.0	7.7	18.0	2.6	0	39
Residence												
Urban	94.3	45.4	66.5	22.9	33.9	43.3	8.4	18.5	31.9	6.6	0	702
Rural with road	87.8	51.3	31.6	6.6	14.3	47.6	4.7	11.8	27.4	3.0	0	1,753
Rural without road	71.2	47.5	10.1	5.1	13.6	40.0	1.4	10.2	20.9	0.8	0	862
Region												
Northern	78.1	54.7	18.7	9.0	16.4	44.7	3.8	11.1	21.6	2.0	0	1,312
Central	91.9	52.6	49.3	9.8	20.7	41.4	6.1	14.2	30.8	3.6	0	1,280
Southern	84.7	32.6	32.0	10.5	17.2	50.6	3.5	13.4	28.7	4.6	0	725
Education												
None	55.7	30.1	9.4	0.8	7.3	28.8	0.4	8.4	17.8	0.2	0	479
Primary	85.4	50.1	26.2	5.2	15.3	48.0	1.0	12.4	26.4	1.3	0	1,572
Lower secondary	94.3	56.0	44.7	12.9	21.9	48.3	8.1	14.5	30.4	5.4	0	766
Upper secondary	96.8	53.4	62.0	27.2	32.4	44.4	14.6	15.6	30.4	8.4	0	500
Total	84.9	49.1	33.4	9.7	18.2	44.7	4.6	12.8	26.7	3.2	0	3,317
					LRH	S 2000						
Total	77.5	53.7	39.8	10.9	13.9	34.6	4.0	13.9	30.6	3.9	22.8	3,060

Table 13.7 presents the percentage of women who knew about specified means of transmission, by background characteristics. The table shows that 63.4 per cent of respondents know that HIV can be transmitted through sexual intercourse with people who have HIV. The percentage is relatively high among women who live in urban areas (84.4 per cent) and in the Central region (76.5 per cent), and among women with lower secondary (81.0 per cent) and upper secondary education (89.0 per cent). Much lower percentages were recorded for women who live in rural areas without a road (38.1 per cent), who live in the Northern region (52.4 per cent) and Southern region (59.7 per cent), and women who have no education (38.3 per cent). Almost no variation was found among women by age group. This finding appears to indicate that knowledge about transmission of HIV through sexual intercourse is widely spread among all ages of women.

Some 42.2 per cent of women know that sharing syringes is a means of transmission of HIV. This route of transmission was known by 48.0 per cent of never-married women, 62.9 per cent of urban women, 57.8 per cent of those with only lower secondary education and 68.2 per cent of those with upper secondary education. Blood transfusion as a possible means of transmission is known to 29.3 per cent of women, and infection from mother to child is known to 18.6 per cent of the women.

### TABLE 13.7 KNOWLEDGE ABOUT HOW HIV IS TRANSMITTED: WOMEN

Percentage of women who know specified means of HIV transmission, according to background characteristics, LRHS 2005

Background characteristics	Ever heard of HIV	Sex	Blood transfusion	Sharing syringe	Mother to child	Others	No. of women
Age							
15 - 19 20 - 24 25 - 29 30 - 34 34 - 39 40 - 44 44 - 49	69.4 71.1 68.9 72.9 71.0 71.5 67.3	62.3 64.5 62.3 66.0 63.8 63.0 61.2	31.8 29.9 28.8 29.6 28.2 27.1 27 3	44.1 43.0 42.0 41.6 40.6 40.9 41.3	22.0 19.5 17.6 18.9 16.9 16.4 16.1	3.4 3.8 3.6 3.9 4.9 4.9 3.6	2,549 2,178 2,201 1,902 1,828 1,374 1,042
Marital status							,.
Never-married Married Divorced Widowed	72.6 70.1 71.3 55.5	65.6 63.0 67.2 49.3	36.6 27.4 25.8 24.2	48.0 40.8 39.0 33.0	24.7 17.1 13.9 15.4	3.1 4.2 4.2 3.5	2,846 9,714 287 227
Residence							
Urban Rural with road Rural without road	90.5 73.4 46.3	84.4 66.5 38.1	48.5 27.4 15.8	62.9 41.8 24.1	30.8 17.5 9.9	3.0 4.0 4.7	3,022 6,704 3,348
Region							
Northern Central Southern	59.2 83.3 67.2	52.4 76.5 59.7	20.5 41.0 24.2	32.6 52.5 40.7	12.0 26.9 15.6	4.5 3.3 4.0	5,052 5,080 2,942
Education							
None Primary Lower secondary Upper secondary	45.9 74.4 86.9 93.8	38.3 66.8 81.0 89.0	13.3 28.8 41.8 54.2	21.6 43.2 57.8 68.2	8.1 17.4 27.0 38.2	4.8 4.1 3.6 1.7	3,770 5,714 2,123 1,467
IUIdi	70.4	03.4	29.5	42.2	10.0	4.0	15,074

Table 13.8 shows the percentage of male respondents knowing specified ways by which HIV is transmitted. The table shows that the percentage of men knowing all of the main means of HIV transmission is greater than the proportion of women knowing them. About 81 per cent of men, compared with only 63.4 per cent of women, knew that HIV can be transmitted through sexual intercourse. Some 39.4 per cent of men, compared with 29.3 per cent of women knew that blood transfusion is another means of HIV transmission; 55.5 per cent of men but only 42.2 per cent of women knew that sharing a syringe can transmit HIV; and 22.6 per cent of men, compared with 18.6 per cent of women, knew that a newborn child might be infected by the mother if she has HIV. Differentials in men's knowledge about ways in which HIV is transmitted, by background characteristics, are similar to those found for women respondents.

These findings show that people's knowledge about HIV is on the right track but that the overall level of knowledge is still somewhat low. It is necessary for the government to expand the information campaign on ways by which HIV is transmitted to people, especially to people who live in remote areas, those with low education, and those who live in the Northern and Southern regions. Women have generally lower level of knowledge than men and information campaigns and programmes should therefore be gender specific.

### TABLE 13.8 KNOWLEDGE ABOUT HOW HIV IS TRANSMITTED: MEN

Percentage of male respondents who know specified means of HIV transmission, according to background characteristics, LRHS 2005

Background characteristics	Ever heard of HIV	Sexual intercourse	Blood transfusion	Sharing syringe	Mother to child	Others	No. of men
Age		intercourse		synnige	cinit		
4.5. 4.0							
15 – 19	82.9	/8./	47.5	56./	30.8	4.2	263
20 – 24	82.4	79.4	34.6	50.6	23.0	4.2	330
25 - 29	83.1	/9.1	39.0	54.5	20.7	4.9	508
30 - 34	84.5	80.6	38.1	56.8	21.2	4./	556
34 - 39	86.5	83.0	40.5	58.4	25.7	6.0	534
40 – 44	89.1	84.9	41.5	59.3	22.2	4.9	405
44 – 49	86.8	82.9	39.1	54.4	20.8	6.9	379
50 – 54	85.6	81.1	37.4	51.4	18.5	4.1	222
55 – 59	75.8	73.3	35.0	50.8	19.2	7.5	120
Marital status							
Never-married	83.8	81.3	46.4	58.3	29.7	4.2	427
Married	85.4	81.5	38.7	55.4	21.8	5.3	2,829
Divorced	68.2	63.6	22.7	40.9	4.6	0.0	22
Widowed	64.1	53.9	18.0	41.0	15.4	7.7	39
Residence							
Urban	94 3	94.0	55 3	71 9	31.2	3.4	702
Rural with road	87.8	83.5	36.6	54.7	20.9	53	1 753
Rural without road	71.2	65.4	32.0	43.9	19.1	6.5	862
Region	7.112		02.0	.015		0.0	001
negion							
Northern	78.1	72.9	31.0	48.7	17.5	8.0	1,312
Central	91.9	89.0	48.9	62.3	28.9	3.1	1,280
Southern	84.7	81.8	37.7	56.0	20.8	3.7	725
Education							
None	55.7	49.7	16.9	29.4	8.8	7.7	479
Primary	85.4	80.8	34.4	51.3	20.1	5.2	1,572
Lower secondary	94.3	91.6	47.1	67.4	26.2	4.7	766
Upper secondary	96.8	95.6	64.8	75.6	38.2	3.4	500
Total	84.9	81.0	39.4	55.5	22.6	5.2	3,317

Table 13.9 shows the percentage distribution of women according to their answers to the question on whether it is easy to recognise people with HIV/AIDS. The level of knowledge is not high, as 29.8 per cent said they did not know and 30.4 per cent did not answer the question. Only 32.6 per cent of the respondents know that people with

HIV/AIDS are not easy to recognise. Higher percentages of women who knew that it is not easy to recognise people with HIV/AIDS were found among women who live in urban areas (44.5 per cent) and among those with only lower secondary (42.8 per cent) and upper secondary education (51.9 per cent).

### TABLE 13.9 KNOWLEDGE OF WHETHER IT IS EASY TO RECOGNISE PEOPLE WITH HIV/AIDS: WOMEN

Percentage distribution of women by knowledge on whether it is easy to recognise people with HIV/ AIDS, according to background characteristics, LRHS 2005

	ls it	easy to recognise	people with HIV/A	IDS?	Т	Total	
Background characteristics	Yes	No	Don't know	Missing	Per cent	No. of women	
Age							
15 – 19 20 – 24 25 – 29 30 – 34 34 – 39 40 – 44	6.0 6.1 7.8 7.9 7.1 8.1	34.4 34.3 32.6 30.2 32.4 31.7	28.4 29.8 27.6 33.9 30.9 30.9	31.2 29.8 32.0 28.1 29.6 29.4	100 100 100 100 100 100	2,549 2,178 2,201 1,902 1,828 1,374	
44 - 49 Marital status	8.9	30.5	27.1	33.5	100	1,042	
Never-married Married Divorced Widowed Residence Urban Rural with road	5.0 7.9 7.7 4.4 8.8 8.8 8.6	36.3 31.7 32.1 25.1 44.5 34.3	30.4 29.7 30.7 25.6 36.0 29.6	28.3 30.7 29.6 44.9 10.7 27.5	100 100 100 100 100	2,846 9,714 287 227 3,022 6,704	
Rural without road	2.9	18.4	24.6	54.2	100	3,348	
Region Northern Central Southern	7.9 7.1 6.1	28.3 36.3 33.6	22.2 38.8 27.2	41.6 17.8 33.1	100 100 100	5,052 5,080 2,942	
Education							
None Primary Lower secondary Upper secondary	3.8 8.0 10.1 8.5	18.6 33.1 42.8 51.9	22.9 32.6 32.8 32.4	54.7 26.4 14.3 7.2	100 100 100 100	3,770 5,714 2,123 1,467	
lotal	7.2	32.6	29.8	30.4	100	13,074	

KNOWLEDGE OF STIS AND HIV/AIDS

Table 13.10 shows the percentage distribution of male respondents by their response to the question on whether it is easy to recognise people with HIV/AIDS. A higher proportion of men (43.5 per cent) than of women (32.6 per cent) knew that it is not easy to recognise people with HIV/AIDS. The proportion giving the correct answer varies

with the background of respondents; it was given by 52.1 per cent of men in urban areas, 47.6 per cent of those in the Central region, 49.9 per cent of those with only lower secondary education and 60.0 per cent of those with upper secondary education.

### TABLE 13.10 KNOWLEDGE OF WHETHER IT IS EASY TO RECOGNISE PEOPLE WITH HIV/AIDS: MEN

Percentage distribution of male respondents by knowledge whether it is easy to recognise people with HIV/AIDS, according to background characteristics, LRHS 2005

	ls it	easy to recognise	people with HIV/A	IDS?	т	otal
Background characteristics	Yes	No	Don't know	Missing	Per cent	No. of men
Age						
15 - 19 20 - 24 25 - 29 30 - 34 34 - 39 40 - 44 44 - 49 50 - 54	9.5 10.0 12.6 11.5 14.8 14.3 11.9 12.6	39.9 46.4 40.9 44.4 42.1 46.2 48.5 40.1 26.7	35.4 27.0 31.5 31.1 31.6 29.4 28.2 32.9 20.8	15.2 16.7 15.0 12.9 11.4 10.1 11.3 14.4 20.0	100 100 100 100 100 100 100	263 330 508 556 534 405 379 222
Marital status	12.5	50.7	50.8	20.0	100	120
Never-married Married Divorced Widowed Residence Urban	9.8 12.9 4.5 7.7 16.0	44.7 43.5 40.9 25.6 52.1	30.9 30.7 27.3 33.3 28.3	14.5 12.8 27.3 33.3 3.6	100 100 100 100	427 2,829 22 39 702
Rural with road Rural without road	13.4 7.4	45.2 32.8	30.2 33.8	11.1 26.0	100 100	1,753 862
Region						
Northern Central Southern	13.6 10.3 13.9	40.2 47.6 42.2	27.0 34.8 30.3	19.3 7.3 13.5	100 100 100	1,312 1,280 725
Education						
None Primary Lower secondary Upper secondary	4.8 12.5 14.8 15.8	22.3 41.5 49.9 60.0	33.2 33.0 30.3 22.0	39.7 13.0 5.1 2.2	100 100 100 100	479 1,572 766 500
lotal	12.4	43.5	30.8	13.4	100	3,317

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# APPENDIX A: LIST OF STAFF PARTICIPATING IN THE FIELED WORK OF THE LAO REPRODUCTIVE HEALTH SURVEY 2005

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Dr. Samaychanh Boupha Ms. Phonesaly Souksavath

### **Technical advisers:**

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- Mr. Thipsavanh Intharack
- Mr. Bounloi Sengkhamyong
- Mr. Phouvong Phoukeo
- Ms. Somchanh Phengxay
- Mr. Bouangeue Chanthabouly
- Mr. Kingphet Atsanavong

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- Mr. Onkeo Ounalom
- Ms. Thirakha Chanthalanouvong
- Mr. Thisavanh Intharack
- Mr. Bounloi Sengkhamyong
- Ms. Somchanh Phengxay
- Mr. Vixay Santivong
- Mr. Phouvong Phoukeo
- Ms. Salika
- Mr. Souksakhon Phonekeo
- Mr. Phousavanh

### **Provincial supervisors:**

- Ms. Khamtoun Kingsada
- Mr. Kongmany Xayala
- Mr. Sisouphan Sengyot
- Mr. Khamsan Xayavong
- Mr. Somphet Xayachack
- Mr. Eyai Chansavath
- Mr. Oxay Souphanthong
- Mr. Duangta
- Mr. Singkham Silipanya
- Mr. Sengthavy Phommachan
- Mr. Oungeue
- Mr. Bouthong Soukavath
- Mr. Lonkham
- Mr. Somphone

Vientiane Municipality Vientiane Municipality Phonsaly Province Phonsaly Province Luangnamtha Province Luangnamtha Province Oudomxay Province Borkeo Province Borkeo Province Luangprabang Province Luangprabang Province Huaphan Province

Mr. Laksana Vongsouthi	Xayabury Province
Mr. Chansamone	Xayabury Province
Mr. Somsanit Phommaxay	Xiengkhuang Province
Mr. Siphanedone	Xiengkhuang Province
Mr. Sinuan Chanthavong	Vientiane Province
Ms. Somphone Phinit	Vientiane Province
Mr. Netsakhone Novannachit	Borikhamxay Province
Mr. Soukhan Phoutthavong	Borikhamxay Province
Mr. Khamkong	Khammuane Province
Ms. Noy Manisy	Khammuane Province
Ms. Norasin	Savannakhet Province
Mr. Keomanivong	Savannakhet Province
Mr. Sonephet Thiemsavanh	Saravane Province
Mr. Khamking Keosouphan	Saravane Province
Mr. Bounnoy Soukkhounme	Sekong Province
Mr. Sengalon	Sekong Province
Mr. Khamman Khounavansy	Champasak Province
Mr. Keovimon Souliyavong	Champasak Province
Mr. Khambay Xayaseng	Attapeu Province
Ms. NouChon	Attapeu Province
Mr. Kouly	Xaysomboon SR
Mr. Khampheo Vongphachan	Xaysomboon SR

### **Interviewers:**

### 1. Vientiane Municipality

Ms. Malavone	Mr. Khamphan	Mr. Khampasong
Mr. Vilayphan	Mr. Bounchan	Ms. Phourahong
Mr. Karathone	Mr. Sitpasirth	Mr. Thavone
Ms. Khamseo	Mr. Sypasirth	Mr. Xaysana
Mr. Monesing	Ms. Khamta	

### 2. Phongsaly Province

Mr. Khampoy Mr. Bounpheng Mr. Shengsomchit Mr. Bounsirth Mr. Khamlar

### 3. Luangnamtha Province

Mr. Xaysavath Mr. Phoume Mr. Phetkhoukhet Mr. Davone

### 4. Oudomxay Province

Mr. Syamphone Mr. Soulideth Mr. Vanpheng Mr. Senganou Mr. Chamthamonr Mr. Khanve Mr. Syphan Mr. Maiounjoy Mr. Somphet

Mr. Bounloi Mr. Khamkieng Mr. Houmphan Mr. Phaeungsom

Mr. Xaysavanh Mr. Thongphat Mr. Outhone Mr. Bouavane Mr. thittan Mr. Phonethavy Mr. Choom Mr. Yinxay

Mr. Lir Mr. Souvanphet Mr. Somphone Mr. Bounchan

Mr. Chayngayasith Mr. Khampan Mr. Bounpone Mr. Singthong

### 5. Bokeo Province

Mr.	Singthong
Mr.	Pangchanngam
Mr.	Somphone
Mr.	Chomepheng

Mr. Shaiphone Mr. Phonesy Mr. Vilay Mr. Bounheung

Mr. Thongsavanh

Mr. Somphone

Mr. Khamouan

Mr. Somsanit

Mr. Bounsy

### 6. Luangprabang Province

Ms. Phonesavanh Mr. Bounpheng Mr.Bounpheng Vannasouk Mr. Phay Mr. Soulidath

### 7. Huaphan Province

Mr. Onta Mr. Vanechai Mr. Mayleu Mr. Shothone

8. Xayaboury Province

Mr. Songthor

Mr. Somphet

Mr. Sonephet

Mr. Khamchin

### Mr. Phetvisay Mr. Thongme Mr. Vilaysark Mr. Phouxay

Mr. Korpkeo

Mr. Oudone

Mr. Sinpasirth

Mr. Khamchaivan

Mr. Thanongsark

Mr. Titsanguan

Mr. Khan

Mr. Bouathong

Mr. Phetphouvieng

Mr. Somphong Mr. Thongphan Mr. Sengdao Mr. Keopaphone

### 9. Xiengkhuang Province

Mr. SyvongMr. KhitsavatMr. DamduanMr. SengdaoMr. TongsyMr. KouayangMr. PhoukhamMr. Phonesy

### **10. Viengtiane Province**

Mr. Bounpan Mr. Bouakham Mr. Bounmy Mr. Khampian Mr. Sengsoulin

### 11. Borikhamxay Province

Mr. Bounsheun Mr. Khonesavanh Mr. Saikham Mr. Bounyom

### 12. Khammuan Province

Mr. Somphet Mr. Banthala Mr. Vannahong Mr. Lirthvilay Mr. Khamsone Mr. Vilayvong Mr. Khamphouvane Mr. Bounmy Mr. Phadi Ms. Khamngeue Mr. Bounsone Mr. Chaisouk Ms.Chansamone

Ms. Viengkeo Mr. Bounkhong Mr. Bounsong Mr. Vilasiem Mr. Santi

Ms. Phut Mr. Khamsone Mr. Inkham Ms. Bouachan

Mr. Saysamon Mr. Bounthan Mr. Phattanong Mr. Pasha

Mr. Sengdeuan Mr. Sonesit Mr. Somthong Mr. Paokeryang

Mr. Phouvong Mr. Chanthalay Mr. Souvithat Mr. Ketsana Mr. Bounmy Xayashang

Mr. Settha Mr. Kongchai Mr. Khamlay Mr. Bouakhan

Mr. Keovongxay Mr. Soulathin Mr. sylivane Mr. Khamta

REFERENCES

### 13. Savannakhet Province

Ms. Xayana Mr. Bounthiam Mr. Somsark Mr. Somsanouk Mr. Keokhonsy

### 14. Salavan Province

Mr. Amphone Mr. Soulisark Mr. Sysoukhon Mr. Bounmy

### 15. Sekong Province

Mr. Oudon Mr. Bounsy Mr. Outhaivan Mr. Sengaloun

### 16. Champasak Province

Mr. Souvan Mr. Khonesavanh Ms. Viengxay Mr. Bounpan Mr. Lamphou Mr. Manisak

### 17. Attapeu Province

Mr. Myxay Ms. Nousay Mr. Vengkham Mr. Phoutsamai

### 18. Xaysomboon SR

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Mr. Khampeung Mr. Phaivan Mr. Outhai Ms. Pone

Ms. Somkhit Mr. Sengchan Ms. Naly Mr. Bounlon Mr. Bounyong

Mr. Vongvilay Mr. Khamsand Mr. Sorlisak Mr. Khamsomkhit

Mr. Yearvang Mr. Thongphuan Mr. Vongphet

- Mr. Syvilay Mr. Bounleum Mr. Khamshob Mr. Pholithat
- Mr. Thongxay Mr. Phonesy Mr. Syliphone Mr. Thongkhoun

Mr. Kongdavan Mr. Vatthana Mr. Latsamay Ms. Noukone

Mr. Sengphet Mr. Bounleat Mr. Savai Mr. Chansamone Mr. Bounthanone

Mr. Somphone Mr. Khamphuang Mr. Khamking Ms. Syvixay

Mr. Non Ms. Sengdeun

# **APPENDIX B: QUESTIONNAIRES**

	1			
	Lao Re	productive Health	Survey 20	05
		Household questionn	aire	
		Identification		
Province	District	Village	EA	Household No.
Name of household hea	ad			
		Interview Visit		
First time	Day		Month	Results code
Second time	Day		Month	Results code
Final time	Day		Month	Results code
Total number of visits		1. One time	2. Two time	3. Three time
Result code	1. Completed	2. No body	was at home	3. Postponed
	4. Refused	5. Partially	completed	6. Vacant/Distoyed dwelling
	7. Other			
Total	Total r	number of person in housel	nold	
	Total r	number of eligible women		
	Total r	number of eligible men		
Interviewer's name				
Supervisor's name				
L				



		List of Usual N	lember Living ir	n The Hous	sehold	
Line No.	<b>1. Name and surname</b> (Record name and surname of household member who regularly living in the household)	<ol> <li>2. Relationship with head of household</li> <li>1. Head of household;</li> <li>2. Spouse;</li> <li>3. Son/daughter;</li> <li>4. Parent;</li> <li>5. Relative;</li> <li>6. Other not relative</li> </ol>	<ul> <li>3. Did he/she sleep here last night</li> <li>1. Yes</li> <li>2. No</li> </ul>	4. Sex 1. Male 2. Female	5. Age (Completed age)	6. What is your marital status ( last relation/ marriage) 1. Never married 2. married 3. Divorced 4. Widowed
01		1     2     3       4     5     6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
02		1     2     3       4     5     6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
03		1     2     3       4     5     6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
04		1     2     3       4     5     6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
05		□ 1 □ 2 □ 3 □ 4 □ 5 □ 6	□ 1. Yes □ 2. No	□ 1 □ 2		□ 1 □ 2 □ 3 □ 4
06		□ 1 □ 2 □ 3 □ 4 □ 5 □ 6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
07		□ 1 □ 2 □ 3 □ 4 □ 5 □ 6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
08		□ 1 □ 2 □ 3 □ 4 □ 5 □ 6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
09		1     2     3       4     5     6	□ 1. Yes □ 2. No	□ 1 □ 2		□ 1 □ 2 □ 3 □ 4
10		1     2     3       4     5     6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
11		1     2     3       4     5     6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
12		□ 1 □ 2 □ 3 □ 4 □ 5 □ 6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
13		1     2     3       4     5     6	□ 1. Yes □ 2. No	□ 1 □ 2		
14		□ 1 □ 2 □ 3 □ 4 □ 5 □ 6	□ 1. Yes □ 2. No	□ 1 □ 2		1     2       3     4
15		□ 1 □ 2 □ 3 □ 4 □ 5 □ 6	□ 1. Yes □ 2. No	□ 1 □ 2		□ 1 □ 2 □ 3 □ 4

List of Usual Member Living in The Household					
7. What is his/ her ethnicity (See ethnic code in the manual table 101)	8. Has he/she ever been to school? (For person age 6 years and above) 1. Yes 2. No, go to Q11	9. What is the high- est level education he/she completed? (see the coding in the manual table 102)	10. What is the high- est level vacational education he/she completed? (see the coding in the manual table 103)	11. What is his/her main activity during last 12 months? (For person age 10 years and above) (see the coding in the manual table 104)	<b>12. Eligible person</b> (Age 15-49 for women and age 15-59 for men)
	□ 1. Yes □ 2. No				01 🗆
	□ 1. Yes □ 2. No				02 🗌
	□ 1. Yes □ 2. No				03 🗌
	□ 1. Yes □ 2. No				04 🗌
	□ 1. Yes □ 2. No				05 🗌
	□ 1. Yes □ 2. No				06 🗌
	□ 1. Yes □ 2. No				07 🗌
	□ 1. Yes □ 2. No				08 🗌
	□ 1. Yes □ 2. No				09 🗌
	□ 1. Yes □ 2. No				10 🗌
	□ 1. Yes □ 2. No				11 🗌
	□ 1. Yes □ 2. No				12 🗌
	□ 1. Yes □ 2. No				13 🗌
	□ 1. Yes □ 2. No				14
	□ 1. Yes □ 2. No				15 🗌

	Household Characteristics							
Housing construction	13. Roof	14. Wall			15	15. Floor		
material	🗌 1. Tile		□ 1. Cement			] 1.Tile		
	2. Zinc		2. Wood			] 2. Cement	:	
	3. Wood		3. Bamboo	)		] 3. Wood		
	🗌 4. Bamboo		4. Other		4. Bamboo		)	
	5. Grass				Г	] 5. Other		
						]		
	6. Other							
16. What electricity do you use?	□ 1. Own metter	□ 2. S wit	hared 🗌 3. h other HH	Generator 🗌	] 4. Oth	er 🗌 5.	No electricity	
17. What is the source of	1. Electricity	□ 2. F	uel 🗌 3. Wood		k	🗌 4. Sawdu	st	
energy is used for cook- ing?	🔲 5. Coal	☐ 6. C	harcoal	🗌 7. Gas		8. Other		
18. What type of toilet is used in household?	1. Modern toilet		2. Normal toilet	□ 3.	Other	🗌 4. N	o toilet	
19. What is the main	□ 1. Mineral/piped w	vater	2. Well with cover			3. Rain	4. Bore	
source of water for drink- ing?	5. Well without cov	ver	6. River/stream/dam			7. Other		
20. How long does it take to travel to district hospital?	, Hour		98 Don't know					
21. Type of transportation for traveling to hospital?	. 1. Car . V		2. Walk 🗌 3. Motol		bike 🗌 4. Other			
22. Does household have any kind of these proper- ties? ( Multiple answers)	1. Radio     2. TV     3. Newspaper     4. No							
	Fertility							
23. During the last 12 month, are there any chil- dren birth in your house- hold?	1. Male 2. Female 3. None							
			Total Mo	ortality				
24. During the last 12 months, how many person died in your household?	1. Male	9	2. Fe	male		3. None		



			Total Mortalit	у			
25. State name, sex and		Name		Sex Age			
your household during the last 12 months.	1.			<ul> <li>1. Male</li> <li>2. Female</li> </ul>			
	2.			<ul> <li>1. Male</li> <li>2. Female</li> </ul>			
	3.			<ul> <li>1. Male</li> <li>2. Female</li> </ul>			
	4.	4 1. Male 2. Female					
	5.			<ul> <li>1. Male</li> <li>2. Female</li> </ul>			
			Maternal Morta	lity			
26. During last 12 months, how many women aged 15-49 died while preg-	No. of death (s) occured during this premisisses						
nant, while giving birth or within 42 days after giving birth?	Persons     None     Of wich:						
giving birth:	A. No. of death during pregnancy B. No. of death during childbirth						
	C. No. of a	death after giving birth w	rithin 42 days				
Province	District	Village	EA	Household	Person ID		
				lumber of male question	naire		
			1.∧		nane		
Total number of questionn	aires used		1. N	lumber of female question	onnaire		



Lao Reproductive Health Survey 2005 Woman questionnaire age 15 - 49 year old					
Indentification					
Province	District	Villages	EA	Household No	Woman ID get from hh questionniare
		Intervi	ew visit		•
First time	Day		Month		Result
Second time	Day		Month		Result
Third time	Day		Month		Result
Total number of visits:	🗌 1 Time	[	2 Time		3 Time
Result code	1. Completed 4. Refused 7. Other	2. No b 5. Parti	ody stayed at home ally completed	3. Postponed 6. Vacant/Destr	royed dwelling
Respondent name					
Interviewer's name					
Supervisor's name					

Section 1: Reproduction							
Question	- Answer code						
101. How old are you now?	Age						
102. Have you ever given alive birth?	□ 1. Yes □ 2. No, go to Q. 107						
103. How many sons and daughters are living with you ?	Sons at home Daughter at home						
104. How many sons and daughters are living elsewhere ?	Sons at   Daughter at     elsewhere   elsewhere						
105. Have you ever given birth to a child who was born alive but later died ?	□ 1. Yes □ 2. No						
106. How many sons and daughter died ?	Sons Daughter						
107. Have you ever had a miscarriage or had an abortion ?	□ 1. Yes □ 2. No, go to Q. 110						
108. How many miscarriages or abortions ?	Time						
109. The period of space miscarriage or abortions ?	Month Year 99.DK						
110. How long ago did your last menstrual period start ?	Day       Month       Year         77.DK       88.DK       99.DK         1. Before last birth       2. Uterus removed       3. Menopause         4. Never menstruated       5. DK						
111. Total number of alive birth given? ( If non, Record "00")	( 103 + 104 + 106 )						
112. Checking Question 111:	* If, ever given birth 1 or more go to Q. 113 * If, never given birth go to Q. 122						
113. Ask about all births, whether still alive or not, starting with the first one. Record names of all the births in Q.114 (For twins and triplets on separate lines							
114	0.115	0, 116	0.117	0.118	0.119	0, 120	0.121
------	--	-----------------------	----------------------------	------------------------------	-------------------------	--------------------------------------	---
Name	Birth status	Sex	Month and year of birth	Is he / she still alive ?	How old is he she now ?	Is he / she living with you now ?	How old was he / she when he / she died ?
01	<ul> <li>1. Sing</li> <li>2. Mult</li> </ul>	□ 1. Boy □ 2. Girl	м	□ 1. Yes		□ 1. Yes	D
			Y	<b>g</b> o to Q. 121		het pers.	м Г. У
02	□ 1. Sing	□ 1. Boy	м	□ 1. Yes		□ 1. Yes	D
	🗌 2. Mult	2. Girl	Y	□ 2. No		□ 2. No	M
				go to Q. 121		net pers.	Y Y
03	🗌 1. Sing	□ 1. Boy	м	□ 1. Yes		□ 1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y	□ 2. No		□ 2. No	м
				go to Q. 121		net pers.	Y
04	🗌 1. Sing	□ 1.Boy	м	□ 1. Yes		□ 1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y	□ 2. No		□ 2. No	м
				go to Q. 121		net pers.	Y
05	☐ 1. Sing	□ 1.Boy	м	□ 1. Yes		□ 1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y	□ 2. No		□ 2. No	м
				go to Q. 121		net pers.	Y
06	□ 1. Sing	□ 1.Boy	м	□ 1. Yes		□ 1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y	□ 2. No		□ 2. No	м
				• go to Q. 121		net pers.	Y

114	Q. 115	Q. 116	Q. 117	Q. 118	Q. 119	Q. 120	Q. 121
Name	Birth status	Sex	Month and year of birth	ls he / she still alive ?	How old is he she now ?	ls he / she living with you now ?	How old was he / she when he / she died ?
07	□ 1. Sing	□ 1.Boy	м	□ 1. Yes		□ 1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y	□ 2. No		□ 2. No	м
				go to Q. 121		net pers.	Y
08	🗌 1. Sing	□ 1.Boy	м	🗌 1. Yes		1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y	□ 2. No		□ 2. No	м
				go to Q. 121		net pers.	Y
09	🗌 1. Sing	□ 1.Boy	м	🗌 1. Yes		□ 1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y Y	□ 2. No		□ 2. No	м
				go to Q. 121		net pers.	Y
10	🗌 1. Sing	🗌 1. Boy	м	🗌 1. Yes		🗌 1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y	□ 2. No		□ 2. No	м
				go to Q. 121		net pers.	Y
11	□ 1. Sing	□ 1.Boy	м	□ 1. Yes		□ 1. Yes	D
	🗌 2. Mult	🗌 2. Girl	Y	□ 2. No		□ 2. No	м
				go to Q. 121		net pers.	Y
Image: Check Q. 117, for each birth did you record month and year of birth ?         * Check Q. 117, for each birth did you record month and year of birth ?         * Check Q. 119, for each living child did you record current age ?         * Check Q. 121, for each dead child did you record age of death ?							

Que	stion	Answ	er code
125. Are you pregnant how .		<ul> <li>1. Yes</li> <li>2. No</li> <li>3. Not sure</li> </ul>	( If answer 2 or 3 skip to Q. 126 )
124. How many months pregnant a	are you ?	Month	
125. At the time you become pregr you want to become pregnant at a	nant, did you want to wait, or did ll ?	<ul> <li>1. Then</li> <li>2. Later</li> <li>3. Not at all</li> </ul>	
126. At what age did your first men	strual period start ?	Age	98 Don't know
Section 2: Pre	gnancy and breastfeedin	g ( for children birth since	March / 2000 )
201 Checking Question 116:	- One or more birth s - No birth since Marc	ince March 2000	Go to Q 202 Go to Q 401
202 Enter the line number, name a	nd survival status of three last child bi	rth since March 2000, begin with the	last birth
203A: Line number from Q. 114			
203B: Name from Q. 114	Last birth	Next to last birth	Second from last birth
203C: Survival status from Q. 118	<ul> <li>1. Alive</li> <li>2. Dead</li> </ul>	□ 1. Alive □ 2. Dead	<ul><li>1. Alive</li><li>2. Dead</li></ul>
204: At the time you become pregnant ( name ), did you want to become pregnant then or want to wait or did you not at all?	<ul> <li>1. Then</li> <li>2. Later</li> <li>3. Not at all</li> <li>8. DK</li> </ul>	<ul> <li>1. Then</li> <li>2. Later</li> <li>3. Not at all</li> <li>8. DK</li> </ul>	
205: When you vere pregnant ( name ), did you see anyone for antenatal care for this pregnancy ?	<ul> <li>1. Yes</li> <li>2. No, go to Q 209</li> </ul>	<ul> <li>1. Yes</li> <li>2. No, go to Q 209</li> </ul>	<ul> <li>1. Yes</li> <li>2. No, go to Q 209</li> </ul>
206: Whom did you see ? ( Multiple answer )	<ul> <li>1. Doctor</li> <li>2. Nurse</li> <li>3. Midwife</li> <li>4. Health worker</li> <li>5. TBA</li> <li>7. Others</li> </ul>	<ul> <li>1. Doctor</li> <li>2. Nurse</li> <li>3. Midwife</li> <li>4. Health worker</li> <li>5. TBA</li> <li>7. Others</li> </ul>	<ul> <li>1. Doctor</li> <li>2. Nurse</li> <li>3. Midwife</li> <li>4. Health worker</li> <li>5. TBA</li> <li>7. Others</li> </ul>
207: Where did you go for ante- natal care for this pregnancy ? ( Multiple answer )	<ul> <li>1. Central/ Prov. Hospital</li> <li>2. District Hospital</li> <li>3. Health Center</li> <li>4. Private clinic</li> <li>7. Others</li> </ul>	<ul> <li>1. Central/ Prov. Hospital</li> <li>2. District Hospital</li> <li>3. Health Center</li> <li>4. Private clinic</li> <li>7. Others</li> </ul>	<ul> <li>1. Central/ Prov. Hospital</li> <li>2. District Hospital</li> <li>3. Health Center</li> <li>4. Private clinic</li> <li>7. Others</li> </ul>

Que	estion	Answer code		
208: How many months pregnant were you when you first recieved antenatal care ?	Month	Month	Month	
209: How many time did you have antenatal care ?	Time	Time	Time	
210: Did you get any treament for any difficuties ?	<ul> <li>1. Yes</li> <li>2. No</li> <li>3. No difficulty</li> </ul>	<ul> <li>1. Yes</li> <li>2. No</li> <li>3. No difficulty</li> </ul>	<ul> <li>1. Yes</li> <li>2. No</li> <li>3. No difficulty</li> </ul>	
211: Did you recieve iron pills when you were pregnant with ( name )	<ul> <li>1. Yes</li> <li>2. No go to Q 213</li> </ul>			
212: How many iron pills did you take during your pregnantcy with ( name )	Total pill			
213: Where did you give birth to ( name ) ( Multiple answer )	<ul> <li>1. Central Hospital</li> <li>2. Provincial hospital</li> <li>3. District hospital</li> <li>4. Health Center</li> <li>5. Private Clinic</li> <li>6. House, go to Q. 214</li> <li>7. Others</li> </ul>	<ul> <li>1. Central Hospital</li> <li>2. Provincial hospital</li> <li>3. District hospital</li> <li>4. Health Center</li> <li>5. Private Clinic</li> <li>6. House, go to Q. 214</li> <li>7. Others</li> </ul>	<ul> <li>1. Central Hospital</li> <li>2. Provincial hospital</li> <li>3. District hospital</li> <li>4. Health Center</li> <li>5. Private Clinic</li> <li>6. House, go to Q. 214</li> <li>7. Others</li> </ul>	
214: Why did you not give birth in hospital ? ( Multiple answer )	<ul> <li>1. Cost</li> <li>2. Distance</li> <li>3. Health Services</li> <li>4. Not nacessery</li> <li>7. Others</li> </ul>	<ul> <li>1. Cost</li> <li>2. Distance</li> <li>3. Health Services</li> <li>4. Not nacessery</li> <li>7. Others</li> </ul>	<ul> <li>1. Cost</li> <li>2. Distance</li> <li>3. Health Services</li> <li>4. Not nacessery</li> <li>7. Others</li> </ul>	
215: How much did your birth cost by health system ? ( Includ- ing cost of bedroom, medical equipment, medicine )	Unit kip	Unit kip	Unit kip	
216: Who assisted with the delivery of ( name ) ( Multiple answer )	<ul> <li>1. Doctor</li> <li>2. Nurse</li> <li>3. Midwife</li> <li>4. Health worker</li> <li>5. TBA</li> <li>6. Relative</li> <li>7. Other</li> <li>8. No one</li> </ul>	<ul> <li>1. Doctor</li> <li>2. Nurse</li> <li>3. Midwife</li> <li>4. Health worker</li> <li>5. TBA</li> <li>6. Relative</li> <li>7. Other</li> <li>8. No one</li> </ul>	<ul> <li>1. Doctor</li> <li>2. Nurse</li> <li>3. Midwife</li> <li>4. Health worker</li> <li>5. TBA</li> <li>6. Relative</li> <li>7. Other</li> <li>8. No one</li> </ul>	

2

Que	stion	Answe	er code
217: Was ( name ) born on time or prematurely or late ?	<ul> <li>1. On time</li> <li>2. Premature</li> <li>3. Late</li> <li>8. DK</li> </ul>	<ul> <li>1. On time</li> <li>2. Premature</li> <li>3. Late</li> <li>8. DK</li> </ul>	<ul> <li>1. On time</li> <li>2. Premature</li> <li>3. Late</li> <li>8. DK</li> </ul>
218: When ( name ) was born, was he/she very large, larger than average, average, smaller than average, or very small ?	<ul> <li>1. Very large (4 kg)</li> <li>2. Larger than aver. (3.8 kg)</li> <li>3. Average (3-3.5 kg)</li> <li>4. Smaller than aver. (2.5 kg)</li> <li>5. Very small (2 kg)</li> <li>8. DK</li> </ul>	<ul> <li>1. Very large (4 kg)</li> <li>2. Larger than aver. (3.8 kg)</li> <li>3. Average (3-3.5 kg)</li> <li>4. Smaller than aver. (2.5 kg)</li> <li>5. Very small (2 kg)</li> <li>8. DK</li> </ul>	<ul> <li>1. Very large (4 kg)</li> <li>2. Larger than aver. (3.8 kg)</li> <li>3. Average (3-3.5 kg)</li> <li>4. Smaller than aver. (2.5 kg)</li> <li>5. Very small (2 kg)</li> <li>8. DK</li> </ul>
219: How much did ( name ) weight ? ( record weight from health card, if available )	, Kg 8. DK 1. Record from card 2. Record from recall	, Kg 8. DK 1. Record from card 2. Record from recall	, Kg 8. DK 1. Record from card 2. Record from recall
220: During how long after the birth of ( name ), did you not have sexsual relation ?	Month	Month	Month
221: After 45 days of birth did meet a doctor ? 222: If yes, how many times did you meet a doctor ?	<ul> <li>1. Yes</li> <li>2. No Go to Q. 224</li> </ul>		
223: Where did you go for care ?	<ul> <li>1. Central Hospital</li> <li>2. Dist hospit.</li> <li>3. Health Center</li> <li>4. Private Clinic</li> <li>5. TBA</li> </ul>		
224: Did you ever breastfeed ( name )	<ul> <li>1. Yes go to Q. 226</li> <li>2. No</li> </ul>	<ul> <li>1. Yes go to Q. 226</li> <li>2. No</li> </ul>	<ul> <li>1. Yes go to Q. 226</li> <li>2. No</li> </ul>
225: Why did you not breastfeed ( name ) ? If there is a answer, please go to Q. 301	<ul> <li>1. Child died</li> <li>2. Child ill or weak</li> <li>3. Mother ill or weak</li> <li>4. Nepple/bre. problem</li> <li>5. No milk</li> <li>6. Moth. work</li> <li>7. Moth. stud</li> <li>8. Child refu.</li> <li>9. Keep brea. brat.</li> <li>96. Others</li> </ul>	<ul> <li>1. Child died</li> <li>2. Child ill or weak</li> <li>3. Mother ill or weak</li> <li>4. Nepple/bre. problem</li> <li>5. No milk</li> <li>6. Moth. work</li> <li>7. Moth. stud</li> <li>8. Child refu.</li> <li>9. Keep brea. brat.</li> <li>96. Others</li> </ul>	<ul> <li>1. Child died</li> <li>2. Child ill or weak</li> <li>3. Mother ill or weak</li> <li>4. Nepple/bre. problem</li> <li>5. No milk</li> <li>6. Moth. work</li> <li>7. Moth. stud</li> <li>8. Child refu.</li> <li>9. Keep brea. brat.</li> <li>96. Others</li> </ul>

2
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Que	stion	Answ	er code	
226: Have you given the yellow	□ 1 Voc			
milk to a child at first delivery ?				
	2. No	2. No	□ 2. No	
227: Are you still breasfeeding	□ 1. Yes go to 0. 230			
( name )				
	2.110			
228: How many months did you				
breastfeed ( name ) ?	Month	Month	Month	
	□ 8. DK	□ 8. DK	□ 8. DK	
229: Why did you stop breast-	1. Child died	1. Child died	□ 1. Child died	
feeding ( name ) ?	2. Mother ill or weak	2. Mother ill or weak	2. Mother ill or weak	
	□ 3 No milk	□ 3 No milk	□ 3 No milk	
	4. Mother working		4. Mother working	
	5. Mother studying	5. Mother studying	5. Mother studying	
	6. Child refused	6. Child refused	6. Child refused	
	7. Become pregnant	7. Become pregnant	7. Become pregnant	
	8. Weaning	8. Weaning	8. Weaning	
	9. Other	9. Other	9. Other	
230: At any time vesterday was				
(name) given any of the follow-	Yes No DK			
ing in addition to breastmilk.				
a. Pain water			<	
b. Tinned of fresh milk				
c. Any other liquids				
a. Any solid or musny food				
Sect	ion 3: Child Health ( For cl	hildren birth since March	2000)	
301: Name from Q. 203 a	Last birth	Next to last birth	Last birth	
302: From Q. 203 b	1. Alive go to 303	1. Alive go to 303	1. Alive go to 303	
	2. Died go to next child	2. Died go to next child	2. Died go to Q. 401	
303: Has ( name ) been ill with				
a fever at any time in the last 2				
weeks ?	2. No	2. No	2. No	
	□ 8. DK	□ 8. DK	□ 8. DK	
304: Has ( name ) been ill with a	□ 1. Yes	□ 1. Yes	□ 1. Yes	
cough at any time in the last 2	□ 2.No -	□ 2.No ~	□ 2.No ►	
weeks ?	$\square$	$\square$	$\square$	
			U 0. DK	
305: When ( name ) was ill with	1. Yes	□ 1. Yes	□ 1. Yes	
a cough did he/she breath more	🗌 2. No	🗌 2. No	🗌 2. No	
rapidly than usual with short	□ 8. DK	□ 8. DK	□ 8. DK	
306: Did you seek advice or treat-	□ 1. Yes	□ 1. Yes	□ 1. Yes	
ment for the cough ?	2. No, go to Q. 308	2. No, go to Q. 308	2. No, go to Q. 308	

4

Que	estion	Answ	er code
307: Where did you seek advice or treatment ? ( Multiple answer )	<ul> <li>1. Central hospital</li> <li>2. Prov./Dist. Hos.</li> <li>3. Health Center</li> <li>4. Private clinic</li> <li>5. Pharmacy</li> <li>6. Tradit. Doctor</li> <li>7. Others</li> </ul>	<ul> <li>1. Central hospital</li> <li>2. Prov./Dist. Hos.</li> <li>3. Health Center</li> <li>4. Private clinic</li> <li>5. Pharmacy</li> <li>6. Tradit. Doctor</li> <li>7. Others</li> </ul>	<ul> <li>1. Central hospital</li> <li>2. Prov./Dist. Hos.</li> <li>3. Health Center</li> <li>4. Private clinic</li> <li>5. Pharmacy</li> <li>6. Tradit. Doctor</li> <li>7. Others</li> </ul>
308: Has ( name ) had diarrhea in the last 2 weeks?	□ 1. Yes □ 2. No □ 8. DK → next child	□ 1. Yes □ 2. No □ 8. DK □ next child	□ 1. Yes □ 2. No □ 8. DK □ Go to Q. 401
309: Was there any blood in the stools ?	<ul> <li>1. Yes</li> <li>2. No</li> <li>8. DK</li> </ul>	□ 1. Yes □ 2. No □ 8. DK	<ul> <li>1. Yes</li> <li>2. No</li> <li>8. DK</li> </ul>
310: Did you seek advice or treat- ment for the diarrhea ?	□ 1. Yes □ 2. No □ 8. DK > go to next child	□ 1. Yes □ 2. No □ 8. DK > go to next child	□ 1. Yes □ 2. No □ 8. DK > go to Q. 401
311: Where did you seek advice or treatment ?	<ul> <li>1. Central hospital</li> <li>2. Prov./Dist. Hos.</li> <li>3. Health Center</li> <li>4. Clinic</li> <li>5. Pharmacy</li> <li>6. Tradit. Doctor</li> <li>7. Others</li> </ul>	<ul> <li>1. Central hospital</li> <li>2. Prov./Dist. Hos.</li> <li>3. Health Center</li> <li>4. Clinic</li> <li>5. Pharmacy</li> <li>6. Tradit. Doctor</li> <li>7. Others</li> </ul>	<ul> <li>1. Central hospital</li> <li>2. Prov./Dist. Hos.</li> <li>3. Health Center</li> <li>4. Private clinic</li> <li>5. Pharmacy</li> <li>6. Tradit. Doctor</li> <li>7. Others</li> </ul>
311: What was given to treat the diarrhea ?	<ul> <li>1. Pill or syrup</li> <li>2. Injection</li> <li>3. Intravennous</li> <li>4. Drink oral</li> <li>5. Tradit. Medicine</li> <li>7. Others</li> </ul>	<ul> <li>1. Pill or syrup</li> <li>2. Injection</li> <li>3. Intravennous</li> <li>4. Drink oral</li> <li>5. Tradit. Medicine</li> <li>7. Others</li> </ul>	<ul> <li>1. Pill or syrup</li> <li>2. Injection</li> <li>3. Intravennous</li> <li>4. Drink oral</li> <li>5. Tradit. Medicine</li> <li>7. Others</li> </ul>

	S	ection 4: Contracep	otive	
Contraceptive method	Q. 401: Have you ever heard of this method ?	Q. 402: Have you ever used this method ?	Q. 403: Where did you get it ?	
A. Pill	<ul> <li>1. Yes / Spond</li> <li>2. Yes / Probed</li> </ul>	1. Yes 2. No, go to novt method	1. Central/Prov.	6. Moble outreach clinic
	3. No, go to next method	next method	<ul> <li>2. Dist. nospit.</li> <li>3. Health Center</li> </ul>	8. VHV/TBA
			<ul> <li>4. Private Clinic</li> </ul>	9. Abroad
			5. Pharmacy	
B. IUD	1. Yes / Spond	1. Yes	□ 1. Central/Prov.	☐ 6. Moble outreach clinic
	3. No, go to next method	next method	2. Dist. hospit.	7. Midwife on home visit
			3. Health Center	8. VHV/TBA
			4. Private Clinic	9. Abroad
			5. Pharmacy	
C. Injection	1. Yes / Spond  2. Yes / Probed	1. Yes	□ 1. Central/Prov.	☐ 6. Moble outreach clinic
	3. No, go to next method	next method	2. Dist. hospit.	7. Midwife on home visit
			3. Health Center	8. VHV/TBA
			4. Private Clinic	9. Abroad
			5. Pharmacy	
D. Diaphragm	1. Yes / Spond	1. Yes	□ 1. Central/Prov.	6. Moble outreach clinic
	3. No, go to next method	next method	2. Dist. hospit.	7. Midwife on home visit
			3. Health Center	8. VHV/TBA
			4. Private Clinic	9. Abroad
			5. Pharmacy	
E. Condom	1. Yes / Spond     2. Yes / Probad	1.Yes	□ 1. Central/Prov.	6. Moble outreach clinic
	3. No, go to next method	next method	2. Dist. hospit.	7. Midwife on home visit
			3. Health Center	8. VHV/TBA
			4. Private Clinic	9. Abroad
			5. Pharmacy	

Contraceptive method F. Female sterilisation	Q. 401: Have you ever heard of this method ?	Q. 402: Have you ever used of this method ?	Q. 403: Where did you get it ?	
F. Female sterilisation	1. Yes / Spond			
		1. Yes	□ 1. Central/Prov.	6. Moble outreach clinic
	<ul> <li>3. No, go to next method</li> </ul>	next method	2. Dist. hospit.	☐ 7. Midwife on home visit
			3. Health Center	□ 8. VHV/TBA
			4. Private Clinic	9. Abroad
			🔲 5. Pharmacy	
G. Male sterilization	1. Yes / Spond	1. Yes	□ 1. Central/Prov.	☐ 6. Moble outreach clinic
	<ul> <li>3. No, go to next method</li> </ul>	next method	2. Dist. hospit.	7. Midwife on home visit
			3. Health Center	□ 8. VHV/TBA
			4. Private Clinic	9. Abroad
			5. Pharmacy	
H. Rhythm/ Periodic abstinence	1. Yes / Spond	1. Yes	☐ 1. Central/Prov.	☐ 6. Moble outreach clinic
	<ul> <li>2. res / Probed</li> <li>3. No, go to next method</li> </ul>	next method	2. Dist. hospit.	7. Midwife on home visit
			3. Health Center	□ 8. VHV/TBA
			4. Private Clinic	🗌 9. Abroad
			5. Pharmacy	
l. Withdrawal	1. Yes / Spond	1. Yes	□ 1. Central/Prov.	6. Moble outreach clinic
	<ul> <li>3. No, go to next method</li> </ul>	next method	2. Dist. hospit.	2. Midwife on home visit
			3. Health Center	□ 8. VHV/TBA
			4. Private Clinic	9. Abroad
			5. Pharmacy	
J. Norplant	1. Yes / Spond	1.Yes	□ 1. Central/Prov.	6. Moble outreach clinic
	<ul> <li>2. Yes / Probed</li> <li>3. No, go to next method</li> </ul>	2. No, go to next method	2. Dist. hospit.	7. Midwife on home visit
			3. Health Center	□ 8. VHV/TBA
			4. Private Clinic	🗌 9. Abroad
			5. Pharmacy	

Section 4: Contraceptive				
Contraceptive method	Q. 401: Have you ever heard of this method ?	Q. 402: Have you ever used of this method ?	Q. 403: Where did you get it ?	
K. Tranditional medi- cine	1. Yes / Spond	1. Yes	1. Central/Prov.     6. Moble outreach clinic	
	3. No, go to next method	next method	2. Dist. hospit.     7. Midwife on home visit	
			□ 3. Health Center □ 8. VHV/TBA	
			🗌 4. Private Clinic 🗌 9. Abroad	
			5. Pharmacy	
L. Emergency contra- ception	1. Yes / Spond	1. Yes	1. Central/Prov.     6. Moble outreach clinic	
	3. No, go to next method	next method	2. Dist. hospit.   7. Midwife on home visit	
			□ 3. Health Center □ 8. VHV/TBA	
			🗌 4. Private Clinic 🗌 9. Abroad	
			5. Pharmacy	
M. Other	1. Yes / Spond	□ 1. Yes	1. Central/Prov.     6. Moble outreach clinic	
	<ul> <li>2. Yes / Probed</li> <li>3. No, go to next method</li> </ul>	2. No, go to next method	2. Dist. hospit.     7. Midwife on home visit	
			□ 3. Health Center □ 8. VHV/TBA	
			🗌 4. Private Clinic 🗌 9. Abroad	
			5. Pharmacy	
404. Check Q. 402:	• * Never use * Ever use o	any contraceptive go to c ne or more contraceptive	ı. 408 go to q. 405	
Question		Ansv	ver code	
405: What was method at first time you used ?	🗌 1. Pill	6. Female sterilizat	ion 🔲 11. Tranditional medicine	
	□ 2. IUD	7. Male sterilization	n 🗌 12. Emergency method	
	3. Injection	8. Rhythm/periodi	c abstinence 🗌 13. Other	
	🗌 4. Diaphram	9. Withdrawal		
	☐ 5. Condom	10. Norplant		
406: How many living ch at that time ?	ildren did you have	Nur	nber of living children	
407: What was your age method ?	when you first started using any	Age	98. Don't know	

Question	Answer code					
408. Check Q. 123:	* Not pregnant or unsure go to q. 409 * Currently pregnant go to q. 418					
409: Are you using any contraceptive method now ?	□ 1. Yes	<ul><li>2. No, go to q. 418</li></ul>				
410: Which contracep- tive method are you	🔲 1. Pill	6. Female sterilization	11. Tranditional medicine			
using now ?	2. IUD	7. Male sterilization	12. Emergency method			
	3. Injection	8. Rhythm/periodic abstinence	13. Other			
	4. Diaphram	9. Withdrawal				
	5. Condom	10. Norplant				
411: Who made the decision on type of	□ 1. Self	3. Partner	5. Health worker			
contraceptive to use ?	2. Self with partner	4. Relative				
412: From where did you get this method ?	□ 1. Central/Prov.	4. Private clinic	7. Midwife on home visit			
(Multiple answer)	2. Dist hospit.	5. Pharmacy	8. VHV/TBA			
	3. Health Center	6. Mobile outreach	9. Abroad			
413: For how many months have you been using this contracep- tive method ?	Month	<ul> <li>996. ( 8 years or longer )</li> <li>998. Don't know</li> </ul>				
414: In what month and year were you steralised ?	Month	□ 96. ( DK month )	Year 🗌 98. ( DK year )			
415: Do you have any problem with the method you are using now ?	□ 1. Yes	2. No, go to Q. 501				
416: What was the main problem ?	1. Husband disapp	4. Incovenient to use	96. Other			
Multiple answer ( If use of any method,	2. Hard to get it	5. Wants more children	□ 98. DK			
go to Q. 501 )	3. Cost too much	6. Health concerns				
417: Why have you not use contraceptive	1. Husband disapp	6. Health concerns	11. Lack of knowlege			
method ?	2. Hard to get it	7. Fatalistic	96 Other			
Multiple answer	3. Cost too much	8. Other pers. disapp.	□ 98. DK			
	4. Incovenient to use	9. Diff to get pregn.				
	5. Wants more children	10. Menopausal				

2	2
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Question	Answer code				
418: Do you intend to use any method in the future ?	□ 1. Yes □ 2. N	No, go to Q. 420 🗌 8. Do	n't know, go to Q. 501		
419: Which method do you wish to use ?	🔲 1. Pill	6. Female sterilization	11. Tranditional medicine		
Multiple answer	2. IUD	7. Male sterilization	12. Emergency method		
( If use of any method, go to Q. 501 )	3. Injection	8. Rhythm/periodic abstinence	13. Other		
	4. Diaphram	9. Withdrawal			
	5. Condom	10. Norplant			
420: What the main reseon do you not in-	1. Husband disapp	6. Health concerns	11. Lack of knowlege		
tend to use a method ? ( Multiple answer )	<ul><li>2. Hard to get it</li></ul>	7. Fatalistic	96 Other		
	3. Cost too much	8. Other pers. disapp.	☐ 98. DK		
	4. Incovenient to use	9. Diff to get pregn.			
	5. Wants more children	🗌 10. Menopausal			
Section 5: Marriage					
Question		Answer code			
501: What is your marital status ?		1. Never married, go to q. 507	3. Divorced		
		2. Married	4. Widowed		
502: How many times have you been married ?		☐ 1. One ☐ 2. Twice	3. More the Twice		
503: Are you and your hu or is he staying elsewher	usband currently living together e ?	☐ 1. Yes, go to Q. 505	□ 2. No		
504: How long is your husband staying elsewhere ?		Month	Year		
505: In what month and year did you first married ?		Month 🗌 96. DK	Year 🗌 98. (DK year)		
506: How old were you at that time ?		Age	☐ 98. DK		
507. Have you ever had sexual intercoure ?		□ 1. Yes	2. No. go to q. 601		
508: How old were you sexual at first ?		Age	□ 98. DK		

		Se	ction 6: Fertil	ity Preferenc	es
Question		Answer code			
601 Check Q. 411:		* If, not sterilized g * If, sterilized go to	go to q. 602 o q. 607		
602: Chech Q. 123	02: Chech <u>)</u> . 123		<ul> <li>Would you like</li> <li>After this wou children ?</li> </ul>	e more children ? ld you like more	<ul> <li>1. Yes, go to q. 603</li> <li>2. No, go to q. 607</li> <li>3. Can't pregnant, go to q. 608</li> <li>4. Unsure / DK, go to q. 608</li> </ul>
Q. 603: How man	y children do you w	vant ?			Number of children
604: What is the main reason you       1. Don't hat         want more children ?       2. Not enou         3. Have no       4. Have no		ve any child ugh child son daughter		5. Custom / religion 6. Husband recom. 7. Help fam. Econ 8. Other	
605: Check Q. 123	<ul> <li>Not pregn unsure</li> <li>Pregnant</li> </ul>	ant or	How long would y How long would y after this ?	rou like to wait ? rou like to wait	□993. Soon/nowMonth□994. Can't pregnant□995. After marriageYear□996. Other□998. Don't know
606: Why is the main reason you made like that ?				<ul> <li>1. Like to have a child</li> <li>2. Prefer no more children</li> <li>3. Undecided</li> </ul>	
607: What is the main reason you1. Have erdon't want another child ?2. Too old		nough	<ul><li>3. Health</li><li>4. Poor</li></ul>	<ul><li>5. Too busy</li><li>6. Other</li></ul>	
608: Check Q. 118:	<ul> <li>Has living children</li> <li>No living children</li> </ul>	If you you ha exactl many If you of chil how n	could go back to th ave no children and y the number of chi would you like ? could choose exact ldren to have in you nany would you like	e time when could choose ldren how ly the number r whole life, ?	Child 🗌 98. Don't know number
609. Check Q. 501 * If, married go to q. 610 * If, never married / divorced / wido			wed go to q. 612		
610: Have you think your husband want the same number of children you would like to have ?			would like to	□ 1. Yes □ 2. No	
611: Do you think your husband want the same number of children that you want more or fewer than you want ?			1. Same number       3. Fewer children         2. More children       4. DK		

REFERENCES

	2				
Question		Answer code			
612: What do you think is the best number of year be the birth of the next chil		I			
	Sec	ction 7: Husband's background			
701 Check Q. 501:       * If, married / divorced / widowed go to q. 702         * If, never married go to q. 801					
702: How old was your ( last ) husband on his la birthday ?	st	Age 🗌 98. Don't know			
703: Did ( last ) your husband ever attend schoo	ol ?	□ 1. Yes □ 2. No, go to q. 705			
		Primery school Secondary school			
704: What was the highest level of school	at was the highest level of school       1. No class       14. Fourth class       21. Class       22. Class         12. Second class       16. Second class       23. Class       23. Class				
705: What kind of work does your husband do a	?				
	Section 8: ( STI ) and ( HIV / AIDS )				
801: Have you ever heard STI ?		□ 1. Yes □ 2. No. go to q. 807			
802: From which sources of information have yo heard about it ? (Multiple answer )	ou	1. Radio       5. Health workers       9. Office         2. TV       6. School/teachers       96. Other         3. Newsp./magaz.       7. Community         4. Posters       8. Friend/relative			
803: What kind of STIs have you heard ?		1. Syphilis     3. Warts     8. DK       2. Gonorrheoea     4. Other			
804: Have you had vaginal discharge in the last month ?	12	□ 1. Yes □ No, go to q. 807			
805: What type of treatment did you take ? ( Multiple answer )		1. Traditional medicine4. Cream/pessary in vaginal2. Oral antibiotic5. Other3. Injection antibiotic5. Other			

Question	Answer code		
806: Where did you get treatment ?	<ul> <li>1. Pharmacy</li> <li>5. Midwife on home visit</li> <li>2. Hospital</li> <li>6. Self medication</li> <li>3. Health center.</li> <li>7. Other</li> <li>4. Private clinic</li> </ul>		
807: Have you ever heard to HIV / AIDS ?	□ 1. Yes □ No, go to Q.813		
808: From which suorces of information have you heard sbout it ? (Multiple answer )	1. Radio       5. Health workers       9. Office         2. TV       6. School/teachers       10. Other         3. Newsp./magaz.       7. Community         4. Posters       8. Friend/relative		
809: Is there anything a person can do to avoid get- ting HIV ?	□ 1. Yes □ 2. No □ 8. DK		
810: Is it easy to recornized people infected with HIV ?	□ 1. Yes □ 2. No □ 8. DK		
811: How is HIV transmitted ? (Multiple answer )	<ul> <li>1. Sexual intercouse</li> <li>4. Mother to child transmission during</li> <li>2. Blood trans.</li> <li>3. Sharing syringe</li> <li>5. Other</li> </ul>		
812: How to prevent infected STI and HIVs ?	<ul> <li>1. Have only one sex parner</li> <li>2. Using toilet becarfully</li> <li>3. Taking medicine before have sex</li> <li>4. Using condom before have sex</li> </ul>		
<ul> <li>813: What are the risk factors of getting HIV ?</li> <li>a. Avoid mosquitoes</li> <li>b. Not having sex</li> <li>c. Using condoms during sex</li> <li>d Monogamy ( having only one partner )</li> <li>e. Avoid sharing food with person with HIV</li> <li>f. Avoid sharing toilet with person with HIV</li> <li>g. Avoi sharing glass with person with HIV</li> <li>h. Avoid sharing needles/drugs</li> <li>i. No sex with CSWs</li> </ul>	1. Yes       2. No         1       1         2       2         3       3         4       4         5       5         6       6         7       7         8       8         9       9		

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Lao Reproductive Health Survey 2005 Man questionnaire						
Indentification						
Province	District	Villages EA		Household No		
Name and number of el	igible men					
Name and number of w	ife					
		Intervi	ew visit			
First time	Day		Month	Result		
Second time	Day		Month	Result		
Final time	Day		Month	Result		
Total number of visits:	☐ 1 Time	[	2 Time	☐ 3 Time		
Result code	1. Completed 4. Refused 7. Other	2. No k 5. Part	body stayed at home ially completed	3. Postponed 6. Vacant/Destroyed dwelling		
Interviewer's name						
Supervisor's name						

Section 1: Respondent's Background								
Question	Answer code							
101. In what month and year were you born ?	☐ 98. DK ☐ 08.DK Month Year							
102. How old are you now ?	Age							
103. What is the highest grade you studyied / completed ? ( See code table 102 in manual )	Grade 🛛 88 No attend, go to Q. 106							
104. Can you read and understand Lao language ? ( only one answer )	1. Easily      2. Read difficulty      3. Can't read, go to Q. 106							
105. Do you usually read a newspaper at least once a week ?	□ 1. Yes □ 2. No							
106. Do you usually listen to the radio at least once a week ?	□ 1. Yes □ 2. No							
107. Do you usually watch to TV at least once a week ?	□ 1. Yes □ 2. No							
108. What kind of work do you usually do within the last 12 months ? ( see table 104 in manual )	Code Specify							
109. Average, how many cigarette do you smoke a day ?	Number 🗌 88 No smoking, go to Q. 111							
110. How old were you when you started smoking cigarettes ?	Age 🗌 98. DK							
111. Average how many time do you drink alcohol a week ?	□       1. 1-3 Times / week       □       3. < 1 time / week							
112: If drink, how old were you when you started drinking alcohol ?	Age 🗆 98. DK							
Se	ection 2: Fertility							
201: Have you ever had children ?	□ 1. Yes □ 2. No, go to q. 205							
202: How many children do you have ?	Number							
203: In what month and year was your last child born ?	☐ 98. DK ☐ 08.DK Month Year							
204: When your wife gave birth to her last child did you want a child by then or did you want to wait or did you not want at all ? (only one answer)	1. Then Later 3. Not at all							

3							
Question	Answer code						
205: How old were you when you had your first sexual intercourse ?	Year  2. Never have sex, go to Q. 303						
206: With whom did you have extra marital sexual intercourse ?	☐ 1. Commercial sex worker ☐ 2. Friend ☐ 3. Partner						
207: In the last 12 month did you have sex with none marital partner ?	□ 1. Yes □ 2. No						
208: In the last sexual intercources did you use condom ?	□ 1. Yes □ 2. No						
209: With whom did you have a last sexual intercources ?	□ 1. Partner □ 2. Other						
Secti	ion 3: Contraceptive						
301: Has you / your wife / partner ever used any contracep- tive method ?	□ 1. Yes □ 2. No, go to q. 303						
302: What method are you / wife / partner using now ?	<ul> <li>1. Pill</li> <li>6. Female sterilization</li> <li>10. Norplant</li> <li>2. IUD</li> <li>7. Male sterilization</li> <li>11. Traditional medicine</li> <li>3. Injection</li> <li>8. Rhythm/periodic abstinence</li> <li>4. Diaphragm</li> <li>5. Condom</li> <li>9. Withdrawal</li> <li>13. Other</li> </ul>						
303: Do you intend to use one of the methods in the future ?	□ 1. Yes □ 2. No, go to q. 305						
304: Which method would you like to use in the future ? Multiple answer	1. Pill       6. Female sterilization       10. Norplant         2. IUD       7. Male sterilization       11. Traditional         3. Injection       8. Rhythm/periodic       12. Emergency         4. Diaphragm       abstinence       method         5. Condom       9. Withdrawal       13. Other						
305: If you can go back to the time when you have no children and could choose exactly the number of children to have on your whole life how many would you like to have ?	Number 🗆 98.DK						
306: If you could choose exactly the number of children how many would you like to have ?	Number 🗆 98.DK						
307: From where, have you ever heard or seen family plan- ning program ?	1. Never heard     4. Newsp./magaz.       2. Radio     5. Poster						
Multiple answer	3.TV 7. Other						
308: With whom are you talking about family planning? Multiple answer	1. Never talk       5. Son/Daughter         2. Wife       6. Relative         3. Parent       7. Friend         4. Brother/Sister       8. Other						

	3								
Question		Answer code							
309: Have you and your wife ever discussed the children you would like to have ?	number of	□ 1. Yes □ 2. No							
310: Do you think your wife want the same num children that you want, or does she want more you want ?	nber of or fewer than	1. Same number     3. Fewer children       2. More children     8. DK							
Section 4: (STIs) and (HIV/AIDS)									
401: Have you ever heard about STIs ?		□ 1. Yes □ 2. No, go to q. 404							
402: From which sources of information have yo about it ? Multiple answer	ou heard	1. Radio       5. Health workers       9. Workplace         2. TV       6. School/teachers       96. Other         3. Newsp./magaz.       7. Community         4. Posters       8. Friend/relative							
403: What kind of STIs have you ever heard abo Multiple answer	ut ?	Image: 1. Syphilis     Image: 3. Warts     8. DK       Image: 2. Gonorrheoea     Image: 4. Other							
404: Have you ever heard about HIV/AIDS ?		□ 1. Yes □ 2. No							
405: From which suorces of information have yo about it ? Multiple answer	ou heard	1. Radio       5. Health workers       9. Workplace         2. TV       6. School/teachers       10. Other         3. Newsp./magaz.       7. Community         4. Posters       8. Friend/relative							
406: Is there anything a person can do to avoid HIV/AIDS ?	getting	□ 1. Yes □ 2. No □ 8. DK							
407: Is it easy to recornize people infected with	HIV/AIDS?	□ 1. Yes □ 2. No □ 8. DK							
408: How is HIV/AIDS transmitted ? Multiple answer		<ul> <li>1. Sexual intercouse</li> <li>2. Blood trans.</li> <li>3. Sharing syringe</li> <li>4. Mother to child transmission during pregnancy/birt</li> <li>5. Other</li> </ul>							
409: How to prevent infected STIs/HIVs ? Multiple answer		<ul> <li>1. Have only one sex partner</li> <li>2. Using toilet Carefully</li> <li>3. Taking medicine before</li> <li>7. Other</li> <li>have sex</li> <li>8. DK</li> </ul>							

	3									
Question		Answer code								
<ul> <li>410: What are the risk factors of getting HIV?</li> <li>1. Avoid mosquitoes</li> <li>2. Not having sex</li> <li>3. Using condoms during sex</li> <li>4. Monogamy ( having only one partner )</li> <li>5. Avoid sharing food with person with HIV</li> <li>6. Avoid sharing toilet with person with HIV</li> <li>7. Avoi sharing glass with person with HIV</li> <li>8. Avoid sharing needles/drugs</li> <li>9. No sex with CSWs</li> </ul>		1. Yes	1 1 1 1 1 1 1 1 1		lo ] ] ] ] ] ]	2 2 2 2 2 2 2 2 2 2 2 2 2 2				
411: In the last 12 month have you had any treat for urethral discharge ?	ment		1. \	/es					No, finish interwiew	
412: What type of treatment to used ? (Multiple answer )			1. Traditional medicine 2. Oral antibiotic			ie		<ul> <li>3. Infection antibiotic</li> <li>4. Cream</li> <li>5. Other ()</li> </ul>		
413: Where did you get this ? (Multiple answer )			1. F 2. F 3. F	Phamacy Hospital Health cei	ntre				<ul> <li>4. Private clinic</li> <li>5. Home visit</li> <li>6. Self medication</li> </ul>	

## APPENDIX C: SAMPLING ERRORS, DESIGN EFFECT AND CONFIDENCE INTERVALS FOR SELECTED INDICATORS

		Unw	veighted		(Weighted)			
Indicators	Value	Standard error	[95% conf. interval]	Design effect	Value	Standard error	[95% conf. interval]	Design effect
Vital rates								
Incidence of teenage								
pregnancy	13,1	0,8	12,2 - 15,3	1,3	12,4	0,8	10,9 - 14,1	1,5
Crude birth rate	29,9	0,7	26,4 - 29,2	2,5	27,0	0,7	25,6 -28	2,6
Crude death rate	5,4	0,3	5,0 - 6,3	1,8	5,6	0,3	5,0 - 6,3	2,0
Infant mortality rate	56	3,4	49,1 - 62,3	1,6	58,6	4,4	49,9 - 67,2	2,5
Child mortality rate	15,0	1,4	9,4 - 15,0	1,2	15,0	1,7	8,9 - 15,6	1,7
Under five mortality rate	68	3,7	60,6 - 75,1	1,6	70,8	4,7	61,6 - 80,1	2,3
Skill birth attendant	18,5	0,8	17,2 - 20,2	3,3	23,4	1,0	21,5 - 25,4	4,6
Antenatal care	28,5	1,1	26,4 - 30,7	4,8	34,0	1,3	31,4 - 36,6	6,3
Ever heard of STIs: Wom	nen							
Have heard	55,8	1,0	53,7 - 57,8	5,6	59,8	1,2	57,5 - 62,1	7,3
Not heard	44,1	1,0	42,1 - 46,1	5,6	40,1	1,2	37,8 - 42,4	7,3
NS	0,2	0,0	0,1 - 0,2	0,9	0,1	0,0	0,1 - 0,2	1,0
Ever heard of STIs: Men		1	<u> </u>			1	1	
Have heard	70	1,1	67,9 - 72,1	1,8	72,0	1,2	69,5 - 74,4	2,5
Not heard	29,9	1,1	27,9 - 32,1	1,8	28,0	1,2	25,6 - 30,4	2,5
NS	0,2	0,0	(0,0) - 0,1	1,0	-	0,0	(0,0) - 0,1	0,7
Ever heard of HIV/AIDS:	Women							
Have heard	70,4	1,0	68,3 - 72,2	6,2	75,9	0,9	74,0 - 77,7	6,4
Not heard	29,5	1,0	27,6 - 31,5	6,2	24,0	0,9	22,1 - 25,8	6,4
NS	0,1	0,0	0,1 - 0,2	0,9	0,1	0,0	0,1 - 0,2	0,9
Ever heard of HIV/AIDS:	Men							
Have heard	84,9	0,9	83,1 -86,6	2,0	87,4	0,8	85,8 - 89,0	2,0
Not heard	14,5	0,9	12,8 -16,2	2,1	12,1	0,8	10,5 - 13,7	2,1
NS	0,5	0,1	0,3 -0,8	0,9	0,0	0,1	0,2 - 0,7	1,0
Iron taken during pregn	ancy,							
Did not take	76,4	1,0	74,4 -78,3	2,9	73,1	1,2	70,8 - 75,4	3,7
<90 pills	14,6	0,7	13,3 -16,1	2,2	17,8	0,9	16,0 - 19,6	3,1
>90 pills	5,9	0,5	4,9 -7,0	2,5	5,7	0,5	4,7 - 6,8	2,8
Don't know	3	0,3	2,4 -3,6	1,9	3,4	0,4	2,7 - 4,1	2,2
Contraceptive prevalence rate	38,4	0,9	36,6 - 40,1	3,2	39,8	1,0	37,9 - 41,7	3,8
Modern method	35,0	0,8	33,3 - 36,6	3,1	35,6	0,9	33,8 - 37,4	3,7
Traditional method	3,4	0,3	2,9 - 3,9	2,0	4,2	0,4	3,5 - 4,9	3,0

## Continued

		Unw	veighted		(Weighted)					
Indicators	Value	Standard error	[95% conf. interval]	Design effect	Value	Standard error	[95% conf. interval]	Design effect		
Contraceptive use any method by urban/rural areas										
Urban Rural with road Rural without road	51,6 39,2 26,6	1,5 1,3 1,8	48,8 - 54,5 36,8 - 41,7 23,0 - 30,1	1,7 3,4 4,4	50,5 40,0 27,5	1,6 1,4 2,1	47,4 - 53,6 37,2 - 42,7 23,4 - 31,6	2,0 4,1 5,7		
Unmet need for family planing	27,3	0,7	27,5 - 30,2	2,3	28,8	0,9	27,1-30,5	3,4		
Unmet need for spacing Unmet need for limitation	11,0 16,3	0,6 0,5	11,7 - 14,0 15,7 - 17,1	3,1 1,9	11,9 16,9	0,8 0,6	10,5 - 13,5 15,8 - 18,1	5,2 2,4		