

MIZORAM

Reproductive and Child Health

District Level Household Survey 2002-04



International Institute for Population Sciences, (Deemed University) Mumbai – 400 088



Ministry of Health & Family Welfare, Government of India, New Delhi – 110 011



Development & Research Services Pvt. Ltd. New Delhi-110029

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PREFACE AND ACKNOWLEDGEMENT

Government of India had launched the Reproductive and Child Health (RCH) program to ensure that couples have access to adequate information and services for reproductive health care. As a first step, family planning target has been withdrawn and an effort is being made to provide a package of reproductive services at different levels of health care centres.

Monitoring of the services is also being improved. New indicators are being added to assess quality of services and provision of an integrated reproductive health care service. The District Level Household Survey (DLHS) was initiated by Government of India and financed by the World Bank covering all the districts in the country. For the second time, district level estimates will be available for most of the critical reproductive health indicators. These important initiatives are certainly quite satisfying for all those who are concerned with taking ICPD reproductive health agenda ahead. The project is being coordinated by International Institute for Population Sciences, Mumbai and implemented by a number of consulting agencies.

For the purpose of data collection, uniform questionnaires, sampling design and field procedures were used throughout the country. The survey thus provided comparable data for all the districts in the state. The present report provides salient findings of Mizoram and covered all the districts. The findings of selected indicators of reproductive and child health services from the state of Mizoram are presented in the report.

It is believed that the data generated through the survey will meet the requirements of the Programme Administrators and Policy Makers for making effective interventions for providing quality services and achieving multiple objectives.

The DLHS-RCH could not have been successfully completed without cooperation and support from innumerable sources at various stages of the project. Although, it is not possible to acknowledge everyone involved in the survey, several organizations and individuals deserve special mention.

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We would be failing in our duty if we do not thank our respondents who spent their valuable time with tremendous patience.

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KEY INDICATORS, MIZORAM

DISTRICT LEVEL HOUSEHOLD SURVEY- REPRODUCTIVE AND CHILD HEALTH, (DLHS-RCH), 2002-04

Osmula sisa		Adaguata Iran falia agid tablata/aurun ³	
Sample size	0 705	Adequate Iron folic acid tablets/syrup ⁻	
Households surveyed	8,725	Pull antenatal check-up	
Currently married women age 15-44	7,541	Delivery characteristics	
Husband's of eligible women	6,065	Delivery at home	
Characteristics of households		Delivery at government health institutions	
Percent rural	63.5	Delivery at private health institutions.	
Percent Hindu	1.7	Delivery attendant by skilled persons ⁵	
Percent Muslim	0.7	Child health	
Percent other religion (Christian)	0.7	Percent of children whose mother squeezed out milk	
Percent scheduled caste	97.3	from her breast ⁶	
Percent scheduled tribe	2.8	Percent of children ⁷ with diarrhoea ⁸ who received	
Percent with electricity	96.0	ORS	
Percent with flush toilet	00.0	Percentage of women whose child ⁷ with pneumonia ⁸	
Percent with no toilet facility	83.8	sought treatment	
Percent living in Kachcha houses	32.1	Borcont of childron who received	
Porcent living in <i>Pucce</i> bouces	2.1	reicent of children who received	
Percent with low standard of living	39.7	vaccinations	
Percent with high standard of living	33.1	BCG	
Percent with indiand colt (15 - 222)	22.8	DP1 (3 injections)	
Characteristics of survey the main raised	56.8	Polio (3 drops)	
Characteristics of currently married		Measles	
women age 15-44 years		All vaccinations ¹⁰	
Percent below age 30	40.9	No vaccination at all	
Percent with age at first cohabitation below age 18.	22.2	Percentage of women who had	
Percent illiterate	14.2	Pregnancy complication ²	
Percent having 10 or more years of schooling	22.3	Delivery complication ²	
Percent with illiterate husband	8.9	Post delivery complication ²	
Percent with husband 10+ years of schooling	35.2	Symptoms of RTI/STI	
Marriage		Problems of varinal discharge	
Mean age at marriage for boys	05.4	Menstruation related problem	
Mean age marriage for girls	25.1	Awaranass of BTI/STI and HIV/AIDS	
Percent of hove married below are 21	21.6	Awareness of KTI/STI and Hiv/AiDS	
Percent of girls married below age 19	14.1	Percent of women who have heard of R1/S11	
	14.0	Percent of women who have heard of HIV/AIDS	
renning		Utilization of government health services	
Mean children ever born women age 40-44 years	3.6	Antenatal care	
Percent of births of order 3 and above	41.5	Treatment for pregnancy complication	
Current use of family planning method		Treatment for post-delivery complication	
Any method	53.8	Treatment for vaginal discharge	
Any modern method	52.6	Treatment for children with diarrhoea	
Pill	5.9	Treatment for children with pneumonia	
IUD	4.9	Quality of family planning services	
Condom	2.3	Percent non-users ever advised to adopt the family	
Female sterilization	39.2	planning method	
Male sterilization	0.1	Percent users told about side effects of method	
Any traditional method	12	Percent users who received follow up convices	
Rhythm/safe period	0.2	r ercent users who received follow-up services	
Withdrawal	0.2		
Unmet need for family planning	0.4	Characteristics of husband of eligible	
Dereent with upmet need for encoing	16.1	women	
Percent with unmet need for the stating	10.1	Percent of husband knowing NSV	
Percent with unmet need for limiting	8.9	Percent of men who have heard of RTI/STI	
	25.0	Percent of men who have heard of HIV/AIDS	
Maternal care		Percentage who had any symptoms of RTI/STI	
Percent of women received antenatal check-ups	74.3	Sought treatment for RTI/STI	
Antenatal check-up at home	1.5		
Antenatal check-up in first trimester	41.2		
Three or more visit for ANC	56.3		
Two or more tetanus toxoid injections	47.8		

¹ For births in past three years, ² For live/still births during three years preceding the survey, ³ 100 or more IFA tablets/Syrup, ⁴ A minimum of three visits for ANC, at least one TT injections and 100 or more IFA tablets/syrup, ⁵ Either institutional delivery or home delivery assisted by Doctor/ANM/nurse, ⁶ Children age below 3 years, ⁷ Last but one living children below age 3 years, ⁸ Last two weeks preceding the survey, ⁹ Last but one living children (age 12-23 months) born during three years preceding the survey. ¹⁰ BCG, three injections of DPT, three drops of polio and measles.

SALIENT FINDINGS

For the assessment of district level Reproductive and Child Health indicators, Government of India proposed to undertake district level household surveys through non-governmental agencies on an annual basis. The District Level Household Survey (DLHS) was the result of government's initiative. In Mizoram, DRS, India was entrusted the work of carrying out of the survey. The survey for Phase-1 of the DLHS covering 3districts of the state was conducted during October 2002 to November 2002. The survey for Phase-2 covering the remaining districts of the state was carried out during July 2004 to August 2004. The focus of the survey was on: i) Coverage on ante natal care (ANC) and immunization services, ii) Extent of safe deliveries, iii) Contraceptive prevalence rate and unmet need for family planning, iv) Awareness about RTI/STI and HIV/AIDS and v) Utilization of government health services and users' satisfaction. The salient findings of the survey are presented here.

For both the phases together, the data was collected from 8,726 households in Mizoram. From these households, 7,541 eligible women (usual resident or visitors who stayed in the sample household the night before the interview, currently married aged 15-44 years whose marriage was consummated) and 6,065 husbands of eligible women were interviewed.

Of the total households interviewed in Mizoram, nearly 37 percent were from urban areas. There were 2 percent Hindu households, less than one percent Muslim and 97 percent came under other category in the sample. Three percent of the households belonged to scheduled castes and 96 percent to scheduled tribes. Thirty percent of the households lived in *Kachcha* and about 59 percent are in Semi-*pacca* and 11 percent are in *pucca* houses. The majority of the households belonged to low economic status (40 percent in low SLI)

About 97 percent of population aged seven and above are literate. Percent literate among females is 97 where as it is 97 percent for male. Proportion of non-literate is much higher among the older cohort compared to the younger ones. Nearly 12 percent of eligible women in the state are non-literate, and 10 percent have completed 11 or more years of schooling. In Mizoram the level of literacy among the eligible women and their husbands are high. As regards distribution of non-literate women, lesser proportion of younger women's below age 30 are illiterate compared to older women age 30 and above, but in case of non-literate husbands across age is more or less uniform, though it is marginally more for husbands above 40 years.

The reporting of the marriages during three yeas prior to survey gives the mean age at marriage among the boys and girls in the state as 25.1 and 21.6 years respectively. Fourteen percent of boys and same percentage of girls in the state got married before attaining the minimum legal age at marriage of 21 and 18 years respectively. In all the districts, except Aizawl, Lawngtlai and Lunglei more than 14 percent of boys got married below the legal minimum age at marriage. In Champhai, Lunglei, Mamit and Saiha, over 14 percent of the girls got married below the legal minimum age at marriage.

About half of the households (57 percent) use cooking salt that is iodized at the recommended level of 15 parts per million or higher level of iodine content whereas 12 percent of households used salts that are not iodized at all. Lowest proportion of households (1 percent) in Serchhip is using non-iodized salt whereas in Lawngtlai the highest proportion of households (59 percent) used non-iodized salt. While more than 60 percent of households in Aizawl, Champhai, Kolasib, Saiha and Serchhip consume adequately iodized salt, only 15 percent of households in Lawngtlai do so.

On an average, women on the verge of completion of reproductive period have given birth to 3.6 children. The completed fertility in the states varies from the lowest of 3.3 children ever born per women in a Lunglei to the highest of 4.5 children in Saiha.

The share of births of order 3 and above in the total births that occurred three years prior to survey is 42 percent. In most of the district, proportion of higher order births is quite high, ranging from the lowest of around 34 percent in Aizawl, to the highest of about 51 percent in Saiha.

The data collected on the utilization of ANC services for the women who had their last live/ still birth during three years prior to survey shows that the ANC coverage in the state is high as 74 percent of the women received at least one ante-natal care during pregnancy. About two percent of the women during their pregnancy were visited by health worker at their residence for providing ANC. Seventeen percent of the women visited private health facilities and 59 percent received ANC from government health facilities. The percent of women who got some kind of ANC during pregnancy range between 29 percent in Lawngtlai to 94 percent in Aizawl. In 5 districts out of 8, 80 percent or more women got some antenatal care.

Though 74 percent of the women in Mizoram received ANC, only 70, 68 and 24 percent women had check-up of weight, blood pressure and abdomen respectively. Twenty-nine percent women received Iron and Folic Acid (IFA) tablets and 24 percent got at least one TT injection. A full package of ANC including minimum three ANC visits, at least one TT injection and 100 or more IFA tablets/Syrup was received by 20 percent of women.

Minimum three ANC and timing of first check up is crucial for maternal and child care. In Mizoram nearly 41 percent of women got ANC in the first trimester and nearly 56 percent had minimum three antenatal check-ups. An extent of ANC in first trimester varies from minimum of 13 percent in Lawngtlai to the maximum of 67 percent in Aizawl. In Lawngtlai, only 13 percent of women had minimum three ANC whereas in Aizawl more than 85 percent women had got minimum three ANC.

Nearly 53 percent of the total deliveries in Mizoram were conducted in the health institutions; 4 percentages point up from RCH Round I. The majority of the institutional deliveries were conducted in government institutions (47 percent of total deliveries) as against in private institution 6 percent of total deliveries. Seventeen percent of the total deliveries, that took place at home, were assisted by midwifery trained persons i.e. doctor/ nurse and ANM. So in all, 61 percent of the deliveries, slightly up from RCH Round I (63 percent), in the state were assisted by skilled personnel. The extent of institutional deliveries varies from the highest of 86

percent in Kolasib to the lowest of 22 percent in Lawngtlai. In all the districts, comparatively higher proportion of the deliveries took place in government health institutions. Safe deliveries were on the similar pattern in all the districts. The percent of the institutional deliveries increases substantially with women's education and economic status, though the variation in the institutional deliveries by women's education is much conspicuous than that by women's economic status.

In Mizoram, 47, 23 and 35 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 25 percent of the women sought treatment for the pregnancy and 19 percent for the post-delivery complications. The pregnancy complication varies from the lowest of 18 percent in Saiha to the highest of 73 percent in Lawngtlai. The incidence of all the three types of complications seems to be linked with each other. In the districts where the incidence of pregnancy complications is high, the incidence of delivery and post-delivery complications is also high.

In most of the districts and the state as a whole, the practice of breast-feeding is almost universal. The practice of initiation of breastfeeding within two hours of birth of the child is also common. In Mizoram, only 67 percent women started breastfeeding the child within two hours of birth and only 11 percent started after one day of birth. There is great deal of variation in the pattern of breastfeeding across the districts. In Lawngtlai district only 38 percent of the women breastfed the child within two hours of birth. In Kolasib and Lunglei district, the percentage is highest (81 and 79 percent respectively).

In Mizoram 78, 56, 44 and 60 percent of the children received the BCG vaccine, three doses of DPT, Polio and measles vaccine respectively. There is 19 percentage points drop from BCG to measles. It means that large number of children that have contact with services providers are missed out of subsequent services. The complete schedule of immunization including BCG, three doses of DPT and Polio each and measles was received by 33 percent of the children, whereas 15 percent of the children did not receive a single vaccination under routine programme. About 30 percent of the children received supplementation of at least one dose of vitamin A and only 10 percent children received IFA tablets/liquid for iron supplementation.

The extent of complete immunization consisting of BCG, three injections of DPT, three doses of Polio and measles is the lowest in Lawngtlai (7 percent) and highest in Serchhip (60 percent). In 3 districts (Aizawl, Saiha and Serchhip) more that 50 percent of the children received complete immunization.

In Mizoram, 90 percent of the women were aware of diarrhoea management and 71 percent were aware of Oral Rehydration Salt (ORS). During the two-week period prior to survey, children of 22 percent of the women suffered from diarrhoea. And 62 percent women treated diarrhoea among children by giving ORS. In comparison to awareness about diarrhoea management, the awareness about danger sings of pneumonia is quite low. Only 41 percent of the women reported awareness about danger sings of pneumonia. Twenty-three percent of the women reported that their children suffered from cough, cold and difficulty in breathing in two-week period prior to survey and 57 percent sought treatment.

The knowledge of family planning methods is universal in all districts of Mizoram, with over 94 percent women reporting knowledge of one method or the other. However, the knowledge of any spacing method is marginally low, but the proportion *per se* is quite high (78 percent). The knowledge of any modern methods is also universal in all the districts, though the knowledge of all modern methods is only 25 percent. The proportion knowing all modern methods (males and females' sterilization, IUD, oral pills and condom) varies from about 7 percent in Champhai to 52 percent in Aizawl.

In DLHS, knowledge about No-scalpel vasectomy has been asked to husbands of eligible women. About twenty-six percent of the husbands were aware of no-scalpel vasectomy in the state.

The contraceptive prevalence rate (any methods) in the state is 54 percent, 6 percentage point up from RCH Round I, comprising of prevalence of about 53 percent of modern methods and 1 percent of traditional methods. Thirty nine percent of the couples adopted sterilization. The percent user of the two male methods sterilization and condom is only 2 percent. There has been positive association between contraceptive use and female education, economic development and availability of health facility. The highest contraceptive prevalence is in Kolasib (70 percent) followed by Aizawl (67 percent) and lowest is in Lawngtlai (36 percent).

In Mizoram, a total of 25 percent of women are found to have unmet need for family planning, with 9 percent for limiting and 16 percent for spacing. There is not much inter-district differences in the pattern of unmet need. The total unmet need varies from 11 percent in Kolasib to 36 percent in Lunglei followed by Champhai and Lawngtlai (29 percent).

Only 5 percent of the women in the state reported that either ANM/LHV or health worker visited them at their residence at least once in the past three months. About ninety three percent of women who were visited by ANM felt that ANM had given them sufficient time to discuss health-related matters.

In nearly 6 out of 8 districts, less than 5 percent of the women reported the visit of ANM/LHV to their residence. In the remaining 2 districts (Champhai and Saiha) 6 percent and 30 percent of the women, respectively, reported visits of ANM/LHV.

It has been observed that in three months period prior to survey, 85 percent of the eligible women who were required to consult health facility visited any of the government health facilities. Very small proportion of the women who visited the health facility rated facility as excellent. On the other hand, nearly 14 percent of the women who did not visit the government health facility reported government health facility "non-conveniently located" or "time is not suited" as reason.

The district level variation in the utilization of the government health facilities ranges from 66 percent in Aizawl to 100 percent in Saiha. A very small percentage of women visited to private health facilities (14 percent), ranges from one percent in Kolasib and Serchhip, to 34 percent in Aizawl.

In Mizoram 49 and 84 percent of women are aware of RTI/STI and HIV/AIDS respectively. The corresponding level of awareness among husbands of eligible women is 56 and 86 percent. The percent of women who are aware of RTI/STI is lowest in Lunglei (11 percent) and HIV/AIDS is lowest in Lawngtlai 46 to highest in Aizawl 83 and 100 percent. Similarly awareness level of husbands of eligible women of RTI/STI and HIV/AIDS are lowest in Lunglei (15 percent) and in Lawngtlai (48 percent) to highest in Aizawl and Saiha (82 percent each) and in Aizawl (99 percent) respectively. Out of 8, in 2 districts the awareness of HIV/AIDS is below state figure for women and in 2 districts for husbands of eligible women.

About 49 percent of women and 8 percent of husbands of eligible women in the state reported having at least one symptoms of RTI/STI. In most of the districts the reported prevalence of RTI/STI among husbands was low. The prevalence of RTI/STI is lowest in Saiha (29 percent) for women and in Kolasib (4 percent) for husbands to highest in Lawngtlai (76 percent) for women and (13 percent) for husbands. About 9 percent of women reported vaginal discharge with low in Aizawl (5 percent) to highest in Lawngtlai (19 percent). Twenty three percent of women sought treatment for vaginal discharge problem and 19 percent of husbands sought treatment with at least one symptoms of RTI/STI. It may be noted that in 6 out of 8 districts higher proportion of women compared to husbands sought treatment for their reproductive health problems.

CHAPTER I

INTRODUCTION

1.1 Background and Objectives of the Survey

The Reproductive and Child Health (RCH) programme that has been launched by Government of India (GoI) in 1996-97 is expected to provide quality services and achieve multiple objectives. It ushered a positive paradigm shift from method-oriented, target-based activity to providing client-centred, demand-driven quality services. Also, efforts are being made to reorient provider's attitude at grassroots level and to strengthen the services at outreach levels.

The new approach requires decentralization of planning, monitoring and evaluation of the services. The district being the basic nucleus of planning and implementation of the RCH programme, Government of India has been interested in generating district level data on utilization of the services provided by government health facilities, other then that based on service statistics. It is also of interest to assess people's perceptions on quality of services. Therefore, it was decided to undertake District Level Household Survey (DLHS) under the RCH programme in the country.

The Round I of RCH survey was conducted during the year 1998–99 in two phases (each phase covered half of the districts from all states/union territories) in 504 districts for which International Institute for Population Sciences (IIPS), Mumbai was designated as the nodal agency.

In Round II, survey was completed during 2002-04 in 593 districts as per the 2001 Census. In DLHS-RCH, information about RCH has been collected using a slightly modified questionnaire. In Round II, some new dimensions, such as test of cooking salt to assess the consumption of salt fortified with iodine, collection of blood of children, adolescents and pregnant women to assess the level of anaemia, and measurement of weight of children to assess the nutritional status, were incorporated.

The main focus of the DLHS-RCH has been on the following aspects:

- Coverage of ANC & immunization services
- Proportion of safe deliveries
- Contraceptive prevalence rates
- Unmet need for family planning
- ➢ Awareness about RTI/ STI and HIV/AIDS
- Utilization of government health services and users' satisfaction.

For the purpose of conducting DLHS-RCH, all the states and the union territories were grouped into 16 regions. A total of twelve research organizations including Population Research Centres (PRCs) were involved in conducting the survey in 16 regions with IIPS as the nodal agency.

1.2 Survey Design

In Round II, a systematic, multi-stage stratified sampling design was adopted. In each district, 40 Primary Sampling Units (PSUs – Villages/Urban Frame Size) were selected with probability proportional to size (PPS) using the 1991 Census data. All the villages were stratified according to population size, and female literacy was used for implicit arrangement within each strata. The number of PSUs in rural and urban areas was decided on the basis of percent of urban population in the district. However, a minimum of 12 urban PSUs were selected in each district in case the percent urban was low. The target sample size in each district was set at 1,000 complete residential households from 40 selected PSUs. In the second stage, within each PSU, 28 residential households were selected with Circular Systematic Random Sampling (CSRS) procedure after house listing. In order to take care of non-response due to various reasons, sample was inflated by 10 percent (i.e. 1,100 households).

For selecting the urban sample, the National Sample Survey Organization (NSSO) provided the list of selected urban frame size (UFS) blocks in the district. The UFS blocks were made available separately for each district for urban areas. The maps of selected blocks were obtained from the NSSO field office located in each state/union-territory.

But in each state, in two districts, the PSUs that were surveyed in Round I of DLHS-RCH (also known as RHS-RCH) were also selected for survey in Round II. This was done in order to measure the changes more accurately. Two districts, one with the highest proportion of safe delivery and another with the lowest proportion of safe delivery among those surveyed during Round I of the survey were selected for this purpose. In all other districts, fresh sample of PSUs were selected.

1.3 House Listing and Sample Selection

The household listing operation was carried out in each of the selected PSU segment prior to the data collection that provided the necessary frame for selecting the households. The household listing operation also involved preparation of location map and layout sketch map of the structures and recording the details of the households in these structures in each selected PSU. This exercise was carried out by independent teams each comprising one lister, one mapper and one supervisor under the overall guidance and monitoring of the survey coordinator of households of the selected regional agencies.

A complete listing of households was carried out in villages with households up to 300. In case of villages with more than 300 households but less than or equal to 600 households, two segments of more or less same size were formed and one segment was selected at random and household listing was carried out. In case of villages with more than 600 households, segments each of about 150 households were formed and two segments were selected for listing using the systematic random sampling method.

Small villages with less than 50 households were linked with a nearest village. After combining it with the nearest village, the same sampling procedure was adopted as mentioned above.

For the urban PSUs, the selected UFS blocks needed no segmentation as they were of almost equal size and contained less than 300 households.

No replacement was made if selected household was absent during data collection. However, if a PSU was inaccessible, a replacement PSU with similar characteristics was selected by the IIPS and provided to the regional agency for survey.

1.4 Questionnaire

DLHS-RCH collected information on a various indicators pertaining to RCH that would assist policymakers and programme managers to formulate and implement the goals set for RCH programmes. The International Institute for Population Sciences (IIPS), Mumbai, the Nodal Agency for DLHS–RCH project has made necessary modifications in the two Questionnaires: Households Questionnaire and Women's Questionnaire and added three more Questionnaires i.e., Husband's Questionnaire, Village Questionnaire and Health Questionnaire, in consultation with MoHFW and World Bank. These Questionnaires were discussed and finalized in training cum workshop organized at IIPS during the first week of November 2001.

These modified questionnaires had been canvassed of round II of the DLHS–RCH survey, taking into consideration the views of all the regional agencies involved. The house–listing teams and the interviewers and the supervisors for the main survey were given rigorous training based on the manuals developed for the purpose by the Nodal Agency.

All the questionnaires were bilingual, with questions in both regional and English language.

The Details of questionnaires are as follows:

Household Questionnaire: The household questionnaire lists all usual residents in each sample household including visitors who stayed in the household the night before the interview. For each listed household member, the survey collected basic information on age, sex, and marital status, relationship to the head of the household, education and the prevalence /incidence of tuberculosis, blindness and malaria. Information was also collected on the main source of drinking water, type of toilet facility, source of lighting, type of cooking fuel, religion and caste of household head and ownership of other durable goods in the household. In addition, a test was conducted to assess whether the household used cooking salt that has been fortified with iodine. Besides, details of marriages and deaths which happen to usual residents within reference period were collected. Efforts were also made to get information about maternal deaths.

Women Questionnaire: Women questionnaire is designed to collect information from currently married women age 15 - 44 years who are usual residents of the sample household or visitors who stayed in the sample household the night before the interview. The women questionnaire covered the following sections:

Section I: Background Characteristics: In this section the information collected on age, educational status and birth and death history of biological children including still birth, induced and spontaneous abortions.

Section II: Antenatal, Natal and Post natal Care: In this section the questionnaire collect information only from the women who had live birth, still birth, spontaneous or induced abortion during last three years preceding the survey date. The information on whether women received antenatal and postpartum care, who attended the delivery and the nature of complications during pregnancy for recent births were also collected.

Section III: Immunization and childcare: This section gives information about feeding practices, the length of breastfeeding, immunization coverage and recent occurrence of diarrhoea, and pneumonia for young children (below age 3 years).

Section IV: Contraception: This section provides information on knowledge and use of specific family planning methods. Questions were included about reasons for non use, intentions about future use, desire for additional child, sex preference for next child etc.

Section V: Assessment of quality of Government health services and client satisfaction. In this section the questions are targeted to assess the quality of family planning and health services provided by Government health facilities. The information were also collected about the rating of Government health facilities and staffs and reasons for not visiting to government health facilities by eligible woman.

Section VI: Awareness about RTI/STI and HIV/AIDS: In this section the information were collected about women's knowledge of RTI/STI about awareness, Source of knowledge, aware of mode of transmission, curability, symptoms and treatment seeking behaviour. About HIV/AIDS; Awareness, Source of knowledge, aware of mode of transmission and prevention etc were canvassed.

Husband Questionnaire: In DLHS-RCH, round II, husband questionnaire was used to collect information from eligible women's husbands about age, educational status, knowledge and source of knowledge of RTI/STI and HIV/AIDS reported symptoms of RTI/STI and male participation. Apart from these information desires for children, reasons for not using F.P. methods, future intention to use F.P. methods and knowledge about no scalpel vasectomy (NSV) has also been collected.

Health Questionnaire: In DLHS-RCH, round II, a health questionnaire is included. The information collected were on weight of children age 0–71 months old and the blood sample to assess the haemoglobin levels of children age 0–71 months old, adolescents 10–19 years old and pregnant eligible women. This information is useful for assessing the levels of nutrition prevailing in the population and prevalence of anaemia among women, adolescent girls and children.

Village Questionnaire: A village questionnaire is also added in this round of DLHS. The information collected on the availability and accessibility of various facilities in the village especially on accessibility of educational and health facilities.

1.5 Fieldwork and Sample Coverage

The fieldwork for RCH Round II was done in two phases. During Phase I, 3 districts were covered from October 2002 to November 2002 and remaining 5 districts were covered during Phase II from July 2004 to August 2004.

During Round II, a total of 18,785 thousand households were covered. From these surveyed households, 15,614 currently married women (aged 15-44 years) and 10,958 husbands of eligible women were interviewed.

1.6 Data processing

All the five types of completed questionnaires were brought to the headquarter of regional agencies and data were processed using microcomputers. The process consisted of office editing of questionnaires, data entry, data cleaning and tabulation. Data cleaning included validation, range and consistency checks. For both data entry and tabulation of the data, IIPS developed the software package. The district and state level reports were prepared by regional agency whereas national report is prepared by the nodal agency.

1.7 Sample Weights

In generating district level demographic indicator sample weight for household, women and husband, weight have been used and these for a particular district are based on three selection probabilities f_1^i, f_2^{i} and f_3^{i} pertaining to ith PSU of the district. These probabilities are defined as

 f_1^i = Probability of selection of ith PSU in a district = $\frac{(n_r * H_i)}{H}$

Where, n_r is the number of rural PSU to be selected in a district, H_i refers to the number of household in the ith PSU and $H = \sum_{H_i} H_i$, total number of household in a district.

 f_{2}^{i} = Probability of selecting segment (s) from segmented PSU (in case the ith selected PSU is segmented)

= (Number of segments selected after segmentation of PSU) / (number of segment created a PSU) The value of f_2 is to be equal to one for un-segmented PSU. f_{3}^{i} = probability of selecting a household from the total listed households of a PSU or in segment(s) of a PSU

$$= \frac{28^* HR_i}{HL_i}$$

Where HR_i is the household response rate of the ith sampled PSU and HL_i is the number of households listed in i th PSU in a district.

For urban PSU, f_1^{i} is computed either as the ratio of number of urban PSUs to be included from the district to the total number of UFS blocks of the district or as the ratio of urban population of the selected PSU to the total urban population of the district.

The probability of selecting a household from the district works out as;

$$f^i = \left(f_1^i * f_2^i * f_3^i\right)$$

The non-normalized household weight for the ith PSU of the district is, $w^i = \frac{1}{f^i}$, while the

normalized weight used in the generation of district indicators as

$$n_i^d = \frac{\sum_{i=1}^{n_i} n_i}{\sum_{i=1}^{n_i} n_i * w^i} * w^i$$
, i= 1,2,3.....40.

Where n_i is the number of households interviewed in the ith PSU. The weight for women and husband are computed in the similar manner after multiplication of expression for fⁱ by the corresponding response rate. State weights for households, women and husbands are further derived from the district weights n_i^d for the ith psu in dth district using external control so that for sample results do not deviate from the corresponding information about the population.

Let, $n_s = \sum_i n_i^d$ and $N_I = \sum_i N_i^d$, denote the number of households in the sample and census of a particular state, then state level households weights are work out as;

 $n_i^s = n_i^d * \frac{\begin{pmatrix} n_i^d \\ n_s \end{pmatrix}}{\begin{pmatrix} N_i^d \\ N_{sc} \end{pmatrix}}$, where n_i^d household sample in ith district, n_s is the total sample in the

state, N_i^d is the census population in the ith district and N_{sc} is the census population in the state. These households' weights are controlled for rural-urban separately.

Considering sample and census currently married women in 15-44 years and married males above 15 years for specified state by districts and rural-urban residence, state level women and husbands' weights are obtained for estimation of state level indicators.

1.8 Sample Implementation

Table 1.1 shows the period of fieldwork, number of households interviewed and household's response rates. A total of 8,726 households are interviewed, about 5,542 were rural. The overall household response rate – the number of households interviewed per 100 occupied households – was 100 percent. The household response rate was almost 100 percent in every district.

Table 1.1 NUMBER OF HOUSEHOLDS INTERVIEWED											
Month and year of fieldwork and number of households interviewed by district, Mizoram, 2002-04											
	Month a	and year									
	of fiel	d work	Number of	households in	terviewed	Deenenee					
State/District	From	То	Total	Rural	Urban	rate					
State	-	-	8,726	5,542	3,184	99.7					
State-phase I	10/2002	11/2002	-	-	-	-					
State-phase II	07/2004	08/2004	-	-	-	-					
Kolasib	10/2002	11/2002	1093	440	653	100.0					
Lunglei	10/2002	11/2002	1046	589	457	100.0					
Saiha	10/2002	11/2002	1101	750	351	100.0					
Aizawl	07/2004	08/2004	1109	304	805	99.8					
Champhai	07/2004	08/2004	1086	1086	0	99.2					
Lawngtlai	07/2004	08/2004	1080	1080	0	99.9					
Mamit	07/2004	08/2004	1098	765	333	98.5					
Serchhip	07/2004	08/2004	1113	528	585	100.0					
Note:Table based on unweig	Note:Table based on unweighted cases.										

In the interviewed households, interviews were completed with 7,541 currently married women who are the usual member of the household or stayed night before the household interview and 6,065 husbands of eligible women were also interviewed (Table 1.2). The number of completed interviews per 100 identified eligible women and husbands in the households with completed interviews were 96 and 80 percent respectively. The variation in the women's response rate by district was highest in Lunglei (99 percent) and lowest in Aizawl (93 percent), similarly husband's response rate was found to be highest in Lawngtlai (94 percent) and lowest in Lunglei (59 percent).

	Number	of women int	terviewed	Response	Number o	f husbands i	nterviewed	Response
State/District	Total	Rural	Urban	rate	Total	Rural	Urban	rate
State	7,541	4,848	2,693	95.5	6,065	4,010	2,055	79.2
Kolasib	805	340	465	96.3	621	276	345	74.8
Lunglei	1,028	572	456	98.5	613	373	240	59.0
Saiha	1,002	689	313	94.6	841	581	260	79.3
Aizawl	946	276	670	92.6	826	239	587	85.2
Champhai	1,001	1,001	0	95.4	866	866	0	86.9
Lawngtlai	821	821	0	97.6	777	777	0	94.4
Mamit	991	695	296	96.0	743	518	225	75.1
Serchhip	947	454	493	93.8	778	380	398	81.8

1.9 Basic Demographic Profile of the State

Before presenting the survey result, the basic demographic features of Mizoram and its districts (as per census, 2001) are presented here.

The state of Mizoram, located in the North Eastern part of the country with 0.89 million populations in 2001, Mizoram is a small state located in the north eastern part of the country Mizoram is perched like a lone sentinel on the tip of the north eastern border of India. The geographical location of the state is quite unique. Mizoram, one of the fabled Sevensisters of the North East covers overall area of 21,087 sq.km. Mizoram is shaped like a narrow triangle .Mizoram is sandwiched between Burma on the east and south, Bangladesh and Tripura in the west and Assam and Manipur to the north. Mizoram, a land of the Highlanders, lies in the north eastern border of India. The state is consisted of 8districts, 22 sub-districts (Blocks) and 802 villages. The urban areas of the state comprise 17 towns during 2001 Aizawl is the capital of the Mizoram.

According to 2001 census the population of Mizoram is 0.89 million out of which 0.46 millions are males and 0.43 millions are females. The rural and urban breakup of the population shows that 60.38 percent of the population was enumerated in rural areas and 49.6 percent in urban areas. Keeping pace with the national average, Mizoram has recorded a sharp decline in the decadal growth rate from 39.70 per cent in 1981-91 to 29.18 percent during 1991-2001. Among the districts, Aizawl with 39.24 percent has the highest decadal growth rate whereas Mamit with (–3.50) percent has the lowest decadal growth rate of total population during 1991-2001.

Percentage of both Scheduled Caste and Schedule Tribe population have experienced a marginal decline during 1991-2001 and the proportion of schedule caste and scheduled tribe population in total population of 2001 are 0.0 percent and 94.5 percent respectively. Highest proportion of Schedule Caste population has been recorded in Aizawl district (0.1 per cent) and that of Schedule Tribe in Serchhip (98.1 per cent) and seven districts has the lowest proportion of Schedule Caste (0.0 per cent) and that of Schedule Tribe in Kolasib (89.8 per cent). With a population density of 42 per sq. km., Mizoram and union territories in India and this figure is almost three times higher than the all India density of 325 persons per square km. Among the districts, Aizawl has the highest density (95 sq. km.) and Mamit has the lowest (21sq. km).

The sex ratio of the total population in the state has improved since 1991 Census from 921 to 935 per 1000 males. Serchhip has recorded the highest sex ratio (967) and surprisingly Mamit has the lowest (896) within the state.

The literacy rate in the state has improved from 52.21 percent in 1991 to 88.8 percent in 2001 .The literacy rate in urban (150 percent) is considerably higher in the state than that in rural areas (148 percent). Among the districts, Aizawl has the highest literacy rate of 82.4 percent. Lawngtlai has the lowest literacy rate of 52.4 percent. The male literacy for the state is 90.7 percent and the female literacy rate is 86.7 percent. Both the rates have increased from 1991 census to 2001 census.

	Perc	centage litera	te 7+				
India/state/district	(in thousand)	Percenta ge urban	decadal growth rate ¹	Sex ratio ²	Male	Female	Persons
India	1,0278,737	28.0	21.5	933	75.3	53.7	64.8
State	889	49.6	29.18	935	90.7	86.7	88.8
Kolasib	66	55.3	36.01	908	92.3	90.2	91.3
Lunglei	137	42.2	23.10	922	87.4	80.6	84.2
Saiha	61	32.5	33.16	954	86.1	78.1	82.2
Aizawl	326	76.2	39.24	952	96.7	96.3	96.5
Champhai	108	38.8	29.77	944	93.2	89.1	91.2
Lawngtlai	74	0.0	34.78	899	70.9	57.8	64.7
Mamit	63	17.0	-3.50	896	83.0	74.8	79.1
Serchhip	54	48.0	18.45	967	96.2	94.1	95.1

CHAPTER II

BACKGROUND CHARACTERISTICS OF HOUSEHOLD

This chapter provides a socio-economic and demographic profile of households interviewed in the District Level Household Survey-Reproductive and Child Health. Facilities and services such as Health, Education and Communication available in the representative sampled village are also presented here. The *de facto* producer of enumeration is adopted in order to include every individual staying in the sampled Primary Sampling Units (PSU), either a village or an urban area, the night before the survey. The objective of adopting the *de facto* method is to avoid duplication of persons who are in transit.

2.1 Age –Sex Structure

The age-sex distribution of sampled household population classified by residence is presented in Table 2.1. The percent distribution is based on sampled *de facto* population of 47,814 persons of whom 64 percent lived in the rural areas of Mizoram. The state of Mizoram depicts a young and growing population with 37 percent below the age of 15 years (Figure 2.1). There are more children below 15 years recorded in rural areas (39 percent) compared to those in urban areas (33 percent).



The overall sex ratio of 102 males per 100 females is recorded for the *de facto* population. The sex ratio is more skewed, 105 in favour of males in rural areas compared to 97 in urban areas.

Table 2.1 HOUSEHOLD POPULATION BY AGE AND SEX									
Percent distribut	tion of the ho	ousehold pop	ulation by age	and by residen	ce and sex,	Mizoram, 2002	2-04		
		Total			Rural			Urban	
Age	Total	Male	Female	Total	Male	Female	Total	Male	Female
	0.0	0.4	2.0	0.0	0.5	0.4	2.0	0.0	47
	2.2	2.4	2.0	2.3	2.5	2.1	2.0	2.2	1.7
1-4	10.3	10.7	9.8	11.3	11.7	10.8	8.5	8.9	8.1
5-9	12.7	13.1	12.3	13.6	13.9	13.3	11.1	11.8	10.5
10-14	11.9	12.0	11.7	12.2	12.4	11.9	11.3	11.4	11.3
15-19	10.7	10.1	11.3	10.5	9.9	11.0	11.2	10.5	11.8
20-24	9.7	8.2	11.2	9.6	8.2	11.1	9.9	8.3	11.4
25-29	9.1	8.2	10.1	9.1	8.3	9.9	9.1	7.9	10.3
30-34	7.2	6.9	7.5	6.9	6.8	7.0	7.8	7.0	8.5
35-39	6.8	6.8	6.8	6.5	6.6	6.5	7.3	7.4	7.3
40-44	7.0	6.7	7.3	6.4	5.9	7.0	7.9	8.1	7.7
45-49	3.6	4.7	2.4	3.5	4.6	2.3	3.7	4.9	2.6
50-54	3.0	3.8	2.2	2.8	3.5	1.9	3.4	4.2	2.6
55-59	1.7	1.8	1.6	1.7	1.7	1.6	1.8	2.0	1.6
60-64	1.5	1.7	1.4	1.5	1.6	1.3	1.7	1.8	1.5
65-69	1.0	1.1	1.0	0.9	1.0	0.9	1.2	1.3	1.2
70-74	0.8	1.0	0.6	0.7	0.9	0.5	1.0	1.3	0.7
75-79	0.4	0.4	0.5	0.4	0.3	0.4	0.6	0.5	0.7
80+	0.4	0.4	0.4	0.3	0.2	0.4	0.5	0.6	0.5
Total paraant	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
rotar percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of									
persons	47,814	24,112	23,702	30,408	15,542	14,866	17,406	8,571	8,835
Sex ratio ¹	102	NA	NA	105	NA	NA	97	NA	NA
Note: Table is	based on th	e de facto p	opulation, i.e. p	ersons who st	ayed in the	household the	night before	the interviev	w (including

both usual resident and visitors) NA: Not applicable¹ Male per 100 females

2.2 Household Characteristics

The percent distribution of 8,725 households surveyed in the state of Mizoram by selected characteristics of the household head and the number of usual household members are shown in Table 2.2. This is based on *de jure*, the usual resident population. More than 93 percent of household heads are male invariant of place of resident while only 7 percent are female-headed households. Nearly 73 percent of household heads are in the 30-59 years age group. The median age of household heads is 43 years for the state as a whole, while it is 42 years in rural areas and 45 years in urban areas. About 12 percent of household heads are younger than 30 years and 15 percent are at least 60 years old. Majority of the household heads are Christian (88 percent), 2 percent are Hindu, 9 percent are Buddhist and less than one percent belongs to Muslim religions. Christians constitute a higher proportion of population in urban areas (96 percent) than in rural areas (83 percent). Only 15 percent of the rural households are Buddhist, while only 0.1 percent of urban households.

	Total	Residence		
Characteristic	lotal -	Rural	Urban	
Sex of the household head				
Male	93.3	93.8	92.3	
Female	6.7	6.2	7.7	
Age of the household head				
< 30	12.2	14.7	7.9	
30-44	44.5	44.2	44.9	
45-59	28.6	27.7	30.2	
60+	14.7	13.3	17.0	
Median age of the household head	43.0	41.8	44.8	
Religion of the household head				
Hindu	1.7	1.2	2.4	
Muslim	0.7	0.6	1.0	
Christian	88.0	83.4	96.2	
Buddhist	9.3	14.5	0.1	
Caste/tribe of the household head				
Scheduled caste	2.8	2.8	2.9	
Scheduled tribe	96.0	96.1	95.8	
Other backward class	0.8	0.8	0.7	
Other #	0.3	0.2	0.4	
Don't know	0.1	0.1	0.2	
Number of usual members				
1	0.8	0.8	0.7	
2	3.7	3.7	3.6	
3	9.7	10.1	8.9	
4	17.5	17.1	18.2	
5	24.3	23.8	25.3	
6	18.7	17.9	20.1	
7	11.4	12.2	10.0	
8	6.3	6.4	6.2	
9+	7.7	8.0	7.1	
Mean household size	5.4	5.4	5.4	
Total percent	100.0	100.0	100.0	
Number of bouggbolds	8,725	5.542	3.183	

Table 2.2 HOUSEHOLD CHARACTERISTICS

Ninety-six percent of the households in Mizoram belong to schedule tribe, 3 percent to schedule caste and other backward classes and other castes constitute less than one percent. About 96 percent each, of the household head belong to schedule tribe in rural areas and urban areas. The overall state average household size is 5.4 persons. There in no rural-urban differential in average household size and it is 5.1 in both rural as well as urban areas.

2.3 Educational Level

The educational background of Mizoram presented in this section is based on *de facto* household population. Level of literacy and years of schooling, according to age, sex and residence are shown in Table 2.3.

Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION										
Percent di residence	Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age , residence and sex, Mizoram, 2002-04									
		Literate		Years of s	schooling					
Age	Non- literate	but no schooling	1-5	6-8	9-10	11 or more	Missing	Total Percent	Number of persons	
Total Male										
7-9	20.0	2.6	75.4	0.9	0.0	0.0	1.1	100.0	1,846	
10-14	7.1	0.2	54.0	33.9	4.4	0.0	0.4	100.0	2,904	
15-19	5.7	0.5	15.3	32.3	34.6	11.5	0.0	100.0	2,438	
20-29	6.0	0.9	13.5	25.3	29.7	24.5	0.1	100.0	3,953	
30-39	8.1	1.0	16.4	24.7	27.6	22.2	0.0	100.0	3,314	
40-49	10.1	0.7	23.4	24.4	22.9	18.6	0.0	100.0	2,744	
50+	11.5	1.1	42.2	20.9	13.0	11.3	0.0	100.0	2,446	
Total	9.0	0.9	31.0	24.4	20.4	14.1	0.2	100.0	19,647	
	Female									
7-9	18.6	2.6	76.7	0.6	0.0	0.0	1.4	100.0	1,648	
10-14	8.7	0.5	51.1	35.1	4.3	0.0	0.3	100.0	2,766	
15-19	6.7	0.3	14.1	29.5	36.6	12.8	0.0	100.0	2,683	
20-29	9.7	0.7	15.9	26.0	28.6	19.0	0.1	100.0	5,039	
30-39	11.7	0.8	25.1	25.6	23.9	12.9	0.1	100.0	3,403	
40-49	14.9	1.2	35.5	25.3	16.0	7.1	0.1	100.0	2,294	
50+	22.7	3.9	53.7	12.7	5.1	1.9	0.0	100.0	1,813	
Total	12.0	1.1	33.1	24.3	19.4	9.8	0.2	100.0	19,645	
					Total					
7-9	19.3	2.6	76.0	0.8	0.0	0.0	1.2	100.0	3,494	
10-14	7.9	0.3	52.6	34.5	4.4	0.0	0.4	100.0	5,670	
15-19	6.2	0.4	14.7	30.9	35.7	12.2	0.0	100.0	5,121	
20-29	8.1	0.8	14.9	25.7	29.1	21.4	0.1	100.0	8,992	
30-39	9.9	0.9	20.8	25.2	25.7	17.5	0.0	100.0	6,718	
40-49	12.2	0.9	28.9	24.8	19.7	13.4	0.0	100.0	5,038	
50+	16.2	2.3	47.1	17.4	9.6	7.3	0.0	100.0	4,259	
Total	10.5	1.0	32.0	24.3	19.9	12.0	0.2	100.0	39,291	
Note: Tabl	e is based o	on <i>de facto</i> pop	ulation.						Contd.	

Table 2.3 indicates that, 20 percent of the population aged seven and above are nonliterate. The proportion of non-literates is 19 percent for females and is same for males. The proportion of non-literate is much higher among the older cohorts compared to the younger ones. For both males and females, going by expected trend, the level of literacy is higher in the younger population than in the older age groups with the exception of the youngest age group of 7-9 years (Figure 2.2).



Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION	
Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age , residence and sex, Mizoram, 2002-04	

		Literate but		Years of	schooling					
	Non-	no				11 or	_	Total	Number of	
Age	literate	schooling	1-5	6-8	9-10	more	Missing	Percent	persons	
				R						
Male										
7-9	25.9	27	69.9	0.6	0.0	0.0	0.8	100.0	1 216	
10-14	9.6	0.3	57.3	29.5	3.0	0.0	0.3	100.0	1,925	
15-19	8.9	0.6	19.9	34.8	29.0	6.7	0.0	100.0	1.538	
20-29	8.7	1.1	18.1	28.9	27.9	15.2	0.1	100.0	2,568	
30-39	12.3	1.4	21.5	27.1	25.1	12.6	0.0	100.0	2,080	
40-49	16.1	1.1	31.1	24.2	19.4	8.1	0.0	100.0	1,634	
50+	17.4	1.6	46.5	19.7	10.4	4.5	0.0	100.0	1,449	
Total	13.1	1.2	35.1	25.0	17.8	7.7	0.1	100.0	12,408	
Female										
7-9	22.2	2.9	73.0	0.3	0.0	0.0	1.6	100.0	1,115	
10-14	12.5	0.6	56.4	28.0	2.6	0.0	0.0	100.0	1,772	
15-19	10.2	0.4	18.8	32.5	30.8	7.3	0.0	100.0	1,640	
20-29	14.8	1.0	21.4	29.3	24.5	8.8	0.2	100.0	3,120	
30-39	19.1	1.2	32.9	26.1	16.4	4.2	0.1	100.0	2,009	
40-49	23.6	1.7	42.9	20.7	8.3	2.6	0.1	100.0	1,383	
50+	31.5	4.3	53.5	8.7	1.4	0.6	0.0	100.0	1,036	
Total	17 7	14	38.1	23.6	14 7	4.3	02	100.0	12 075	
10101			00.1	20.0		1.0	0.2	100.0	12,010	
					lotal					
7-9	24.1	2.8	71.4	0.5	0.0	0.0	1.2	100.0	2,331	
10-14	11.0	0.4	56.9	28.8	2.8	0.0	0.2	100.0	3,696	
15-19	9.6	0.5	19.3	33.6	30.0	7.0	0.0	100.0	3,178	
20-29	12.0	1.0	19.9	29.1	26.0	11.7	0.1	100.0	5,688	
30-39	15.6	1.3	27.1	26.6	20.8	8.5	0.1	100.0	4,088	
40-49	19.5	1.4	36.5	22.6	14.3	5.6	0.1	100.0	3,017	
50+	23.2	2.7	49.5	15.1	6.6	2.8	0.0	100.0	2,485	
Total	15.4	1.3	36.6	24.3	16.3	6.0	0.2	100.0	24,483	
									Contd.	
Around 75 percent of males and 77 percent females in this age group had 1-5 years of schooling. Nearly 32 percent of males have had education for 1-5 years. Females are a bit ahead of their male counterparts in this category with a corresponding share of 33 percent. Lesser proportion of females are found in higher education of 9-10 years (19 percent) and 11 or more years (10 percent) compared to the males having corresponding figures of 20 percent and 12 percent respectively. Less than one percent of the total population, one percent each of males and of females are found to be literate without any formal schooling.

Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION

Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age , residence and sex, Mizoram, 2002-04

		Literate		Years of a	schooling				
	Non-	but no				11 or	_	Total	Number of
Age	literate	schooling	1-5	6-8	9-10	more	Missing	Percent	persons
				U	RBAN				
				U	Male				
7-9	8.7	2.2	86.0	1.6	0.0	0.0	1.5	100.0	631
10-14	2.2	0.0	47.3	42.6	7.1	0.0	0.8	100.0	980
15-19	0.3	0.2	7.4	28.2	44.2	19.7	0.0	100.0	900
20-29	1.0	0.4	4.8	18.8	33.2	41.7	0.0	100.0	1,385
30-39	0.9	0.3	7.9	20.6	31.8	38.5	0.0	100.0	1,235
40-49	1.2	0.1	12.0	24.6	28.0	34.1	0.0	100.0	1,111
50+	2.9	0.6	35.8	22.7	16.8	21.3	0.0	100.0	997
Total	2.0	0.4	23.9	23.4	24.9	25.2	0.2	100.0	7,238
<u> </u>				F	omalo				
7.0		0.4	04 5	4.0	emale	0.0	4.0	400.0	500
7-9	11.1	2.1	84.5	1.2	0.0	0.0	1.2	100.0	532
10-14	1.9	0.4	41.7	47.9	7.5	0.0	0.6	100.0	994
15-19	1.2	0.1	6.7	24.9	45.7	21.3	0.0	100.0	1,043
20-29	1.4	0.2	7.1	20.5	35.3	35.4	0.1	100.0	1,919
30-39	1.0	0.1	13.8	25.0	34.8	25.4	0.0	100.0	1,395
40-49	1.5	0.5	24.3	32.2	27.6	13.9	0.0	100.0	911
50+	10.9	3.4	54.0	18.0	9.9	3.7	0.1	100.0	//6
Total	3.0	0.7	25.1	25.3	27.0	18.6	0.2	100.0	7,570
					Total				
7-9	9.8	2.1	85.3	1.4	0.0	0.0	1.4	100.0	1,163
10-14	2.1	0.2	44.5	45.3	7.3	0.0	0.7	100.0	1,974
15-19	0.8	0.1	7.0	26.5	45.0	20.6	0.0	100.0	1,943
20-29	1.2	0.3	6.1	19.8	34.4	38.1	0.1	100.0	3,304
30-39	1.0	0.2	11.0	22.9	33.4	31.5	0.0	100.0	2,630
40-49	1.4	0.2	17.6	28.0	27.8	25.0	0.0	100.0	2,022
50+	6.4	1.8	43.8	20.6	13.8	13.6	0.0	100.0	1,773
Total	2.6	0.6	24.5	24.4	25.9	21.8	0.2	100.0	14,808

An examination of the educational attainment by place of residence revealed that the urban-rural differential was quite pronounced. In urban areas, only 2 percent of the total population is non-literate in comparison to 13 percent of the rural population. The numbers of non-literate females live in rural areas of Mizoram accruing a share as high as 18 percent, while non-literate rural males is 15 percent. Prevalence of illiterate is much less in urban areas with figures of 3 percent each of non-literate females and males. A contrasting feature of rural-urban difference in educational level is that in rural areas most people had 1-5 years of schooling (37

percent), and those who had 10 or more years of schooling was just 6 percent, whereas in urban areas a significant proportion of people (22 percent) had this level of education.

2.4 Marital Status of the Household Population

The DLHS, collected information on the marital status of all household members aged 10 years and above. Table 2.4 shows the percent distribution of household population by marital status distribution of *de facto* household population by age and sex. Ten percent of females in the age group 15-19 years, followed by 49 percent in the age group 20-24 years, 79 percent in the age group 25-29 years and 92 percent in the age group 30-44 are currently married. The proportion of never married for both males and female is 41 percent in the state, and it is higher for males (43 percent) than for females (39 percent). The proportion of never married among males declines with increasing age and reaches the lowest by the time they are in the age group 45-59 years. A similar pattern has been observed in the case of females, with the lowest never married proportion for the age group 30-34 years. The proportions of divorced, separated or widowed are negligible and limited to the older ages. Forty-four percent of women aged 60 years or above are widowed /divorced /separated. Among the *de facto* population aged 10 years and above, 55 percent each of males and females are currently married.

Table 2.4 MA	Table 2.4 MARITAL STATUS OF THE HOUSEHOLD POPULATION						
Percent distribution sex, Mizoram	oution of the house , 2002-04	ehold population	aged 10 years an	d above by marit	al status, accor	ding to age and	
Age	Never married	Currently married	Married, gaunna not performed	Widowed/ divorced/ Separated	Total Percent	Number of persons	
			Male				
10-14 15-19 20-24	96.4 97.8 71.9	3.2 2.1 27.3	0.2 0.0 0.2	0.0 0.0 0.6	100.0 100.0 100.0	2,904 2,438 1,982	
25-29 30-44 45-59	28.5 6.6 1.8	69.7 91.7 92.7	0.0 0.0 0.0	1.8 1.7 5.5	100.0 100.0 100.0	1,971 4,928 2,477	
60+ Total	1.6 42.5	78.5 54.7	0.2 0.1	19.8 2.7	100.0 100.0	1,100 17,800	
			Female				
10-14 15-19 20-24	96.6 89.1 47.5	2.5 10.3 48.8	0.1 0.0 0.1	0.0 0.6 3.6	100.0 100.0 100.0	2,766 2,683 2,653	
25-29 30-44 45-59 60+	17.9 4.6 2.6 2.1	78.6 91.6 78.4 54.1	0.1 0.0 0.0 0.1	3.4 3.8 19.0 43.7	100.0 100.0 100.0 100.0	2,386 5,123 1,466 921	
Total	39.2	54.8	0.0	5.9	100.0	17,997	
			Total				
10-14 15-19 20-24 25-29	96.5 93.3 58.0 22.7	2.9 6.4 39.6 74.6	0.1 0.0 0.1 0.0	0.0 0.3 2.3 2.6	100.0 100.0 100.0 100.0	5,670 5,121 4,635 4,357	
30-44 45-59 60+ Total	5.6 2.1 1.8 40.8	91.7 87.4 67.4 54.8	0.0 0.0 0.2 0.1	2.8 10.5 30.7 4.3	100.0 100.0 100.0 100.0	10,051 3,942 2,021 35,798	
Note: Table is	based on de fact	o population					

2.5 Marriage

Marriage in the household is an important event that reflects the socio-cultural practices of the communities surveyed in DLHS. This section outlines the marriages ceremonies during the three years period prior to the survey. Mean age at marriage by sex and percentage of total marriages which are below legal age at marriage, 21 years for boys and 18 years for girls by resident at the state and at district levels are shown in Table 2.5.

Table 2.5 MARRIAGE Mean age at marriage and percent Mizoram, 2002-04	age of marria	ages below legal	at marriage by se	ex and by districts,		
Place of residence/	Mean age	at marriage	Percentage o below legal a	of marriage Ige at marriage		
District	Boy	Girl	Boy (<21)	Girl (<18)		
State – Total State – Rural State – Urban	25.1 24.5 26.3	21.6 21.1 22.8	14.1 17.8 7.5	14.0 16.2 8.9		
District Aizawl Champhai Kolasib Lawngtlai	26.0 23.6 24.0 24.1	23.3 20.8 21.6 21.0	7.3 27.6 13.6 10.8	7.7 20.7 6.1 8.3		
Lunglei Mamit Saiha Serchhip	26.2 25.0 24.4 25.3	21.9 21.0 19.8 21.0	1.5 18.1 25.7 18.1	16.5 13.7 20.4 13.3		
Note: Table based on <i>de jure</i> population. Reference period: - January 1 st , 1999 to survey date for phase-1, and January 1 st , 2001 to survey date for phase-2.						

Mean age at marriage for boys and girls in urban areas of Mizoram are 26 years and 23 years respectively. The corresponding figures in rural areas are 25 years and 21 years. On the whole, as far as Mizoram is concerned, both boys and girls seem to oblige the legal age marriage, the average age at marriage being 25 years for boys and 22 years for girls. However, 14 percent boys and 14 percent girls got married below the corresponding specified legal age marriage. The proportion is much higher in the rural areas compared to the urban areas of the state.

When it comes to district level variation in mean age at marriage, it is highest in Aizawl, 26 years for boys and 23 years for girls. The lowest mean age at marriage for boys is 24 years recorded for the districts of Champhai, Kolasib, Lawngtlai and Saiha, and for the girls, the lowest is 20 years in Saiha.

It is also found that, the percentage of girls who were married below the legal age at marriage was the highest in Champhai (21 percent) and the lowest in Kolasib (6 percent). In 3 out of 8 districts more than 15 percent girls were marrying below the legal age at marriage (see Map-1). In the case of boys, marriages below the legal age at marriage are the highest in Champhai district (28 percent) and lowest in Lunglei (2 percent).

2.6 Morbidity Rates

The DLHS-RCH has collected information on the morbidity status relating to blindness, tuberculosis and malaria of the *de jure* members of the household. Table 2.6 provides prevalence rates.

	Resid	ence
Total	Rural	Urban
796	911	586
671	740	544
506	589	354
878	873	887
903	995	748
400	512	212
836	892	739
786	864	648
454	552	282
814	720	986
706	596	902
761	656	944
3.595	5.208	662
2,103	3.119	395
2,856	4,188	526
	Total 796 671 506 878 903 400 836 786 454 814 706 761 3,595 2,103 2,856	Total Rural 796 911 671 740 506 589 878 873 903 995 400 512 836 892 786 864 454 552 814 720 706 596 761 656 3,595 5,208 2,103 3,119 2,856 4,188

Partial, Complete and Night Blindness

The overall prevalence of partial blindness is 836 per 100,000 population in the state and is higher in rural areas (892 per 100,000) than in urban areas (739 per 100,000). It is more among females. The prevalence of complete blindness is 786 per 100,000 population with a rural-urban differential of 864 against 648 per 100,000. Complete blindness is more prevalent among females. The prevalence of night blindness due to vitamin A deficiency is 454 per 100,000 population, and is much higher in rural areas (552) than in urban areas (282).

Tuberculosis

The prevalence of tuberculosis is 761 per 100,000 population, with urban areas having a higher prevalence of 944 compared to 656 per 100,000 in rural areas. The prevalence of TB is higher among males (814 per 100,000) than among females (706 per 100,000).

Malaria

In the DLHS-RCH, household respondents were asked to state whether any member of their household suffered from malaria (characterized by recurrent fever with shivering) any time during the two weeks prior the survey. In the state of Mizoram, 2,856 persons per 100,000 population were reported to have suffered from malaria. Rural residents are many times more likely to suffer from malaria (4,188 per 100,000) than urban residents (526 per 100,000). The reported prevalence of malaria is higher for males than for females.

2.7 Morbidity Rates by Districts

Table 2.7 shows the prevalence of blindness, tuberculosis and malaria in the districts of Mizoram. The prevalence of partial blindness varies considerably among the districts the lowest being 441 per 100,000 in Mamit and the highest, 1,631 per 100,000 in Lawngtlai.

		Prevalenc	e ¹ of morbidity	
District	Partial blindness	Complete blindness	Tuberculosis	Malaria ²
Aizawl	532	118	794	347
Champhai	1,115	243	542	1,984
Kolasib	707	1,802	1,053	1,227
_awngtlai	1,631	304	2,050	13,483
unglei	897	2,395	554	1,793
Mamit	441	544	231	7,359
Saiha	620	1,604	704	2,428
Serchhip	1,529	421	536	833
Mizoram	836	786	761	2,856

The districts with a prevalence rate below 1,000 per 100,000 are Aizwal, Kolasib, Lunglei, Mamit and Saiha. The prevalence rate of complete blindness ranges from 118 per 100,000 in Aizwal to 2,395 per 100,000 in Lunglei. Inter-district variations are substantial for tuberculosis and malaria.

The prevalence rate of tuberculosis is the highest in Lawngtlai district (2,050 per 100,000 population) and it is lowest in Mamit (231 per 100,000). In the case of malaria, the prevalence rate is highest in Lawngtlai (13,483 per 100,000) and lowest in Aizawl (347 per 100,000).

2.8 Housing Characteristics

This section describes the availability of basic amenities in the state. Table 2.8 presents the percent distribution of households by selected housing characteristics. Eighty-four percent of the households in Mizoram have electricity connection and it is much more in urban areas (98 percent) than in rural areas (76 percent).

As regards household source of drinking water more than half (52 percent) of the households get drinking water through taps, while 7 percent drink water from hand pumps/ borewells, and 25 percent drink water from wells. About 73 percent of households in urban areas get piped water for drinking, whereas in rural areas only 40 percent of the households have such provision.

When it comes to sanitation facility, only 32 percent of the households have flush toilets, while 62 percent have pit based toilets or latrines, 3 percent depend on shared toilets and nearly 2 percent of the households have no toilet facility at all. There is a large rural-urban difference; 3 percent of rural households have no toilet facility, compared to just 0.1 percent of urban households.

DLHS-RCH has also collected data on type of fuel used in the households for cooking. Fifty-one percent of the households used liquid petroleum/gas or electricity for cooking in Mizoram. About 45 percent of households rely on fire woods, 3 percent on kerosene, and less than one percent of households use other types of fuel for cooking. The use of liquid petroleum gas/electricity for cooking is reported more in urban areas (92 percent), and firewood for cooking are reported more in rural areas.

There is considerable variation in the quality of housing. On the basis of building material, type of floor, walls and roof, households are categorised into *kachcha*, semi-*pucca* and *pucca*. Thirty percent of the households are living in *kachcha* houses, 59 percent in semi *pucca* houses and 11 percent in *pucca* houses. Twenty-eight percent of urban households live in *pucca* houses compared to 1 percent of rural households.

The possession of consumer durable goods is an indication of a household's socioeconomic status. Table 2.8 shows that not many households in the state own bicycles (5 percent), an electric fan (27 percent), radio/transistor (56 percent) and television (33 percent).

	-	Residence		
Housing characteristic	Total -	Rural	Urban	
Electricity				
Yes	83.8	75.7	97.9	
No	16.2	24.3	2.1	
Source of drinking water				
Tap inside	14.5	3.0	34.6	
Tap shared public	37.6	37.0	38.6	
Hand pump/ bore well	6.9	5.6	9.0	
Well covered	14.2	16.1	11.0	
Well uncovered	10.6	14.8	3.3	
River	11.1	17.0	0.9	
Pond	0.5	0.7	0.2	
Spring	3.8	4 9	1.8	
Other	0.9	1.1	0.6	
Sanitation facility				
Own flush toilet	32.1	13 7	64 1	
Own pit toilet / latrine	61.8	77.6	34.5	
Shared toilet of any type	28	36	1 2	
Public / community toilet	2.0	1.9	0.1	
No toilet facility	2.1	3.3	0.1	
Main type of fuel used for eaching				
Main type of fuel used for cooking	50.0	07.0	04 5	
Liquid petroleum gas/ electricity	50.9	27.6	91.5	
Kerosene	3.4	4.0	2.3	
vvood Other	45.4	68.0	6.0	
Other	0.3	0.3	0.2	
Type of house				
Kachcha	29.9	44.2	4.9	
Semi - pucca	59.0	54.5	66.9	
Pucca	11.1	1.4	28.2	
Household assets				
Fan	27.1	14.9	48.2	
Radio/transistor	56.0	50.8	65.0	
Sewing machine	38.6	26.3	60.2	
Television	32.7	14.9	63.7	
Telephone	23.0	7.7	49.7	
Bicycle	51	2.4	10.7	
Motor cycle/ scooter	10.0	4.1	20.4	
Car / Jeep	ГО.О С Л	17	14 5	
Tractor	0.4	0.1	1.0	
Standard of living index				
Low	007	59 F	7.0	
Medium	39.7	00.0 25 1	1.0	
High	37.5 22.8	6.4	41.0 51.4	
Number of households	22.0	5 5 4 0	0.400	
	8,725	5,542	3,183	

Other durable goods found in the surveyed households are telephone (23 percent), sewing machine (39 percent), and motorcycle or scooter (10 percent). Car/jeep and tractor each are owned by seven percent of households in Mizoram. Ownership of most of the consumer durable items is more among the urban households than among the rural households.

Considering household amenities, such as, source of drinking water, type of house, source of lighting, fuel for cooking, toilet facility and ownership of durable goods a composite

measure, standard of living index (SLI) is made for classification of households. The standard of living index is calculated as by adding the following scores;

Source of drinking water: 3 for Tap (own), 2 for Tap (shared), 1 for hand pump and well, and 0 for other;

Type of house: 4 for *pucca*, 2 for semi-*pucca*, and 0 for *kachcha*;

Source of lighting: 2 for electricity, 1 for kerosene, and 0 for other;

Fuel for cooking: 2 for LPG gas/electricity, 1 for kerosene and 0 for other;

Toilet facility: 4 for own flush toilet, 2 for own pit toilet, 2 for shared toilet and 0 for no toilet;

Ownership for items: 4 each for car and tractor, 3 each for television, telephone and motorcycle/scooter, and 2 each for fan, radio/transistor, sewing machine and bicycle.

The total of the scores may vary from the lowest of a 0 to maximum of 40. On the basis of total score, households are divided into three categories as;

- a) Low if total score is less than or equal to 9,
- b) Medium if total score is greater than 9 but less than or equal to 19 and
- c) High if total score is greater than 19.

As per the standard of living index, forty percent of the households come under the low standard of living category, 38 percent of households to medium standard of living, and 23 percent of the households to high standard of living.

The proportion of sample households with medium and high standard of living is comparatively higher in urban areas than in rural areas, and the proportion of households with a low standard of living is much higher in rural households (59 percent) than in urban households (7 percent) in the state of Mizoram.

2.9 Housing Characteristics by Districts

The 8 districts in Mizoram are not uniform in terms of basic amenities and possession of consumer durables. Table 2.9 presents an inter-district comparison of housing characteristics. The percentage of households with electricity is less than 75 percent in the districts of Lawngtlai (56 percent) and Saiha (68 percent). The household with electricity is highest in Serchhip (99 percent). Ninety-three percent each of households used piped water or water from a hand pump for drinking in the districts of Saiha and Serchhip and the lowest in this category is Lawngtlai (24 percent).

Largely the districts in Mizoram have adequate toilet facility, in all the districts more than 95 percent of the households have toilet facilities and except in Lawngtlai (86 percent).

In Aizawl district the percentage of households using liquid petroleum gas/electricity for cooking is 87 percent and in the rest of the districts, it is relatively low ranging between 12 to 66 percent. The percentage of households living in *pucca* houses is quite low in all the districts of Mizoram. In Aizawl, 29 percent of the households live in *pucca* houses, which is the highest. In the rest of the districts the number of households living in *pucca* houses range from less than one percent to 9 percent.

Table 2.9 HOUSEING CHAR Selected housing characterist	ACTERISTICS BY D ics by district, Mizora	ISTRICT m, 2002-04					
	Percentage of households:						
Districts	With electricity	With drinking water ¹	With toilet facility	Using Liquid petroleum gas/ electricity	Living in <i>pucca</i> house		
Aizawl Champhai Kolasib Lawngtlai	95.5 82.2 97.1 55.8	87.6 88.1 57.8 23.8	100.0 99.8 99.4 86.0	87.2 11.9 65.2 12.6	29.3 0.5 8.7 0.7		
Lunglei Mamit Saiha Serchhip	80.8 80.8 68.3 98.6	68.4 59.5 92.8 92.8	99.3 95.0 98.8 99.9	52.0 43.4 31.5 65.6	6.8 2.5 2.1 2.2		
Mizoram	83.8	73.1	97.9	50.9	11.1		
Note: ¹ That is piped or from a hand pump/bore well							

2.10 Iodization of Salt

Consumption of salt fortified with iodine is recommended to avoid miscarriages, brain disorders, cretinism and retarded psychomotor development. As per the Prevention of Food Adulteration Act, 1988, the minimum iodine content of edible salt is 30 parts per million (PPM) at the manufacturing level.

In the DLHS-RCH survey, each interviewer was provided with a test kit to measure the level of iodine content of salt consumed by the surveyed households. The test results (Table 2.10) are classified by degree of ionization of salt and categorised by background characteristics. It is observed that nearly 57 percent of households used salt that contained a minimum recommended 15 ppm or higher level of iodine content whereas 12 percent of households used salt that is not iodized at all and another 27 percent used salt, which was inadequately iodized.

In rural areas, 17 percent of households against 2 percent in urban areas used non-iodized salts. Percentage of households using inadequately iodized salt in rural areas is more than two times higher compared to that in urban areas. Number of households using non-iodized or inadequately iodized salt is closely associated with the educational level of the household head. Nearly 71 percent of households headed by persons who had more than 10 years of schooling reported the use of adequately iodized salts. Consumption of adequately iodised salt among households of other caste is 64 percent, followed by 57 percent in scheduled tribe households, in other backward classes it is 50 percent of households and among scheduled caste and it is 40 percent of households.

Table 2.10 IODIZATION OF SALT

Percent distribution of household heads by degree of lodization of salt, according to selected background characteristics, Mizoram, 2002-04

Background characteristic	Not lodised	7ppm	15+ppm	Other ¹	Total percent	Number of households
Place of Residence						
Bural	16.9	34.5	45 1	35	100.0	5 542
Urban	2.1	12.7	77.1	8.1	100.0	3,183
Education of the household heads						
Non-literate	39.8	33.2	21.8	5.1	100.0	969
0-9@ years	9.9	29.3	56.3	4.6	100.0	5,263
10 and above	3.8	18.3	71.4	6.5	100.0	2,492
Religion of household head						
Hindu	37.2	14.2	39.1	9.5	100.0	147
Muslim	3.1	30.6	59.2	7.1	100.0	63
Christian	6.3	26.7	62.5	4.5	100.0	7,682
Buddhist	56.0	27.3	6.6	10.0	100.0	809
Other	(9.1)	(27.3)	(39.4)	(24.2)	(100.0)	25
Caste/tribe of the household head#						
Scheduled caste	8.4	33.3	39.8	18.5	100.0	246
Scheduled tribe	11.6	26.5	57.4	4.5	100.0	8,376
Other backward class	1.2	17.5	49.8	31.5	100.0	66
Other	(0.0)	(28.0)	(64.0)	(8.0)	(100.0)	26
Standard of living index						
Low	22.7	36.9	35.6	4.7	100.0	3,464
Medium	5.5	24.8	64.1	5.6	100.0	3,268
High	1.7	11.4	81.7	5.2	100.0	1,993
Total	11.5	26.6	56.8	5.2	100.0	8,725

cases.() Based on less than 50 unweighted cases

Differential in the consumption of properly iodized salt is more pronounced when analysed by religion of the household head and standard of living index. Percentage of households using adequately iodized salt is only 7 percent among Buddhist households, whereas the corresponding figures for Hindu and Christian households are 39 percent and 63 percent respectively. Again, households with low standard of living are more likely to use non-iodized or inadequately iodized salt compared to households with medium or high standard of living index. While 23 percent of households with low standard of living used non-iodized salt, only 2 percent households with a high standard of living fall in this category. The number of households with a high standard of living using adequately iodized salt is more than twice of those with a low standard of living.

2.11 Iodization of Salt by Districts

Table 2.11 shows district level variation in the percent distribution of households by level of iodization of salt used in the households. Saiha and Serchhip has the lowest proportion of households (1 percent each) using non-iodized salt, whereas Lawngtlai has the highest proportion of households (59 percent) using non-iodized salt. Percentage of households using inadequately iodized salt is the highest (39 percent) in Mamit and the lowest in Aizawl (17 percent). Around 57 percent of the households in the state used adequately iodized salt, the highest being in the district of Aizawl (81 percent). The households in Lawngtlai (15 percent) and Lunglei (25 percent) were using adequately iodized salt (see Map-2).

Table 2.11 IDOIZATION OF SALT BY DISTRICT								
Percent distribution of household heads by degree of idoization of salt by district, Mizoram, 2002-04								
District	Not idoized	7ppm	15+ppm	Other ¹				
Aizawl	2.1	17.0	80.5	0.4				
Champhai	8.2	30.6	61.0	0.2				
Kolasib	18.1	20.4	59.9	1.6				
Lawngtlai	59.2	25.1	15.0	0.6				
Lunglei	9.2	33.1	24.9	32.8				
Mamit	5.7	39.4	54.6	0.3				
Saiha	1.4	25.8	70.2	2.6				
Serchhip	1.0	23.6	75.1	0.3				
Mizoram	11.5	26.6	56.8	5.2				
Note:Ppm: Parts per million. ¹ Inclu	des salt not at home, salt	not tested, ref	used and missing	g cases				

2.12 Availability of Facility and Services to the Rural Population

The DLHS-RCH collected information about surveyed village from knowledgeable persons such as, the 'Sarpanch' or 'Pradhan', (village head) or other village officials or other persons including 'teacher' in the villages on health and educational facilities and other services available in the village. One important aspect was on the distance of the village, if not available within the village, from various types of education facilities, including primary school, middle school, secondary school, higher secondary school, college, *Gurujee* scheme and '*Madarsa*'. Further information on the distance of the village, if not available within the village, from various types of health facility, including sub-centres, primary health centres (PHCs), community health centres/ Rural Hospitals (CHCs/RHs), Government dispensary, hospital, private clinic or hospitals and health facilities of Indian system of Medicine (ISM).

Table 2.12 gives the distance of surveyed villages from an education facility. The unit of analysis is usual residents of rural population. Majority of the rural residents (99 percent) (the *de jure* rural population) in the state live in villages that have a primary school, 77 percent live in villages with middle school and 43 percent of the rural population live in villages with secondary schools. Higher secondary schools are available for 8 percent of the rural population. Fourteen percent of the rural population live in villages, which have *Madarassas*. Only two percent of the surveyed villages have a college. As regards the distribution of educational institutions within 5

kilometres distance from of the village, it can be seen that, 3 percent of the villages have middle school, 6 percent have secondary school, 9 percent have higher secondary school and 6 percent have a '*Madarassa*' within this distance. For 58 percent of the villages, the college is more than 10 kilometres away and *madarassa* are available at this distance for 47 percent of the villages.

Table 2.12 DISTANCE FROM THE NEAREST EDUCATION FACILITY							
Percent distribution of rural hou	usehold popula	tion by distan	ce from the nea	arest educatio	n facility, Mizorar	n, 2002-04	
		Dista	ance from the v	village:			
Education facility	Within village	< 5 km	5-9 km	10+ km	Don't know/ missing	Total percent	
Primary School	97.4	0.0	0.0	0.6	0.0	100.0	
Middle School	77.0	2.5	5.4	12.3	2.8	100.0	
Secondary School	43.4	6.2	7.0	35.0	7.4	100.0	
Higher Secondary School	7.6	8.8	2.4	63.8	17.3	100.0	
College	2.4	8.8	3.0	58.8	27.8	100.0	
Gurujee Scheme	0.0	4.1	0.0	1.8	94.1	100.0	
Madarsa	13.8	5.6	1.9	47.4	31.3	100.0	
Note: Table based on rural <i>de jure</i> population							

Percent distribution of rural hou	usehold popula	tion by distan	ce from the nea	arest health fa	acility, Mizoram, 2	002-04		
	Distance from the village:							
Health facility	Within village	< 5 km	5-9 km	10+ km	Don't know/ missing	Total percent		
Rural household population								
Sub-centre	62.7	4.8	12.0	15.5	5.0	100.0		
Primary health centre	16.5	6.9	14.9	48.4	13.2	100.0		
Either sub-centre or PHC Community health centre/	63.5	4.8	12.0	15.5	4.2	100.0		
Referral hospital	2.9	6.4	8.8	63.9	18.0	100.0		
Government dispensary	8.5	2.3	6.9	65.5	19.0	100.0		
Government hospital	2.6	5.3	2.9	66.2	23	100.0		
Private clinic	4.1	6.5	2.2	53.3	31.8	100.0		
Private hospital	2.0	5.0	2.2	44.5	46.3	100.0		
ISM health facility	3.1	4.1	1.9	67.5	23.4	100.0		

Table 2.13 summarises the availability of health facilities within the surveyed villages and provides information on the distance between the villages and the nearest health facility. About 63 percent of the rural population live in villages with Sub-centres. Only 17 percent of the rural household population live in a village with a primary health centre, though the proportion of villages having facilities of either Sub-centre or primary health centre is 64 percent. The proportion of rural population with other health facilities are 3 percent for CHCs/RHs, 9 percent for Government dispensary, 3 percent for Government hospitals, 4 percent for private clinics, 2 percent for private hospitals and 3 percent for Indian System of Medicine.

Table 2.14 AVAILABILITY OF SERVICES Percentage of rural residents living in villages that have sleeted services, Mizoram, 2002-04					
Services	Percentage of rural residents				
Anganwadi centre Anganwadi worker Private doctor Visiting doctor Homeopathic doctor Village health guide Trained birth attendant Traditional healer Dai	80.1 85.8 6.0 31.1 2.3 14.3 48.4 24.1 64.9				
Note: Table based on rural de jure population					

The proportion of rural population located within a distance of 5 kilometres from health facilities are 5 percent for sub-centres, 7 percent for primary health centres, 6 percent for CHCs/RHs. 2 percent for a Government dispensary, 5 percent for Government hospitals, 7 percent for private clinic, 5 percent for private hospitals and 4 percent for ISM health facilities. Distance of particular health facilities is beyond 10 kilometres from surveyed villages in the case of Government hospitals (65 percent) and for private hospitals, (45 percent).

Table 2.14 shows the proportion of rural residents in the state that live in the villages with various health services. Almost 80 percent of rural residents live in villages that have an *anganwadi*, (a nursery school for children age 3-6 years) and at the same time 86 percent of rural households live in villages with *anganwadi* workers (*Anganwadi* workers provide integrated child development services) are available.

About 6 percent of the rural residents live in villages that have a private doctor, 31 percent live in villages with a visiting doctor, 2 percent with a homeopathy doctor, 14 percent with a village health guide, 48 percent with a trained birth attendant and 24 percent with a traditional healer. Sixty-five percent of the rural residents live in villages that have a *Dai* (*Dai* provides the services for the delivery).

2.13 Availability of Education Facility and Health Services by Districts

Table 2.15 shows the availability of education and health facilities for the rural population within the surveyed villages by districts in Mizoram. In the districts of Aizawl, Champai, Kolasib, Mamit and Serchhip all the rural population have access to primary schools. In the state of Mizoram, 98 percent of the rural population live in villages having primary schools. Around 62 percent of the rural population in the state have sub-centres within the village, with the highest coverage of 98 percent in Serchhip and the lowest of 33 percent of the population in Lunglei.

There is one district with no PHCs within the villages. This district is Kolasib. Highest availability of PHCs within the village is found in Serchhip (35 percent). In Serchhip, 98 percent households in the rural area have access to at least one government health facility including sub-

centre, primary health centre, community health centre or referral hospital, government hospital and government dispensary within the village.

Table 2.15 AVAILABILITY OF FACILITY AND SERVICES BY DISTRICT Selected facility and services of rural household population within village by district, Mizoram, 2002-04										
	Percentage of rural household population with:									
Districts	Primary or middle school	Sub- centre	PHCs	Any govern- ment health facility ¹	Doctor ²	TBA ³	<i>Angan- wadi</i> worker			
Aizawl Champhai Kolasib Lawngtlai Lunglei Mamit Saiha Serchhip Mizoram	100.0 100.0 95.9 92.9 100.0 93.0 100.0 97.7	58.8 67.6 94.8 44.7 33.0 69.5 69.8 97.5 61.6	12.9 25.9 0.0 2.7 6.4 22.2 22.9 34.8 16.2	58.8 67.6 94.8 47.5 65.1 69.5 69.8 97.5 66.8	42.5 37.6 5.2 8.3 17.4 40.0 72.4 58.0 34.5	38.7 80.3 24.2 33.7 0.0 40.9 71.9 97.5 48.4	73.7 92.7 64.2 100.0 68.2 92.8 93.0 100.0 85.8			
¹ Includes sub-center, primary health center, community health center or referral hospital, government hospital, and government dispensary within the village ² Either private or visiting doctor ³ Trained birth attendant										

Around 58 percent of the rural population are visited either by private or by visiting doctors in the surveyed villages of Serchhip district, whereas only 5 percent households in Kolasib were able to avail this facility. Highest numbers of rural population (98 percent) are attended by trained birth assistants in Serchhip, while only no household could be classified in this category in Lunglei. A visit by *anganwadi* workers to rural households is highest (100 percent each) in Lawngtlai and Serchhip and the lowest in Kolasib (64 percent).



Percent Girl Marrying Below Legal Age at Marriage





Percentage of Households Using Salt that Contains 15PPM Level of Iodine



CHAPTER III

CHARACTERISTICS OF WOMEN, HUSBANDS AND FERTILITY

The Reproductive and Child Health (RCH) programme is targeted towards the underprivileged section of the population, particularly, women and children. The utilization of RCH services provided across the country depends to a large extent on the characteristics of women, their husbands and episodes of pregnancies, miscarriages, abortions, number of children born to them and survival status of children. Age of women, marital duration, educational attainment, social background and living standard are important factors, which influence reproductive and child health. With this in view, the DLHS-RCH data were collected on demographic characteristics, such as current age, age at consummation of marriage and number of pregnancies, live births and surviving children from eligible women respondents of selected representative households. Information regarding household background characteristics was collected using a separate household questionnaire that covered religion and caste of head of household, type of house, source of drinking water and possession of consumer durables. Fertility preference of women in terms of timing and desire for additional children in comparison to the number of living children provides information on the need for reproductive and child health services.

This chapter provides a comprehensive outline of distribution of currently married women by present age, age at consummation of marriage, duration of marriage, complete years of schooling, pregnancy episodes, children ever born and children surviving, along with social and economic characteristics of households the women represent.

3.1 Background Characteristics of Women

The percent distribution of currently married women in the reproductive age group 15-44 years by residence, religion and caste of head of household, economic standard of household and other demographic characteristics are shown in Table 3.1. A sample of 7,541 eligible women represents the state of Mizoram in DLHS-RCH and about 4,846 of these women are drawn from rural areas. About 58 percent of the currently married women are in the age range of 20-34 years and a similar age distribution is observed both for urban and rural areas. Age at consummation of marriage, particularly in rural areas is found to be very low with as many as 25 percent of the women having cohabited before 18 years of age, while it is 17 percent in urban areas. Looking at the distribution of marital duration it is noted that about 36 percent of the women across the state are married for more than 15 years.

Among the sample 7,541 representative women in Mizoram, Christian and Buddhist constitute 87 percent and 11 percent respectively. More, Christian women are found in urban areas (97 percent) than in rural areas (82 percent). The presence of women belonging to other religious groups is insignificant in proportional and absolute terms. Ninety-six percent of the women belong to scheduled tribes, 3 percent to scheduled castes and less than one percent each to other backward classes and other caste category. Majority of the sample women (97 percent) belong to scheduled tribes. There is a clear rural-urban differential in the educational attainment of women. For the state of Mizoram, 14 percent of women are non-literate and women of this literacy category constitute 22 percent in rural areas, while it is just 1 percent in urban areas.

Table 3.1 BACKGROUND CHARACTERISTICS OF WOMEN

Percent distribution of currently married women aged 15-44 by selected background characteristics, according to residence, Mizoram, 2002-04

		Reside	nce
Background characteristic	Total	Rural	Urban
Age group			
15-19	2.9	3.8	1.4
20-24	15.1	16.9	11.8
25-29	22.9	24.1	20.6
30-34	19.8	18.3	22.5
35-39	18.6	17.5	20.6
40-44	20.8	19.4	23.1
Age at consummation of marriage			
Below 18 years	22.2	25.2	16.8
18 years & above	77.8	74.8	83.2
Marital duration			
0-4	20.2	21.1	18.7
5-9	22.6	22.7	22.4
10-14	21.5	21.9	20.9
15+	35.7	34.3	38.0
Religion			
Hindu	1.6	1.2	2.2
Muslim	0.7	0.6	0.9
Christian	87.0	81 7	96.5
Sikh	0.2	0.2	0.3
Buddhist	10.5	16.2	0.1
Other	0.1	0.1	0.1
Caste/tribe	0.1	0.1	0.1
Scheduled caste	25	2.6	25
Scheduled tribe	96.3	96.4	96.2
Other backward class	0.8	0.4	0.7
Other #	0.0	0.9	0.7
Don't know	0.2	0.1	0.4
Education (Vears of schooling)	0.1	0.1	0.2
Non literate	14.2	21.5	1 1
	62.2	21.5	1.1 57 4
10 years & chows	00.0	11 7	57.4 44 4
Nicoing	22.3	0.2	41.4
Wissing Husband's education (Verse of schooling)	0.1	0.2	0.1
Non literate	0 0	12.4	0.8
	0.9	13.4	0.8
0-9@ years	55.7 25.0	62.0	44.4
TO years & above	35.2	24.4	54.7
Dontknow	0.1	0.1	0.0
Missing Standard of living index	0.1	0.1	0.1
Standard of living index	10 5	50.4	0.0
Low	40.5	59.4	6.6
Medium	36.6	34.1	41.1
High	22.9	6.5	52.3
Number of women	7,541	4,846	2,695
Note:# Not belonging to a scheduled caste, sche	duled tribe and an	other backward class. @	2 Literate persons with

More than 56 percent of women across the state have completed 0-9 years of schooling. Only a handful, 24 percent of rural women have completed 10 or more years of schooling compared to 55 percent for urban women. Men are more literate than their spouses. In Mizoram, 9 percent of the husbands of eligible women are non-literate and the corresponding figures are 13 percent in rural areas and less than one percent in urban areas. The DLHS-RCH, includes data on materials used for floor, walls and roofs of the housing structure along with status of possession of a list of durables and these are utilized to construct a composite index of household standard of living. Households are further classified as those with low, medium and high standard of living. Forty-one percent of women in the state live in low standard of living households and this is 59 percent in rural areas and 7 percent in urban areas. Majority of women across the state live in households categorised as medium standard of living. In urban areas, 52 percent of women belong to high standard of living households and the corresponding figure is just 7 percent in rural areas.

3.2 Educational Level of Women

Table 3.2 provides details of educational level of eligible women in terms of classification by years of schooling, and selected background characteristics, such as, place of residence, religion, and caste and husbands' education. As regards distribution of non-literate women, it is observed that a lesser proportion of younger women below 30 years of age are non-literate compared to older women above 30 years. This age divide remains true even among literate women. A distinct pattern of educational attainment of women is that maximum of them attended schooling either for 1-5 years or 6-8 years and not many had 11 or more years of schooling. For the women in the age group 15-19 years, 28 percent and 34 percent of them had 1-5 years and 6-8 years of schooling, while only 2 percent had 11 or more years of schooling. Among the senior women in the age group 40-44 years, distribution by year of schooling is more or less uniform with 33 percent, 26 percent, 18 percent and 8 percent of them having attended school for 1-5, 6-8, 9-10 and 11 or more years of schooling.

There is a significant rural-urban differential in the level of education of women in Mizoram. About 22 percent of rural eligible women are non-literate and 30 percent, 27 percent, 16 percent and 4 percent of the women have 1-5, 6-8, 9-10 and 11 or more years of schooling. The corresponding figures in urban areas are 1 percent non-literate and 14 percent, 29 percent, 36 percent and 20 percent respectively. More Buddhist women (78 percent) are non-literate compared to Hindu women (46 percent), Christian women (6 percent) and women belonging to other religious communities (56 percent). For literate eligible women from all religious communities, maximum of them have either 1-5 or 6-8 years of schooling. The proportion of Hindu women with 1-5 years of schooling is 8 percent and the same is 26 percent for Christian women, 11 percent for Buddhist women and 24 percent for women from other religions. Among the literate Buddhist women less than one percent of them have 11 or more years of schooling, while 11 percent of literate Christian and other religion women have attained this level of education.

The uneven level of educational attainment by caste can be noted from the recorded proportion of non-literate women among scheduled caste (24 percent), scheduled tribe (14 percent) and other backward class (56 percent). The literate women belonging to different castes or tribes are concentrated more in the range of 1-5 to 9-10 years of schooling. The husband's education is an important characteristic, which has strong association with the education of eligible women. As many as 88 percent of women whose husbands are non-literate are also non-literate, while only less than one percent of women whose husbands have 11 or more or years of schooling are non-literate. Thirty-one percent of literate women educated for 11 or more years of schooling have husbands who have the same level of education.

				Years of	schooling				
Background characteristic	Non- literate	Literate but no schooling	1-5 years	6-8 years	9-10 years	11 or more years	Missing	Total percent	Numbe of womer
0			,	,	,	,	0		
Age group									
15-19	19.1	0.9	28.0	34.0	15.8	2.1	0.0	100.0	219
20-24	16.4	0.6	18.2	30.6	26.9	7.3	0.1	100.0	1,135
25-29	14.2	0.7	18.9	28.6	27.6	9.9	0.1	100.0	1,724
30-34	11.6	1.2	22.2	28.0	23.4	13.5	0.1	100.0	1,493
35-39	14.4	0.4	27.5	25.1	23.4	9.0	0.2	100.0	1,405
40-44	14.5	0.8	33.2	25.8	17.5	8.1	0.1	100.0	1,565
Place of residence									
Rural	21.5	1.1	29.9	27.0	16.4	3.8	0.2	100.0	4,846
Urban	1.1	0.1	14.2	29.0	36.1	19.5	0.1	100.0	2,695
Religion									
Hindu	46.1	0.0	7.9	11.4	27.8	6.7	0.0	100.0	117
Christian	5.9	0.4	26.2	30.8	26.0	10.6	0.1	100.0	6.561
Buddhist	77.5	3.6	11.1	6.0	1.4	0.4	0.0	100.0	7.89
Other	25.2	0.0	23.7	13.7	26.7	10.7	0.0	100.0	74
Caste/tribe #									
Scheduled caste	23.6	2.1	22.2	24.9	19.8	6.5	0.8	100.0	192
Scheduled tribe	13.6	0.7	24.4	28.0	23.6	9.5	0.1	100.0	7.265
Other backward class	56.2	1.3	12.9	10.1	18.0	1.5	0.0	100.0	60
Husband's education									
Non-literate	87.6	0.5	6.9	3.0	1.6	0.4	0.0	100.0	674
Literate but no schooling	63.0	14.3	11.2	4.9	4.3	2.3	0.0	100.0	63
1-5 years	17.7	1.4	51.0	20.9	7.5	1.3	0.2	100.0	1.462
6-8 years	4.4	1.1	33.7	39.3	18.3	3.1	0.2	100.0	1.878
9-10 years	4.4	0.2	15.7	37.5	32.9	9.2	0.1	100.0	2.010
11 or more years	0.9	0.0	5.4	18.6	44.2	31.0	0.0	100.0	1,442
Total	14.2	0.8	24.3	27.7	23.4	9.5	0.1	100.0	7,541

Table 3.2 LEVEL OF EDUCATION OF ELIGIBLE WOMEN

3.3 Background Characteristics of Husbands of Eligible Women

In DLHS-RCH husbands of eligible women were also interviewed. The response rate for husbands is relatively low compared to that of eligible women. Selected background characteristics of husbands are shown in Table 3.3. Across the state of Mizoram, husbands are mostly in the age group 35-44 years. Fewer husbands are less than 25 years. In Mizoram, 88 percent of the husbands are Christians, 10 percent are Buddhist and presence of other religious groups is insignificant. Ninety-six percent of husbands in the state belong to the scheduled tribe and it is almost the same in rural areas (95 percent) as well as in urban areas (96 percent). Nearly 3 percent of the husbands belong to scheduled castes. As regards educational characteristics of the husbands of surveyed eligible women, more than 56 percent of them have completed 0-9 years of schooling and the proportion of non-literate husband ranges from less than one percent in urban areas to 14 percent in rural areas, while the overall state figure is 9 percent.

Table 3.3 BACKGROUND CHARACTERISTICS OF MEN

Percent distribution of husbands of eligible women by selected background characteristics, according to residence, Mizoram, 2002-04

		Residence			
Background characteristic	Total	Rural	Urban		
Age group < 25 25-34 35-44 45 +	6.6 35.2 38.6 19.6	7.6 37.2 35.7 19.5	4.8 31.2 44.2 19.8		
Religion Hindu Muslim Christian Sikh Buddhist Other	1.5 0.8 87.5 0.3 9.8 0.0	1.2 0.6 83.0 0.2 14.8 0.1	2.1 1.1 96.2 0.5 0.1 0.0		
Caste/tribe Scheduled caste Scheduled tribe Other backward class Other # Don't know	3.2 95.5 1.0 0.2 0.1	3.4 95.3 1.1 0.1 0.1	3.0 95.8 0.7 0.4 0.1		
Education (Years of schooling) Non-literate 0-9@ years 10 years & above Standard of living index	9.2 55.7 35.1	13.6 61.4 25.0	0.8 44.4 54.8		
Low Medium High	40.9 37.7 21.4	58.7 35.0 6.3	6.2 43.0 50.8		
Number of living children 0 1 2 3 4+ Number of Men	7.3 15.8 22.4 25.3 29.1 6,065	8.0 15.0 21.1 24.0 32.0 4,010	6.0 17.4 25.1 28.0 23.5 2,055		

Note:# Not belonging to a scheduled caste, scheduled tribe and other backward classes. @ Literate persons with no year of schooling are included.

The proportion of husbands living in households classified as low, medium and high standard of living index are 41 percent, 38 percent and 21 percent respectively. In rural areas, 59 percent of the husbands live in low standard of living households compared to 6 percent in urban areas. This is complementary in the case of husbands living in high standard of living households, 51 percent in urban and 6 percent in rural. In terms of household standard of living composition, those living in medium standard of living dominate in urban (43 percent) and in rural Mizoram most (59 percent) husbands live in low standard of living households. Around 29 percent of husbands across the state reported to have four or more living children. More husbands in urban areas (17 percent) reported to have one living child, while more husbands in rural areas (32 percent) have four or more living children. Above 24 percent of the husbands of rural eligible women have more than three living children and it is 28 percent for husbands of urban eligible women.

3.4 Educational Level of Husbands of Eligible Women

Educational levels in categories of years of schooling classified by age, place of residence, religion and caste/tribe of husbands of eligible women are shown in Table 3.4. The distribution of non-literate husbands across age is more or less uniform, though it is marginally more for husbands above 45 years (11 percent) and for husbands in the age group 35-44 years (10 percent) compared to 8 percent each for husbands in the age groups 25-34 years and 35-44 years respectively. Among the literate husbands, irrespective of their age at the time of survey most of them have 1-10 years of schooling, 79 percent of those below 25 years and 71 percent of those above 45 years of age. As expected few of the younger husbands (12 percent) below 25 years have 11 or more years of schooling compared to 18 percent of those above 45 years. As in the case of eligible women, 50 percent of Buddhist husbands are non-literate while the corresponding non-literate husbands of Hindu and other religions are 36 percent and 21 percent respectively. The proportions of husbands of Hindu, Christian and other religions who have 11 or more years of schooling constitute 16 percent, 20 percent and 18 percent respectively. Most of the literate Buddhist husbands (23 percent) have completed 1-5 years of schooling and the corresponding numbers are 11 percent, 20 percent and 18 percent respectively for Hindu, Christian and other religions husbands. Educational attainment of husbands of eligible women varies according to the caste/tribe they belong. There are more non-literate husbands belonging to scheduled castes (25 percent) followed by other backward classes husbands (24 percent). Among the scheduled caste and scheduled tribe husbands, 36 percent and 46 percent of them have 9 or more years of schooling. The literacy level of other backward classes is comparable with that of husbands from castes other than scheduled tribe, scheduled caste and other backward classes. Among the husbands belonging to other classes, 24 percent of them are non-literate and 23 percent of them have 9 or more years of schooling.

				Years of sc				
Background characteristics li	Non- literate	Literate but no schooling	1-5 years	6-8 years	9-10 years	11 or more years	- Total percent	Number of men
Age group								
< 25	79	13	197	25.8	33.5	11.8	100.0	403
25-34	7.9	1.1	16.6	27.0	28.7	18.7	100.0	2.133
35-44	10.0	0.5	19.0	23.4	27.5	19.6	100.0	2,341
45+	10.7	0.6	28.3	22.3	20.3	17.8	100.0	1,189
Place of residence								
Rural	13.6	1.1	25.4	25.6	23.9	10.4	100.0	4,010
Urban	0.8	0.2	9.5	22.7	32.8	34.0	100.0	2,055
Religion								
Hindu	35.6	0.0	11.3	12.0	24.8	16.3	100.0	92
Christian	4.0	0.2	19.9	26.6	28.9	20.3	100.0	5,309
Buddhist	50.1	6.1	22.5	9.1	10.5	1.7	100.0	596
Other	21.4	1.9	18.4	22.5	18.3	17.5	100.0	69
Caste/tribe #								
Scheduled caste	25.4	0.7	16.1	21.5	22.5	13.9	100.0	196
Scheduled tribe	8.5	0.8	20.0	24.8	27.2	18.7	100.0	5,793
Other backward class'es	24.4	0.0	38.6	14.1	18.8	4.2	100.0	58
	9.2	0.8	20.0	24.6	26.9	18.4	100.0	6,065
Total								

3.5 Children Ever Born and Surviving

In DLHS-RCH, currently married women in the age group of 15-44 years were asked about the children ever born alive and the number of children surviving. Table 3.5 shows mean children ever born and mean surviving children by selected background characteristics and sex of children. A look at the mean children ever born by age of the women reveals that older women had experience more average live births than younger women. On the average, women in the reproductive age group have given birth to more male children than female children and similar a sex differential is also noted when it comes to mean surviving children. Completed fertility, that is, mean children ever born to women in the age group 40-44 years is 3.6 for the state of Mizoram and it comprises an average of 1.8 male children and 1.7 female children. Out of the 3.6 mean children ever born to women in the 40-44 year age group an average of 3.5 children survived. By sex of children, out of 1.8 mean numbers of males, 1.8 survived on the average and the corresponding mean number of females surviving was 1.7 out of 1.7.

Women with longer marital duration have higher mean children ever born. On the average, women who are married for 15 or more years have 3.7 children ever born and on the average 3.7 of them are surviving. There is a clear rural-urban divide in terms of mean children ever born with 2.8 children in rural areas and 2.6 children in urban areas. The mean children ever born to women who are Hindu, Christian, Buddhist and other religions are 2.4, 2.7, 2.9 and 2.7 respectively. The corresponding mean surviving children are respectively 2.4, 2.7, 2.9 and 2.6 for

these religious groups. The average children ever born also vary by caste/tribe of the eligible women. For women belonging to scheduled caste, the mean children ever born are 2.6, for the scheduled tribe are 2.7 and other backward classes are 3.1. For all religious groups, the mean number of surviving children is slightly more than 2 shared almost by one surviving male and one surviving female children on the average.

Table 3.5 CHILDREN EVER BORN AND LIVING										
Mean children ever born (CE	B) and child	dren survivi	ng (CS) by sele	ected backgro	und charac	teristics of cur	rently			
married women aged 15-44 y	ears, Mizo	ram, 2002-0)4							
-	Mean	children ev	er born	Mean	Number					
Background characteristic	Total	Male	Female	Total	Male	Female	women			
A										
Age group (years)	0.6	0.2	0.2	0.6	0.2	0.2	210			
20.24	0.0	0.3	0.3	0.8	0.3	0.3	219			
20-24	1.4	0.0	0.7	1.4	0.0	0.7	1,135			
30-34	2.2	1.2	1.0	2.2	1.2	1.0	1,724			
35-39	2.5	1.5	1.4	2.5	1.5	1.4	1,435			
40-44	3.6	1.8	1.7	3.5	1.8	1.7	1,565			
Marital duration										
0-4	1.0	0.5	04	0.9	0.5	0.4	1 525			
5-9	2.4	1.2	0.4	23	1.2	0.4	1,020			
10-14	3.0	1.2	1.1	3.0	1.2	1.1	1,703			
15+	3.7	1.9	1.8	3.7	1.9	1.8	2,690			
Pasidanca										
Rural	2.8	15	13	2.8	1 /	13	1 846			
Urban	2.0	1.3	1.5	2.0	1.4	1.5	2 695			
Orban	2.0	1.0	1.2	2.0	1.5	1.2	2,000			
Religion										
Hindu	2.4	1.2	1.2	2.4	1.2	1.2	117			
Christian	2.7	1.4	1.3	2.7	1.4	1.3	6,561			
Buddhist	2.9	1.5	1.4	2.9	1.5	1.3	789			
Other	2.7	1.4	1.3	2.6	1.4	1.3	74			
Caste/tribe #										
Scheduled caste	2.6	1.4	1.2	2.6	1.4	1.2	192			
Scheduled tribe	2.7	1.4	1.3	2.7	1.4	1.3	7,265			
Other backward class	3.1	1.4	1.7	3.1	1.4	1.7	60			
Education										
Non-literate	3.0	1.6	1.4	3.0	1.6	1.4	1,073			
0-9@ years	2.8	1.5	1.3	2.7	1.4	1.3	4,775			
10 years & above	2.3	1.2	1.1	2.3	1.2	1.1	1,684			
Standard of living index										
Low	2.9	1.5	1.4	2.8	1.5	1.3	3.058			
Medium	2.7	1.4	1.3	2.6	1.4	1.3	2,758			
High	2.5	1.3	1.2	2.5	1.3	1.2	1,726			
All women	2.7	1.4	1.3	2.7	1.4	1.3	7,541			
Note Table Sectore 14		h				· ·				
Note: Lable includes 14 cas	ses with ot	ner catego	ry on caste/trib	be and 9 cas	es of miss	ing informatio	n on women			
Literate women with no year	of schooline	g are includ	ibei may not ac ed.	au up to in du		now and miss	ng cases. @			

The mean children ever born is higher for non-literate women 3.0 than women who have completed 0-9 years of schooling 2.8 and 10 or more years of schooling 2.3. The mean number

of surviving children for women corresponding to these educational levels is 3.0, 2.7 and 2.3 respectively. Further the mean children ever born for women classified into low, medium and high standard of living by SLI are 2.9, 2.7 and 2.5 respectively. For the state of Mizoram, the DLHS-RCH shows inverse association between mean children ever born and educational attainment of women and also the level of household economic comfort.

3.6 Completed Fertility by District

The level of completed fertility as measured by mean children, ever born to women of 40-44 years by districts in Mizoram together with mean number of surviving children are shown in Table 3.6. On the average, women on the verge of completing reproductive period have given birth to 3.7 children in their reproductive life of which 3.6 children are surviving on the average. Completed fertility in Mizoram varies from the low of 3.35 mean children ever born for Lunglei to the highest of 4.5 children in Saiha district. Completed fertility in terms of mean children ever born is high in the districts of Champhai (3.9), Serchhip (3.8), Lawngtlai (3.7) and Mamit (3.6). Mean children ever born in all the districts of Mizoram is more than 3 children. It is also true that in most of the districts mean number of male children is more than the mean of female children born to women in the 40-44 year age group. Saiha (4.5), Champhai (3.9) and Serchhip (3.7) recorded highest mean number of surviving children. Looking at the absolute difference between mean children ever born and mean number of surviving children, it seems that infant and child mortality is not prevalent among districts in Mizoram.

Table 3.6 COMPLETED FERTILITY BY DISTRICT										
Mean children ever born (CEB) and children surviving (CS) to currently married women aged 40-44 by district, Mizoram, 2002-04										
	Mean	er born	Mean children surviving							
District	Total	Male	Female	Total	Male	Female				
Aizawl	3.4	1.7	1.6	3.3	1.7	1.6				
Champhai	3.9	2.0	1.9	3.9	2.0	1.9				
Kolasib	3.4	1.6	1.7	3.3	1.6	1.7				
Lawngtlai	3.7	2.0	1.7	3.6	1.9	1.7				
Lunglei	3.3	1.7	1.6	3.3	1.7	1.6				
Mamit	3.6	1.8	1.7	3.5	1.8	1.7				
Saiha	4.5	2.4	2.1	4.5	2.4	2.1				
Serchhip	3.8	2.0	1.8	3.7	1.9	1.7				
Mizoram	3.7	1.9	1.8	3.6	1.9	1.8				

3.7 Birth Order

Birth order distribution by selected background characteristics of women are provided in Table 3.7 and Figure 3.1. This distribution can be use as a measure of fertility in the absence of formal measures of fertility, such as, crude birth rate and total fertility rate.

Table 3.7 BIRTH ORDER

Percent distribution of births during three years preceding the survey by birth order by selected background characteristics, Mizoram, 2002-04

		Birth	order		- Total	Number of				
Background characteristic	1	2	3	4+	percent	births				
Age of women										
15-19	90.1	82	17	0.0	100.0	118				
20-24	49.6	35.9	12.2	2.3	100.0	979				
25-29	21.1	32.6	29.1	17.2	100.0	1.081				
30-34	10.7	25.4	24.9	38.9	100.0	570				
35-39	11.1	6.7	18.7	63.5	100.0	244				
40-44	12.2	8.9	17.2	61.7	100.0	88				
Place of residence										
Rural	28.5	27.1	20.8	23.6	100.0	2,134				
Urban	32.7	32.1	20.6	14.5	100.0	947				
Education(Years of schooling)										
Non-literate	27.1	26.1	22.9	23.9	100.0	412				
0-9@ years	27.7	27.5	21.5	23.4	100.0	1,960				
10 years & above	37.2	33.5	17.5	11.8	100.0	708				
Religion										
Hindu	(32.1)	(21.4)	(25.0)	(21.4)	(100.0)	28				
Christian	29.9	29.4	19.9	20.8	100.0	2,709				
Buddhist	27.8	22.4	27.6	22.2	100.0	307				
Other	(30.0)	(27.5)	(30.0)	(12.5)	(100.0)	38				
Caste/tribe #										
Scheduled caste	27.2	29.7	18.5	24.5	100.0	67				
Scheduled tribe	30.1	28.7	20.6	20.6	100.0	2,976				
Other backward class	(19.2)	(19.2)	(38.5)	(23.1)	(100.0)	32				
Standard of living index										
Low	25.3	25.9	22.1	26.7	100.0	1,416				
Medium	30.8	31.2	20.4	17.7	100.0	1108				
High	39.3	30.7	18.1	11.9	100.0	557				
Total	29.8	28.7	20.7	20.8	100.0	3,081				
Note: Total includes one case with caste/tribe were not shown separately.	Note: Total includes one case with missing information on women education and 5 cases with other category on caste/tribe were not shown separately. @ Literate women with no year of schooling are included. # Total number of births									

For the state of Mizoram, 30 percent of the births born in the three years period preceding the survey were of first order, 29 percent of second order and the remaining 42 percent were of order 3 and higher order births. By current age of eligible women, more than 64 percent and 79 percent, respectively of births to women in the age group 35-39 years and 40-44 years are 4 and higher order births. For women of 15-19 years, 90 percent births are of first order and 8 percent births are of second order. In the case of eligible women in urban areas 35 percent of the births are of 3 and higher whereas this order births constitute 44 percent for rural women indicating that higher order births are more concentrated in rural areas. Of the total births born to non-literate women, 47 percent are 3 and higher order births, followed by 45 percent for women with 0-9 years of schooling and 29 percent for women who had 10 or more years of schooling. In short, births born to non-literate women are of higher order whereas much lower order births occurred to women who completed 10 or more years of schooling. Looking at the religion differential in birth order distribution, it is observed that 46 percent of births born to Hindu women are 3 and

higher order births. For Christian and Buddhist women, the 3 and higher order births constitute 41 percent and 50 percent respectively. The occurrence of births of order 3 and above among scheduled tribe is (41 percent), among scheduled caste is (43 percent) and among other backward classes (62 percent). Incidence of births of order 3 and above for women classified by household standard of living index are 30 percent for high, 38 percent for medium and 49 percent for low living standard households women.



3.8 Birth Order by District

Table 3.8 and Figure 3.2 shows the births order distribution by districts in Mizoram. The proportion of births of order 3 and above, ranges from the lowest of 34 percent in Aizwal to the highest of 51 percent in Saiha. The districts, which have lower proportion of births of order 3 and above, are Kolasib (39 percent) and Lawngtlai (40 percent). The districts, which can be classified as having higher proportion of births of order 3 and above, are Serchhip (44 percent) and Champhai (46 percent). The remaining districts fall midway between these districts in terms of incidence of births of order 3 and above.



Table 3.8 BIRTH ORDER BY DISTRICT									
Percent distribution of births during three years preceding the survey by birth order, according to district, Mizoram, 2002-04									
	Birth order								
District	1	2	3	4+					
Aizawl	33.5	32.6	18.8	15.1					
Champhai	28.9	25.3	20.1	25.8					
Kolasib	34.3	27.3	19.7	18.8					
Lawngtlai	28.0	32.5	27.0	12.5					
Lunglei	30.2	27.1	22.3	20.4					
Mamit	26.9	29.9	25.0	18.1					
Saiha	23.7	25.6	19.0	31.7					
Serchhip	29.5	26.2	17.5	26.8					
Mizoram	29.8	28.7	20.7	20.8					

3.9 Fertility Preference

The distribution of currently married women desiring additional children and preferred sex of additional children by number of living children of the women is shown vividly in Table 3.9 and Figure 3.3. Out of the 585 women with no living child, 30 percent are currently pregnant and 4 percent are using spacing methods, while 42 percent want to have children within two years, less than one percent want to have children after two years, 4 percent are undecided about the timing of birth and 4 percent desired not to have any children. Among the currently married women, the desire for additional children dwindles down with increasing number of living children. As many as 25 percent of the women having one living child are using spacing methods, 23 percent of them want additional children within two years, 2 percent after two years, 19 percent are undecided about the timing of the next child, 6 percent of them want no more additional children and 7 percent are sterilized. Use of permanent as well as temporary means of contraception tends to be accelerated with number of living children. In the state of Mizoram, out of the 7,541

surveyed representative women, 12 percent desired to have additional children within two years, less than one percent after two years, 8 percent want no more children, 8 percent are currently pregnant and 54 percent are using either terminal or temporary contraceptive methods. A total of 2,030 women want additional children irrespective of the number of living children. Out of 294 women who have no living children and desire for additional children, 18 percent want a boy as the first child, 6 percent desired for girl, for 47 percent, the sex of the child is immaterial and 29 percent leave it to God. With increasing number of living children, is male the dominating preferred sex of the next child though a sizeable proportion of women desiring additional children expressed that the sex of the child was immaterial.



Percent distribution of currently married w	omen by des	sire for child	ren, accordir	ng to numbe	r of living chi	ldren,
Mizoram, 2002-04						
		Numb	er of living c	hildren		
Desire for children	0	1	2	3	4+	Total
Desire for additional child						
Wants another soon	41.7	23.2	14.1	5.8	2.4	12.1
Wants another later ²	0.9	2.4	0.7	0.5	0.1	0.8
Want another, undecided when	4.0	18.6	12.2	5.3	1.3	7.7
Undecided	1.2	1.5	3.1	5.4	4.1	3.6
Up to God	2.5	2.1	3.3	2.1	3.4	2.8
Want no more	4.1	5.5	8.0	8.6	13.1	8.9
Sterilized	9.1	6.5	25.9	53.8	62.4	39.3
Currently users ³	4.0	24.7	23.4	11.7	7.7	14.5
Currently pregnant	30.0	13.8	7.0	5.7	3.0	8.4
Declared infecund	1.6	1.5	2.1	1.0	2.4	1.7
Missing	1.0	0.3	0.2	0.1	0.1	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	585	1,212	1,607	1,952	2,187	7,541
Preferred sex of additional children						
Воу	17.8	196.7	25.0	29.6	22.7	27.1
Girl	6.4	166.0	18.3	20.7	6.6	18.5
Doesn't matter	47.1	143.0	33.4	34.2	36.1	33.4
Upto God	28.6	73.0	23.4	15.3	34.7	21.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	294	579	536	373	249	2,030
Note: ¹ Wants next births within 2 years. ²	Wants to dela	ay next birth	for 2 or mor	e years. ³ Ot	her than ste	rilization.

Table 3.9 FERTILITY PREFERENCE

3.10 **Pregnancy Outcomes**

Table 3.10 shows distribution of pregnancy outcomes including live birth, stillbirth, induced abortion and spontaneous abortion by districts in Mizoram. The proportion of pregnancies ending in live births ranges from 97 percent each in Serchhip and Champhai to 99 percent in Aizawl, Kolasib, Lunglei, Mamit and Saiha. The incidence of stillbirth is highest in Serchhip (3 percent) followed by Lawngtlai (2 percent) and in all the other districts the incidence of still births is one percent or less than one percent. Induced abortion is almost nil in all the districts of Mizoram. Spontaneous abortion is nil in Serchhip, about 2 percent and highest in Champhai.

Table 3.10 OUTCOMES OF PREGNANCY

Percent distribution of all pregnancies of currently married women aged 15-44 years by their outcomes three year preceding the survey currently married women, according to districts, Mizoram, 2002-04

Districts	Live birth	Stillbirth	Induced abortion	Spontaneous abortion	Missing	Total percent
Aizawl	98.9	0.4	0.0	0.3	0.4	100.0
Champhai	97.4	1.1	0.0	1.5	0.0	100.0
Kolasib	99.0	0.0	0.6	0.4	0.0	100.0
Lawngtlai	98.2	1.6	0.0	0.2	0.0	100.0
Lunglei	99.1	0.1	0.0	0.9	0.0	100.0
Mamit	99.3	0.2	0.0	0.4	0.0	100.0
Saiha	99.3	0.3	0.2	0.2	0.0	100.0
Serchhip	96.6	3.4	0.0	0.0	0.0	100.0

CHAPTER IV

MATERNAL HEALTH CARE

Provisions of maternal health care services to ensure safe motherhood is one of the major components of the Reproductive and Child Health (RCH) programme. The RCH programme services for antenatal care, includes at least three antenatal care visits, iron prophylaxis for pregnant and lactating women, at least one dose of tetanus toxoid vaccine, detection and treatment of anaemia in mothers, and management and referral of high-risk pregnancies, natal care, that is encouragement of safe delivery, post-natal care, and management of unwanted pregnancies. In rural areas, the government delivers reproductive health and other health services through its network of Sub-Centres (SCs), Primary Health Centres (PHCs) and other health facilities. In addition, pregnant women and children can get services from private maternity homes, hospitals, private practitioners, and in some case non-governmental organisations (NGOs) and trust hospitals. In urban areas, reproductive health Posts (UHPs), Urban Family Welfare Centres (UFWCs), hospitals and nursing homes operated by NGOs, and private nursing and maternity homes.

The National Population Policy (NPP), 2000 adopted by the Government of India (Ministry of Health and Family Welfare, 2000) reiterates the Government's commitments to the safe motherhood programme within the wider context of reproductive health. Among the national socio-demographic goals for 2010 specified by the policy, several goals pertain to safe motherhood, that 80 percent of all deliveries should take place in institutions by 2010, hundred percent deliveries should be attended by trained personnel, and the maternal mortality ratio should be reduced to a level below 100 per 100,000 live births. Empowering women for improved health and nutrition is one of the 12 strategic themes identified in the policy to be pursued either as stand-alone programmes or as intersectoral programmes.

In DLHS-RCH Phase-I, to all the eligible women who had their last pregnancy after January 1, 1999 a separate section on the status of maternal health and utilisation of maternal health care services was canvassed. In Phase-II, the same section was canvassed to all the eligible women who had their last pregnancy after January 1, 2001. The women whose last pregnancy terminated into live/still birth were asked about the details of antenatal, natal and post-natal care they received; pregnancy, delivery and post-delivery complications they suffered from and the treatment seeking behaviour in case of complications. Women whose last pregnancy terminated into abortion, either spontaneous or induced, were asked about the utilisation of safe abortion services and the post-abortion complications they experienced. This chapter presents information on antenatal, natal and postnatal care received by women whose last pregnancy had terminated during the three years preceding the survey as live birth or as stillbirth.

4.1 Antenatal Check-Ups

Women who had given a birth during the three years preceding the survey were asked whether they had gone for antenatal check-ups outside the home, and if they had, what type of service provider had given them the check-ups. They were also asked whether any health worker had visited them at home to provide antenatal check-ups. Table 4.1 and Figure 4.1 present the percentage of women who had given birth during the three years preceding the survey, and information regarding the antenatal check-ups they had by source of antenatal check-ups according to some selected background characteristics. Results show that nine out of every ten women received antenatal check-ups during the three years preceding the survey, slightly more than RCH Round I (80 percent). Forty-four percent of women received antenatal check-ups at the doorstep from the ANMs or health worker.



Antenatal check-ups are more common among younger women age below 20 years than among older women, and it is more common among those women who had given their first birth. The percentage of women who received antenatal check-up was comparatively higher in urban areas (96 percent) than in rural areas (65 percent), and the percentage of women who received antenatal check-ups from doctors is much higher in urban areas (79 percent) than in rural areas (29 percent), and on the other hand an 36 percent of rural women received antenatal check-ups from auxiliary nurse midwife, nurse or LHVs, the same for women in urban areas is 19 percent. Twenty-one percent of non-literate women received antenatal check-ups for their last pregnancy that terminated into births (either live or still birth) during the three years preceding the survey.

Table 4.1 ANTENATAL CHECK-UP

Percentage of women* who received any antenatal check-up (ANC) during pregnancy by source of antenatal provider, according to selected background characteristics, Mizoram, 2002-04

		Antenatal	He	C^2			
Background characteristic	Any ¹ antenatal check-up	check-up only at home by ANM	Doctor	ANM/ Nurse/ LHV	Other health professional	Other ³	Number of women
Age group							
Less than 20 years	81.0	1.1	44.8	34.7	8.9	2.1	110
20-34 years	74.1	1.4	44.5	30.6	3.5	5.4	2,548
35 years & above	74.0	2.2	42.4	29.2	1.6	7.3	363
Children ever born							
1	80.9	1.4	49.9	33.9	4.2	4.9	797
2	76.3	0.9	48.7	29.9	2.4	5.0	824
3	69.6	1.0	40.9	27.3	4.1	7.1	687
4+	69.2	2.8	36.0	30.8	3.3	5.4	705
Residence							
Rural	64 5	21	28.6	35.7	33	49	2 084
Urban	96.2	0.2	79.0	19.3	3.8	6.8	938
0.2011	00.2	0.2	1010		0.0	0.0	
Education							
Non-literate	21.2	2.6	9.5	4.7	4.2	1.0	432
0-9 @ years	79.0	1.3	40.6	38.2	3.3	6.9	1,883
10 years & above	94.4	1.3	75.3	26.2	3.5	4.7	705
Religion							
Christian	81.0	1.4	48.6	34.0	3.6	5.9	2,622
Buddhist	21.5	2.7	7.6	5.3	3.6	2.5	332
Other	74.9	0.0	55.5	22.5	0.0	5.1	67
Caste/tribe#							
Scheduled caste	56.2	0.0	35.9	22.9	7.1	3.6	68
Scheduled tribe	74.9	1.6	44.4	31.0	3.4	5.6	2.919
Other backward class	(83.3)	(0.0)	(62.5)	(33.3)	(4.2)	(8.3)	28
Standard of living index							
	55.0	2.4	10.5	21.9	2.1	5 /	1 401
Medium	87.1	2.4	19.5 56.0	34.8	J.1 // 3	5.4	1,401
High	96.3	0.1	84.0	19.6	2.9	4.9	559
Availability of health facility⁴ in the village							
No	48.9	3.5	18.5	29.1	1.4	1.4	769
Yes	73.6	1.3	34.5	39.6	4.5	7.0	1,315
Total	74.3	1.5	44.2	30.6	3.5	5.5	3,021

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001.Note: Total includes 9 women with zero parity, 1 with missing information on education and 4 with other on caste who were not shown separately.¹ Antenatal check-ups either at home or outside from home at health facility.² Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses³ Other also includes trained and untrained *dai.* # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included. ⁴ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

The proportion of women who received antenatal check-ups from a doctor, increased steadily with the level of education and the standard of living index. Ten percent non-literate women as compared to 75 percent having education of more than 10 years received ANC from doctors. Similarly, 20 percent women belonging to households with a low standard of living against 84 percent of that from a high standard of living fall in this category. The proportion of Christian women who received antenatal check-ups from doctors (49 percent) was much higher than that of Buddhist women (8 percent), and 'other' religion women (56 percent). Sixty-three percent of women from the other backward classes category received antenatal check-ups from doctors, while it was 36 percent for scheduled caste women, and 44
percent for scheduled tribe women. Women from other backward classes were more likely to receive antenatal check-ups from auxiliary nurse midwives, or LHVs. Thirty-three percent of scheduled tribe women received antenatal check-ups from ANMs, while it was 23 percent among scheduled castes, 31 percent among scheduled tribes women.

4.2 Antenatal Check-Ups at Health Facility

DLHS-RCH asked women who had a birth during the three years preceding the survey whether women had received antenatal check-ups, and if they had, from where they had availed such services.

Table 4.2 PLACE OF AN	Table 4.2 PLACE OF ANTENATAL CHECK-UP												
Percentage of women* w check-ups, according to s	ho received a elected back	any antenat ground cha	tal check-up aracteristics	os (ANC) o s, Mizoram	during pregr , 2002-04	nancy by so	ource and p	lace of ant	enatal				
				Place of	antenatal cl	heck-ups ¹							
	Antenatal	Govern-	Private ³			ISM ⁴	facility		_				
Background characteristic	only at home	health facility	health facility	PHC	SC	Govt.	Private	Other	Number of women				
A													
Age group		70.0		40.0	00.0	0.0		07	110				
Less than 20 years	1.1	70.9	14.4	10.6	39.0	0.3	5.5	3.7	110				
20-34 years	1.4	59.4	16.1	11.2	46.0	1.6	6.3	5.0	2,548				
35 years & above	2.2	54.3	19.4	6.7	47.6	1.1	4.0	3.2	363				
Children ever born		04.4	00.5	0.0	10.0	1.0	7.5	0.0	707				
1	1.4	61.4	20.5	9.0	43.0	1.2	7.5	6.2	797				
2	0.9	61.7	18.5	12.1	43.3	1.2	6.7	3.8	824				
3	1.0	56.1	13.9	10.2	46.0	2.1	5.5	5.4	687				
4+ Desidence	2.8	56.6	12.2	10.8	53.5	1.8	3.6	3.4	705				
Residence	0.4	FF A		447	FF A	1.0		F 4	0.004				
Rural	2.1	55.4	9.1	14.7	55.4	1.2	3.3	5.1	2,084				
Urban	0.2	67.7	32.9	4.7	32.3	2.0	9.9	4.1	938				
Education		10.0			07.0			4 -	100				
Non-literate	2.6	16.8	2.6	9.2	37.6	0.0	0.0	1.7	432				
0-9 @ years	1.3	66.2	13.5	11.7	51.4	1.3	4.0	4.3	1,883				
10 years & above	1.3	66.5	32.9	8.3	34.8	2.2	11.2	6.0	705				
Religion			40.0	40 7	40.7				0.000				
Christian	1.4	64.8	18.2	10.7	46.7	1.6	6.1	4.8	2,622				
Buddhist	2.7	16.0	3.1	5.6	29.6	0.0	1.1	3.6	332				
Other	0.0	54.8	15.1	12.2	33.7	1.4	7.6	1.7	67				
Caste/tribe#													
Scheduled caste	0.0	48.7	12.3	11.2	46.5	8.4	6.6	1.8	68				
Scheduled tribe	1.6	59.6	16.6	10.6	46.1	1.4	6.0	4.8	2,919				
Other backward class	(0.0)	(70.8)	(12.5)	(15.0)	(40.0)	(0.0)	(0.0)	(0.0)	28				
Standard of living													
index													
Low	2.4	47.3	5.9	13.5	58.5	1.0	1.4	4.2	1,401				
Medium	1.1	72.0	18.5	11.2	44.8	1.8	5.6	4.8	1,061				
High	0.1	64.9	39.1	5.6	30.3	1.7	13.1	5.2	559				
Availability of health facility ⁵ in the village													
No	3.5	39.9	4.0	13.2	48.0	2.1	0.7	4.7	769				
Yes	1.3	64.4	12.1	15.2	58.1	0.9	4.3	5.3	1,315				
Total	1.5	59.2	16.5	10.6	45.9	1.5	6.0	4.7	3,021				

Note:* Women who had their last live/still birth since 1-1-1999/1-1-2001.# Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included.¹Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses. ² Includes sub-centre, primary health centre, community health centre or rural hospital, urban health centre/ urban health post/ urban family welfare centre, government hospital or dispensary. ³ Includes Private hospital/clinic or non-governmental hospital/ trust hospital or clinic. ⁴ Indian system of medicine. ⁵ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

Table 4.2 shows the percentage of women who had received antenatal check-ups during pregnancy by place. During pregnancy, women received antenatal check-ups from multiple sources such as, health workers providing ANC at home, Government health facility, private health facility, and at Indian System of medicine etc. Women who received antenatal check-ups both at home and outside the home are categorised as having received care outside the home. Around 59 percent of women received antenatal check-ups at Government health facility, including 11 percent through primary health centre and 46 percent through subcentre, and 17 percent at a private health facility. Other than this, 2 percent of women reported that they had received antenatal check-ups at the Government Indian system of medicine, and 6 percent at private Indian system of medicine. As mentioned above women availed antenatal check-ups from multiple sources. Women who were visited by an ANM might have also visited government and/ or private health facilities including Indian system of medicine.

Younger women were more likely to receive antenatal-check-ups at government health facilities (71 percent) than older women 59 percent for age 20-34 and 54 percent for age 35 and above. Fifty-five percent women from rural areas availed government health facilities for antenatal check-ups and it was much higher for women in urban areas (68 percent), and a high proportion of women (33 percent) from urban areas availed private health facilities for antenatal check-ups than women from rural areas (9 percent). It may be mentioned that more than half of the women from rural areas (55 percent) and younger women aged 35 years and above (48 percent) received antenatal check-ups at sub-centre. This indicates that the services are reaching the target population, particularly through the public sector. A comparatively high proportion of women who received antenatal check-ups at Government health facilities are literate, Christian, other backward classes, living in households with a high standard of living and women from those villages where health facilities are available.

4.3 Antenatal Check-Ups by District

Table 4.3 indicates the antenatal coverage in Mizoram that ranges from the highest of 94 percent in Aizwal to the lowest of 29 percent in Lawngtlai. Almost all districts, except Lawngtlai and Lunglei more than 80 percent of women got some kind of antenatal check-ups for their last births during the three years preceding the survey. Antenatal check-ups received from doctor was low in Lawngtlai (16 percent), and Saiha (19 percent), and in all the remaining districts more than half of the women received antenatal check-ups from doctor and it is highest in Aizawl (72 percent) followed by Kolasib and Lunglei (58 percent each). In 5 out of 8 districts, Serchhip (77 percent), Mamit (50 percent), Saiha (47 percent), Kolasib (45 percent) and Champhai (43 percent) more than 40 percent of women received antenatal check-ups by ANM/Nurse/LHV.

The extent of utilisation of government health facilities for antenatal check-ups was higher than that of private health facilities. The range of antenatal check-ups coverage through government facilities was highest in Kolasib (85 percent) to the lowest of 24 percent in Lawngtlai. Only in Aizawl 41 percent of the women visited private health facility. In Mizoram, 13 percent pregnant women in Aizawl district availed the Indian system of medicine (either government or private) for an antenatal check-up. In all the other districts, the percentage of women who availed antenatal services through the Indian system of medicine ranged from 6 percent to less than one percent.

Table 4.3 ANTENATAL CHECK-UPS BY DISTRICT

Percentage of women* who received any antenatal care (ANC), by source and place of antenatal check-ups by district, Mizoram, 2002-04

		Antenatal	Health personnel providing ANC		Place of antenatal check-ups		
District	Any ¹ antenatal check-up	check-up only at home by ANM	Doctor	ANM/ Nurse	Govern- ment ² health facility	Private ³ health facility	ISM ⁴ facility
	02.0	0.0	74.0	00.0	64.6	40.0	40.0
Alzawi	93.9	0.6	71.8	23.2	61.6	40.8	12.8
Champhai	70.0	1.5	27.3	42.8	61.6	6.0	1.2
Kolasib	85.7	0.5	58.2	44.6	84.6	4.8	1.6
Lawngtlai	28.5	1.9	16.0	9.9	24.3	2.1	1.1
Lunglei	67.5	0.9	58.0	7.3	53.4	12.8	5.5
Mamit	80.1	1.8	33.6	50.3	71.1	12.5	2.5
Saiha	82.4	5.4	18.9	46.8	76.2	2.3	0.2
Serchhip	92.7	0.5	40.1	76.8	78.6	11.3	3.9
Mizoram	74.3	1.5	44.2	30.6	59.2	16.5	5.1
Note:* Women who had last live/s health facility. ² Includes sub-centr	till birth durin e, primary he	g three years alth centre, c	s preceding community	the survey.	¹ Antenatal ch or rural hosp	eck-ups eith ital, urban he	er at home or ealth centre/

urban health post/ urban family welfare centre, government hospital or dispensary. ³ Includes Private ospital/clinic or nongovernmental hospital/ trust hospital or clinic. ⁴ Either government or private Indian system of medicine.

4.4 Reasons for Not Seeking Antenatal Check-Ups

Table 4.4 shows the percentage of women who had given live/still births during the three years preceding the survey and who did not receive any antenatal check-ups by the main reason for not seeking check-ups according to residence and availability of health facility in the village. Forty-nine percent of women stated that it was not necessary to have an antenatal check-up. It was surprising to see that a higher proportion of urban women (55 percent) than rural women (49 percent) felt that it was not necessary to have an antenatal check-up. Fiftyone percent of the women stated that an antenatal check-up was not necessary in villages with a health facility whereas 47 percent of women from those villages where a health facility is not available fall in this category. About 12 percent of women felt that it was not customary to go for an antenatal check-up. Other factors contributing to non-use of antenatal care were that it costs too much (6 percent), it was situated too far, or there was no transportation (25 percent), no time to go (2 percent), family did not allow to avail antenatal care (17 percent), and 17 percent were reported lack of knowledge of these services. Two percent of the women reported 'poor quality of services' as the main reason. Two percent of women from villages with a health facility reported that they had no time to go, and 2 percent of women reported that their family did not allow them to have an antenatal check-up. The corresponding figures were less than one percent of women each from villages without a health facility.

Table 4.4 REASONS FOR NOT SEEKING ANTENATAL CHECK-UPS											
Percentage of women* who did no receiving an antenatal check-up, acc Mizoram, 2002-04	ot receive a cording to re	any antenata sidence and	al check-up t I availability o	by the main re f health facility	ason for not in the village,						
		Resid	dence	Availability facility ¹ in t	[,] of health he village						
Reason	Total	Rural	Urban	No	Yes						
Not Necessary	49.2	48.7	(55.3)	46.8	50.9						
Not customary	11.8	11.5	(10.6)	14.9	7.6						
Cost too much	5.9	4.9	(23.4)	3.4	6.5						
Health facility too far/ No transport	24.6	24.7	(21.3)	28.4	20.4						
Poor quality service	2.1	2.2	(2.1)	2.7	1.5						
No time to go	1.6	1.3	(4.3)	0.4	2.2						
Family did not allow	1.5	1.1	(4.3)	0.4	1.9						
Lack of knowledge	16.8	17.4	(10.6)	16.9	17.9						
Other	2.9	3.0	(2.1)	2.5	3.5						
Number of women	773	738	35	393	346						
Note:* Women who had their last live health centre, community health cent	e/still birth s	ince 1-1-199 al hospital, g	9/1-1-2001.1	ncludes sub-cer	ntre, primary						
dispensary within the village. Note: pe	ercentage m	av add more	e than 100.0 d	lue to multiple re	esponse.						

4.5 Components of Antenatal Check-ups

Women who received any kind of antenatal check-ups were asked whether they received each of the several components of antenatal check-ups at least once during their pregnancy. Table 4.5 presents the percentage of women who received specific components of check-ups by residence. Except for X-rays (which are not recommended as a standard component of antenatal care), all of the measurements and tests are part of essential obstetric care or are required for monitoring high-risk pregnancies.

Seventy percent of women were weighted, 68 percent had their blood pressure checked, and 24 percent had an abdominal examination as the part of the antenatal check-ups. Other common components of antenatal check-ups were blood test (31 percent), urine test (35 percent), the measurement of height (23 percent), internal examination (6 percent), and breast examination (5 percent). About 6 percent of women had a sonogram or ultrasound, 2 percent had an X-ray and only 5 percent of women reported that they had amniocentesis test. All of these measurements or producers were performed more often during antenatal check-ups in urban areas than in rural areas.

The type of advice received by women who had antenatal check-ups for last live/still births during three years preceding the survey is also presented in Table 4.5. Advice on diet was given to 58 percent of urban women as compared to 48 percent of rural women and 52 percent in general. Forty percent of the women received advice on danger signs of pregnancy. Women were less likely to receive advice on delivery care (38 percent), on breastfeeding (35 percent), and on newborn care (34 percent). Advice on family planning was given to 29 percent of rural women and 30 percent of urban women.

Table 4.5 COMPONENTS OF ANTENATAL CHECK-UPS											
Percentage of women* who received an anter	natal check-up by sp	ecific components c	f antenatal check-								
up, according to residence, Mizoram, 2002-04	1										
Components of antenatal check-ups	Total	Rural	Urban								
Antenatal measurements/tests											
Weight measured	69.8	60.0	84.4								
Height measured	23.1	12.6	38.9								
Blood pressure checked	68.3	56.2	86.4								
Blood tested	31.3	17.2	52.3								
Urine tested	35.4	21.2	56.6								
Abdomen examined	24.0	16.8	34.8								
Internal examined	5.6	2.4	10.4								
Breast examined	4.5	1.0	9.7								
X-ray	2.2	0.5	4.8								
Sonography /ultrasound	6.1	2.1	12.1								
Amniocentesis	4.6	5.9	2.7								
Antenatal advice	51.9	47.6	58.3								
Diet	39.9	36.9	44.4								
Danger signs of pregnancy	37.7	33.5	43.9								
Delivery care	35.3	29.2	44.5								
Breast feeding	34.1	29.4	41.1								
New born care	29.1	28.8	29.6								
Family planning											
Number of women who received any antenatal check-up	2,246	1,344	902								
Note:* Women who had their last live/still birt	h since 1-1-1999/1-1	-2001									

4.6 Antenatal Care Services

In India, the Reproductive and Child Health Programme includes all pregnant women should be registered in the first 12-16 weeks (Ministry of Health and Family Welfare, 1997). Accordingly the first antenatal check-ups should take place at latest during the first trimester of the pregnancy. It also includes the provision of at least three antenatal care visits, of at least one tetanus toxoid injection, and supplementary iron in the form of IFA tablets daily for 100 days. To assess whether the women had received all the care during pregnancy, information was collected regarding number of antenatal visits, timing of the first visit, received tetanus toxoid injection and supplement iron folic acid tablets. The results are presented in Table 4.6. In Mizoram, 13 percent of the women received at least three antenatal check-ups and 44 percent had four or more check-ups. At least three antenatal check-ups were received by 13 percent of women in urban areas compared with 12 percent of women in rural areas. Number of visits for antenatal care varies by education, children ever born, religion, caste and standard of living index. Six percent of non-literate, 43 percent literate women (educated below high school) and 69 percent of women who had 10 or more years of schooling visited for minimum three antenatal care. Parity of women is negatively associated with antenatal check-ups. About half of women with parity one received four or more antenatal check-ups compared to 37 percent of the women with parity 4 and above.

Table 4.6 ANTENATAL CARE

Percent distribution of women who had live/still births during three years preceding the survey by number of antenatal check-ups, the stage of pregnancy at the time of first check-up, the number of tetanus toxoid injections received and were given iron folic acid (IFA) tablets/syrup during pregnancy, and percentage who received full antenatal check-ups by some selected background characteristics, Mizoram, 2002-04

		Resid	dence		Education			Children e	ever born	
			_	Non-	0-9@	10 years				
Antenatal care indicators	Total	Rural	Urban	literate	years	& above	1	2	3	4+
Number of ANC visits	~				~~ ~					
Novisit	25.7	35.6	3.8	79.7	20.9	5.6	19.6	23.7	30.3	30.7
1	6.5	7.2	4.9	5.6	7.4	4.7	5.8	6.2	6.6	7.3
2	11.4	12.2	9.8	5.3	13.8	9.0	10.7	11.7	12.3	10.9
3	12.6	12.4	13.1	3.2	15.2	11.3	13.9	11.0	11.5	13.9
4+	43.7	32.6	68.4	6.1	42.7	69.4	50.0	47.3	39.3	37.2
Missing	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1
Stage of pregnancy at the time of the										
first antenatal check-up										
No antenatal check-up	25.6	35.4	3.8	78.8	20.9	5.6	19.1	23.7	30.3	30.7
First trimester	41.2	31.4	63.2	8.1	40.9	62.4	47.6	44.4	38.5	33.2
Second trimester	28.2	27.5	29.8	8.1	32.8	28.2	28.8	27.3	26.4	30.1
Third trimester	4.9	5.6	3.2	4.9	5.3	3.8	4.5	4.6	4.6	5.9
Missing	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1
Women who received TT										
No TT										
NOTI	26.6	34.6	9.0	82.8	20.6	8.5	21.9	25.7	30.8	29.1
1	24.3	23.1	27.2	6.3	26.7	29.0	10.6	30.0	28.2	29.0
2+	47.8	41.6	61.6	10.8	51.6	60.1	66.8	42.0	39.8	41.2
Do not remember/missing	1.2	0.7	2.3	0.1	1.1	2.3	0.7	2.2	1.2	0.7
Women who received IFA										
tablets/syrup										
No IFA/syrup	39.6	45.9	25.8	83.3	36.8	20.3	29.5	39.8	47.6	42.9
Received but not consumed	2.0	1.6	2.9	1.3	1.9	2.8	3.2	1.4	2.2	1.4
Consumed one IFA per day	39.0	35.2	47.5	10.1	40.6	52.5	47.6	37.9	30.7	38.8
	00 F	26.0	24.4	5.2	20.0	20.0	22.2	24.0	22.0	24.0
Received 100+ IFA tablets/syrup	26.5	26.0	34.1	5.3	29.9	39.0	33.3	31.0	23.9	24.0
Percentage of women who received										
full ¹ antenatal check-ups	20.0	18.0	24.6	2.4	20.6	29.3	25.0	20.3	17.7	16.8
Number of women	3,021	2,084	938	432	1,883	705	797	824	687	705

Note: Total includes 9 cases with zero parity and 4 cases of other caste/tribe were not shown separately. @ Literate women with no years of schooling are also included. ¹ At least three visits for antenatal check-ups, at least one TT injection received and were given adequate amount of IFA tablets/syrup.

Table 4.6 ANTENATAL CARE (contd)

Percent distribution of women who had live/still births during three years preceding the survey by number of antenatal check-ups, the stage of pregnancy at the time of first check-up, the number of tetanus toxoid injections received and iron and were given iron folic acid (IFA) tablets/syrup during pregnancy, and percentage who received full antenatal check-ups by some selected background characteristics, Uttaranchal, 2002-04

	F	Religion#		Caste/Tribe		Standa	Standard of living index			Availability of health facility ² in the village	
Antenatal care indicators	Christian	Muslim	Other	Scheduled caste	Scheduled tribe	Other backward class	Low	Medium	High	No	Yes
Number of ANC visits											
No visit	18.9	79.6	25.1	43.8	25.1	(16.7)	44.3	12.8	3.6	51.6	26.3
1	6.7	4.8	7.7	4.7	6.5	(12.5)	7.8	6.2	3.8	7.8	6.9
2	12.1	6.6	9.6	5.5	11.5	(25.0)	13.2	12.1	5.8	11.7	12.4
3	14.0	1.5	12.6	8.2	12.8	(4.2)	10.5	16.5	10.4	9.0	14.3
4+	48.3	7.4	45.1	37.7	44.0	(41.7)	24.2	52.3	76.3	20.0	40.0
Missing	0.1	0.0	0.0	0.0	0.1	(0.0)	0.0	0.1	0.1	0.0	0.1
Stage of pregnancy at the time of the first antenatal check-up											
No antenatal check-up	18.9	78.5	25.1	43.8	25.0	(16.7)	44.1	12.8	3.6	51.1	26.3
First trimester	45.2	10.1	42.7	35.1	41.6	(33.3)	26.2	46.5	69.0	23.3	36.1
Second trimester	30.8	7.6	27.4	19.9	28.4	(37.5)	24.5	35.2	24.4	18.4	32.8
Third trimester	5.0	3.9	4.8	1.2	4.9	(12.5)	5.2	5.5	2.9	7.2	4.7
Missing	0.1	0.0	0.0	0.0	0.1	(0.0)	0.0	0.1	0.1	0.0	0.1
Women who received TT											
No TT	19.2	84.9	27.7	44.9	26.0	(25.0)	42.7	15.8	7.0		
1	26.6	7.3	21.4	23.9	24.5	(20.8)	20.3	28.9	25.8	49.3	26.0
2+	52.8	7.4	49.8	29.0	48.2	(54.2)	36.1	54.5	64.3	11.5	29.8
Do not remember/missing	1.3	0.4	1.0	2.3	1.2	(0.0)	0.9	0.8	2.9	38.2	43.6
						()				0.9	0.7
Women who received IFA tablets/syrup											
No IFA/syrup	33.7	84.4	49.8	62.1	38.8	(45.8)	54.2	30.1	21.3	60.6	37.3
Received but not consumed	2.3	0.2	0.7	2.0	2.1	(4.2)	1.3	2.7	2.6	0.6	2.2
Consumed one IFA per day	42.7	11.3	33.8	15.3	39.7	(41.7)	30.2	45.0	49.9	25.9	40.7
Received 100+ IFA tablets/syrup	31.5	5.3	25.6	21.9	28.9	(8.3)	20.0	33.1	41.1	16.7	31.4
Percentage of women who received full ¹ antenatal check-ups	22.5	1.4	14.8	9.7	20.4	(16.7)	11.0	25.5	32.4	10.4	22.4
Number of women	2,922	332	67	68	2,919	28	1,401	1,061	559	769	1,315

Note: Total includes 4 cases with other category on caste/tribe were not shown separately. # Total figure may not add to N due to do not know and missing cases. ¹ At least three visits for antenatal check-ups, at least one TT injection received and was given adequate amount of IFA tablets/syrup. ² Includes sub-center, primary health center, community health center or referral hospital, government hospital, and government dispensary within the village.

Christian women (14 percent) were more likely to have at least three visits for antenatal check-ups than Muslim women (2 percent) and women from 'other' religions (13 percent). Coverage is substantially lower for women from scheduled-tribes (13 percent) and for women of other backward classes (4 percent). Having four or more antenatal visits also increased with the standard of living-24 percent for women with a low standard of living, 52 percent for women with a medium standard of living and 76 percent for women with a high standard of living. Availability of health facility in the village does make a difference to the minimum three visits for antenatal check-ups.

Data on timing of first antenatal check-ups shows that about forty-one of the women received their first antenatal check-up in the first trimester of pregnancy, and another 28 percent received their first check-up in the second trimester, and 5 percent of women received their first check-up in the third trimester. A relatively higher proportion of women in the urban areas (63 percent) as compared to those in rural areas (31 percent) had a check-up in the first trimester of pregnancy. The first antenatal check-up in the first trimester has steadily increased with education. Eight percent of non-literate women had undergone their first antenatal check-up in the first trimester, and 62 percent of women who had completed at least 10 years of schooling received their first antenatal check-up in the first trimester. Almost half of the women (48 percent) with parity-1 were visited in first trimester and a little more than a quarter (33 percent) women with parity- four and above had undergone antenatal check-up in first trimester. Muslim women were less likely to go for first antenatal check-up in first trimester of their pregnancy as compared to Christian and women of other religion, and less than one-third (35 percent) of scheduled caste women were visited in first trimester for first antenatal check-ups compared with 42 percent to scheduled tribe women and 33 percent of other backward class of women. Twenty-six percent women with low standard of living, 47 percent with medium standard of living, and 69 percent of women with high standard of living respectively had undergone their first antenatal check-up in the first trimester of their pregnancy period

Nutritional deficiencies in women are often exacerbated during pregnancy because of the additional nutrient requirements of foetal growth; therefore a pregnant woman needs six times more iron than a non-pregnant woman. The information on receiving iron folic acid tablets/syrup during pregnancy is also collected. Table 4.6 shows that women in Mizoram received IFA supplements for more 39 percent of the last birth during three years preceding the survey. The coverage of IFA tablets is relatively higher in urban areas (48 percent) than in rural areas (35 percent). IFA coverage is much low for non-literate women, women with low standard of living, scheduled caste women, and women of higher parity. IFA coverage is also lower among Muslim women (11 percent) than Christian (43 percent) and other religion women (34 percent). Again, during pregnancy in the last three years preceding the survey, only 29 percent of women received 100 or more IFA, 26 percent in rural areas and 34 percent in urban areas. Intake of 100 or more IFA is positively associated with education and standard of living index and negatively associated with parity. Women from other religions and other backward classes received 100 or more IFA than their counterparts. Such a large difference in receiving IFA or intake of 100 or more IFA tablets/syrup is not found while analysing the situation by availability of health facility in the village.

For the last live birth or stillbirth during the three years preceding the survey, women were asked whether they were given tetanus toxoid injection to prevent them and their baby from getting tetanus. Table 4.6 shows that eighty-six percent of the women received two or more tetanus toxoid injections. Coverage of two or more TT injection is slightly higher in urban areas (62 percent) than that in rural areas (42 percent). The coverage of at least one tetanus toxoid injection for Christian women (27 percent) is more than that for Muslim women (7 percent) and women from other religions (21 percent). Coverage of at least one tetanus toxoid injection is almost similar for schedule tribe (25 percent), schedule caste (24 percent) and other backward classes (21 percent). Non-literate women received at least one tetanus toxoid injection for 6 percent of their last birth, whereas literate women with 9 years of schooling received at least one tetanus toxoid injection for 27 percent, and women who had completed 10 years or more of schooling received at least one tetanus toxoid injection for 29 percent of their last birth. Twenty-six percent of women with a high standard of living received at least one tetanus toxoid injection, and 21-29 percent women with low or medium standard of living received at least one tetanus toxoid injection for their last live/still birth. The coverage varies inversely by parity. At least one tetanus toxoid injection was received by 11 percent women of Parity-1 compared with 29 percent of Parity 4 and above.



The percentage of women who received full antenatal care, (that is, at least three antenatal check-ups, and at least one tetanus toxoid injection and supplementary iron in the form of IFA tablets daily for 100 days as recommended by the RCH programme,) has been presented in Figure 4.2. Only 20 percent of women in Mizoram received full antenatal care. Coverage of full antenatal care is low for non-literate women, women with higher parity, Muslim women, women from scheduled caste, women with a low standard of living, and women from those villages where health facilities are available. Full antenatal coverage was also lower in rural areas (18 percent) than in urban areas (25 percent).

4.7 Antenatal Care Indicator by District

amount of IFA

Table 4.7 shows the percentage of women who had given live/still birth during the three years preceding the survey who received different types of antenatal care; (the percentage who received antenatal check-up in the first trimester of pregnancy, the percentage who received at least three antenatal check-ups, the percentage who received at least one tetanus toxoid injection, the percentage given 100 or more iron folic acid tablets/syrup, and the percentage who received full antenatal care services) by district.

Table 4.7 ANTENATAL CARE IND	ICATORS BY D	ISTRICT			
Percentage of women* who receive	d different type o	of antenatal care	by district, Mizo	ram, 2002-04	
	Percentage				
	that received	Percentage	Percentage		
	an antenatal	that received	that received	Percentage	Percentage
	check-up in	three or	at least one	that received	that received
	the first	more	tetanus	adequate	full ²
	trimester of	antenatal	toxoid	amount of	antenatal
District	pregnancy	check-ups	injection	IFA'	check-ups
Aizawl	66.8	85.3	93.2	37.2	30.7
Champhai	31.8	38.6	71.8	22.0	11.5
Kolasib	39.5	66.8	82.8	21.8	13.6
Lawngtlai	12.7	13.0	23.4	12.5	7.9
Lunglei	37.2	50.0	59.1	15.6	9.2
Mamit	38.8	61.0	75.2	29.1	22.7
Saiha	39.7	58.1	80.4	63.4	40.8
Serchhip	38.8	70.8	93.3	32.0	23.4
Mizoram	41.2	56.3	72.1	28.5	20.0
Note:* Women who had their las	t live/still birth s	ince 1-1-1999/1	-1-2001 ¹ 100 d	or more iron fol	ic acid tablets
including syrup ² At least three vi	sits for antenata	I check-ups. at	least one TT in	iection received	and adequate

The utilisation of antenatal care services differs from district to district. In 1 out of 8 districts, Aizawl 67 percent the women received their first antenatal check-up in the first trimester of pregnancy. The percentage of women who received at least three visits for antenatal check-ups ranges from 13 percent in Lawngtlai to 85 percent in Aizwal. In two districts namely Champhai and Lawngtlai, the coverage of at least three visits of ANC were less than 50 percent (see Map-3). There has been good coverage of tetanus toxoid injection in the all districts, ranging from 23 to 93 percent, but on the other hand, performance regarding receipt

of 100 or more IFA is poor. In all the districts, the value ranges from 13 to 63 percent, and it is lowest in Lawngtlai. The percentage of women who received full antenatal care ranges from 8 percent in Lawngtlai to 41 percent in Saihai. In 4 of 8 districts, Champhai, Kolasib, Lawngtlai and Lunglei coverage rate of full antenatal care is below than that of the state average.

4.8 **Pregnancy Complications and Treatment**

Complications during pregnancy may affect both women's health and the outcome of the pregnancy adversely. Early detection of complications during pregnancy and their management are important components of the safe motherhood programme. In the survey, all the eligible women who had given last live or still birth during the three years preceding the survey were asked if at any time during the pregnancy, they had experienced any of the following pregnancy-related problems such as swelling of hands and feet, paleness, visual disturbance, vaginal bleeding, convulsions, weak or no movement of foetus, abnormal position of foetus, and other problems. All the information is based on women's self-reporting which is presented in Table 4.8 and Figure 4.3.



	Percentage	Type of pregnancy complication;										
Background characteristic	of women with any pregnancy complication	Swelling of hands and feet	Paleness	Visual disturbances	Bleeding	Convulsion	Weak or no movement of foetus	Abnormal position of foetus	Other	- Number of women		
Age group (years)												
15-19	35.6	14.3	5.4	1.4	6.4	17.6	3.1	6.5	1.8	11/		
20-24	46.3	28.6	12.9	6.4	3.1	20.3	9.2	8.1	1.2	86		
25-29	47.5	29.5	10.9	7.4	4.2	20.8	10.1	10.1	2.0	1,07		
30-34	47.3	31.6	12.4	9.0	3.1	20.0	10.2	11.0	1.0	60		
35-39	37.7	25.3	11.7	5.1	1.6	16.1	9.5	4.6	1.1	26		
40-44	41.4	32.9	5.7	9.6	7.0	13.1	12.0	11.6	2.0	91		
Children ever born												
1	44.3	27.7	9.2	5.3	3.9	21.6	8.4	7.9	1.0	79		
2	45.6	31.5	10.8	5.4	2.8	20.3	8.5	7.6	0.5	82		
3	51.2	32.1	13.3	8.9	3.8	20.6	13.7	10.8	1.4	68		
4+	41.8	24.1	12.9	9.3	4.0	16.3	8.0	10.6	3.3	70!		
Residence												
Rural	42.4	26.4	12.1	7.0	3.9	16.7	9.1	8.3	1.3	2,08		
Urban	52.7	34.1	10.1	7.2	3.0	26.5	10.7	10.9	2.0	93		
Standard of living index												
	42.3	26.3	14.0	75	4.0	15.6	10.1	86	1 9	1 40		
Medium	42.5	20.5	03	7.5	4.0	22.8	8.0	0.0	0.8	1,40		
High	50.5	33.1	9.2	5.8	3.6	24.3	11.5	9.7	1.7	55		
Received any ANC												
Voc	47.8	29.6	10.6	73	30	22.1	10.5	9.7	13	2 24		
No	39.3	26.6	14.1	6.2	2.7	12.7	7.0	7.4	2.0	77		
Total	45.6	28.8	11.5	7.1	3.6	19.7	9.6	9.1	1.5	3,02		

About 46 percent of the women experienced at least one pregnancy related problem. The proportion was higher among rural women (53 percent) than among urban women (42 percent). Women aged 30 years and above, and women with higher parity face at least one pregnancy related problem more than younger women and women with low parity do. This proportion is relatively high among women who had received some kind of antenatal care during the pregnancy. Forty-eight percent of women who had an antenatal check-up reported that they had experienced at least one problem during their pregnancy while 39 percent of women did not receive any antenatal check-up during their pregnancy fall in this category. The major problems reported were 'swelling of hand and feet' (29 percent), 'paleness' (12 percent), and 'visual disturbance' (7 percent). Only 9 percent reported 'abnormal position of foetus', and 'vaginal bleeding'(4 percent), 'convulsions'(20 percent), and 'weak or no movement of foetus' (10 percent). Other problems related to pregnancy were reported by 2 percent of women. Swelling of hands and feet is more common among older women, women with parity-2 and parity-3 and above, and women with high a standard of living. The percentage of women who were more anaemic belonging to the age group 30-34 years, women from rural areas, women with a low standard of living and women who did not receive any kind of antenatal care during the pregnancy. Anaemia, visual disturbance, and convulsion increased steadily with increase of parity, whereas women with parity-1 reported vaginal bleeding, weak or no movement of foetus and abnormal position of foetus more. The younger women (15-19 years of age) and older women (40-44 years of age) were more likely to report vaginal bleeding and abnormal position of foetus as pregnancy complications.

Women who reported at least one pregnancy related complication were asked whether they had consulted someone or had sought treatment for their problem and also the source of treatment. Table 4.9 shows the percentage of women who had pregnancy complications who obtained advice or had sought treatment by source of treatment according to residence and availability of health facility in the village. Twenty-five percent of women reported that they had obtained advice or consulted someone for their problem. The proportion was higher among urban women (38 percent) than among rural women (18 percent), and 23 percent of women sought treatment from those villages where health facility was available as compared to 14 percent of women with non-availability of health facility within the village.

Among women who sought treatment for pregnancy complications, 68 percent visited a government health facility including a primary health centre (7 percent) and subcentre (18 percent). Thirty percent of them visited a private health facility, and 6 percent had gone to a facility with the Indian system of medicine, while another 6 percent obtained advice from another health facility. The proportion of women who visited a private health facility is higher in urban areas (39 percent) than in rural areas (18 percent). Among women who sought treatment, 78 percent went to a doctor and 17 percent to an auxiliary nurse midwife or nurse or LHV, and another 5 percent to someone else. Ninety-two percent of these women in urban areas, and 61 percent in rural areas were examined by a doctor, whereas ANM/Nurse/LHV examined 29 percent women in rural areas and 8 percent in urban areas.

		Resi	dence	Availability of health facility⁵ in the village		
reatment and source	Total	Rural	Urban	No	Yes	
ercentage of women sought						
eatment who had any regnancy complication	24.9	17.6	37.9	(14.4)	22.6	
Number of women	343	156	187	30	125	
ercentage sought treatment at ealth facility						
Government health facility ¹	67.8	74.9	61.9	(80.0)	72.4	
Primary health centre	6.6	11.1	2.8	(12.5)	12.0	
Sub centre	18.4	27.1	11.2	(30.0)	25.3	
Private health facility ²	29.5	17.7	39.3	(7.5)	19.6	
ISM ³ facility	5.7	1.9	8.9	(2.5)	1.8	
Other	6.4	11.6	2.0	(15.0)	12.1	
ercent distribution of women ho obtained treatment from						
Doctor	77.7	60.7	91.8	(45.0)	64.1	
ANM/nurse/midwife/LHV	17.4	29.1	7.7	(37.5)	26.3	
Other	4.7	10.2	0.2	(17.5)	9.6	
wissing	0.2	0.0	0.3	(0.0)	0.0	
otal percent	100.0	100.0	100.0	100.0	100.0	
umber of women	343	156	187	30	125	

Note:¹ Include municipal hospital, dispensary, urban health centre/urban health post/urban family welfare centre, community health centre/rural hospital, primary health centre and sub centre. ² Include private hospital/clinic and non-governmental organization/ trust hospital. ³ Either government or private Indian system of medicine. ⁴ Other include Dai trained or untrained, other health professional and ISM practitioner. ⁵ Includes sub-centre, primary health centre, community health centre or referral hospital, government

hospital, and government dispensary within the village

4.9 Delivery Care

4.9.1 Place of Delivery

One of the important thrusts of the Reproductive and Child Health Programme is to encourage deliveries under proper hygienic conditions under the supervision of trained health professionals. The provision of delivery services in the government health institutions is one of the components of the RCH programme. For each live/still birth during three years preceding the survey, DLHS-RCH asked the women where (place) their children were born, who assisted during the deliveries in case of home deliveries, characteristics of delivery, and any problems that occurred during the delivery. Table 4.10 and Figure 4.4 present the place of delivery. A little less than half of the birth (47 percent) took place in government health institutions, 6 percent in private health institutions, and a large proportion of births (47

percent) took place at home. About ninety percent of the deliveries in urban areas and 36 percent of the deliveries in rural areas took place in health institutions. Deliveries in health facilities in Mizoram rose from 59 percent in Round-I to 63 percent in Round-II.

Table 4.10 PLACE OF DELIVERY											
Percent distribution of wome	n who had gi	iven live/still bi	irths during th	nree years pro	eceding the s	urvey, by pla	ice of				
delivery, according to selecte	ed backgrour	id characterist	ics, Mizoram	, 2002-04							
	Health	institutions				Total	Number				
Background characteristics	Public	Privato	Home	Other	Missina	percent	women				
	FUDIIC	Flivale		001	inicenig	porconi					
Age group (in years)											
Below 20	36.7	1.3	61.6	0.0	0.4	100.0	110				
25-34	49.1	4.7	45.7	0.4	0.2	100.0	2,548				
35 and above	36.0	12.9	50.0	0.6	0.5	100.0	363				
Children ever born											
1	53.8	7.9	37.5	0.6	0.2	100.0	797				
2	52.5	6.6	40.5	0.4	0.0	100.0	824				
3	45.1	3.8	50.8	0.2	0.1	100.0	687				
4+	35.5	3.4	60.5	0.3	0.4	100.0	705				
Residence											
Rural	33.7	2.2	63.4	0.5	0.2	100.0	2,084				
Urban	76.8	13.0	9.7	0.2	0.3	100.0	938				
Education											
Non-literate	13.4	1.2	85.1	0.3	0.0	100.0	432				
0-9@ years	46.4	3.1	49.7	0.5	0.3	100.0	1,883				
10 years & above	69.6	14.7	15.4	0.2	0.1	100.0	705				
Religion											
Christian	51.4	5.9	42.0	0.4	0.3	100.0	2,622				
Buddhist	13.5	1.5	84.9	0.0	0.0	100.0	332				
Other	44.5	11.5	43.3	0.7	0.0	100.0	67				
Caste#											
Scheduled caste	64.0	8.3	27.1	0.7	0.0	100.0	68				
Scheduled tribe	46.7	5.2	47.4	0.4	0.2	100.0	2,919				
Other backward classes	(54.2)	(20.8)	(25.0)	(0.0)	(0.0)	(100.0)	28				
Standard of living index											
Low	26.2	0.7	72.6	0.3	0.2	100.0	1,401				
Medium	60.3	6.2	32.5	0.7	0.2	100.0	1,061				
High	74.4	16.5	8.9	0.1	0.2	100.0	559				
Number of antenatal											
check-ups											
No check-up	19.1	1.6	78.7	0.4	0.2	100.0	777				
1	39.0	2.4	58.4	0.2	0.0	100.0	196				
2	47.4	2.0	48.9	1.5	0.2	100.0	345				
3	50.2	3.4	46.0	0.0	0.3	100.0	380				
	63.9	9.8	26.0	0.3	0.1	100.0	1,320				
Delivery characteristics	40.0		40.4			400.0	0 750				
Normal	46.9	4.6	48.1	0.3	0.1	100.0	2,756				
Caesarean	58.0	18.7	22.9	0.3	0.0	100.0	124				
Assisted	43.3	12.1	43.3	1.3	0.0	100.0	135				
Availability of nearth											
No.	25.6	1.0	72.0	0.5	0.0	100.0	760				
NO Vac	20.0	1.0	72.9	0.5	0.0	100.0	109				
res	36.5	2.9	57.9	0.5	0.3	100.0	1,315				
Total	17 1	55	46.8	0.4	0.2	100.0	3 021				
i Utai	47.1	5.5	40.0	0.4	0.2	100.0	3,021				

Note: Total includes 9 women with zero parity, 1 with missing information on education, 2 on number of ANC visits, 6 on delivery characteristics and 4 women in other caste who were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included.¹ Includes subcentre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village

The proportion of births occurring in health institutions is higher for young women under 35 years (38-54 percent) than for women aged 35 years and above (49 percent). Institutional deliveries, particularly in private health facilities, increase sharply with education and the standard of living. Around 15 percent of the births to non-literate women and 84 percent births to literate women who had completed at least 10 or more years of schooling took place at health institutions. Women with a high standard of living were more likely to give birth in health institutions than women with a low standard of living (Figure 4.4). The proportion of institutional deliveries decreases as parity increases from parity one (62 percent) to parity four and above (39 percent). Institutional delivery is much lower for Buddhist women (15 percent) than for Christians (57 percent) and other religion women (56 percent). Only 52 percent births of women from scheduled-tribes are institutional deliveries as compared to 72 percent of births to women from scheduled-castes and 75 percent to other backward classes. Institutional deliveries are more common among women who had four or more antenatal check-ups (74 percent) than among who had fewer antenatal check-ups (49-54 percent). Institutional deliveries are least prevalent among births to women who did not receive any antenatal check-ups (21 percent). As expected, a large proportion of births occurred through caesarean section (77 percent), and 55 percent of assisted deliveries took place at health institutions. At the same time, 23 percent of caesarean deliveries and 43 percent of assisted deliveries took place at home. Forty-four percent of births took place at health institutions in the village with availability of health facility compared to 27 percent of births from villages without any health facility.

4.9.2 Assistance During Home Delivery

Table 4.11 shows distribution of assistance during home delivery by selected background characteristics. Generally, assistance during delivery can be provided by medical staff (doctors, ANM/nurse/LHV, TBA, un-trained *dai*), and relatives/friends. If more than one type of attendant assisted during the delivery, then only the most qualified person is considered. In the last three years only 3 percent of home deliveries were attended by doctors, 14 percent by ANM or nurse or LHV, 21 percent by trained birth attendants, 32 percent by untrained *dais*, 30 percent were attended by relatives and friends and less than one percent of home deliveries were not attended by anyone (Figure 4.4). Overall, health professionals attended 17 percent of deliveries that took place at home. The percentage of births (home delivery) attended by health professionals do not differ much between women age. About 18-17 percent of births attended by health professionals. In rural areas, 16 percent of births were attended by health professionals as compared to 27 percent of that in urban areas. The percentage of births attended by health professionals were decreased steadily with increasing with parity of women.

Births to literate women who had completed 10 or more years of schooling which were attended by health professionals is three times higher than those of non-literate women. About one-fourths (22 percent) of home deliveries to women with a medium standard of living and 15 percent of deliveries to women with a low standard of living were attended by

health professionals. Home deliveries are more likely to be attended by health professionals among Christian women (20 percent) than among Buddhist women (8 percent).

Table 4.11 ASSISTANCE DU	Table 4.11 ASSISTANCE DURING HOME DELIVERY AND SAFE DELIVERY											
Percent distribution of womer home delivery, and percentage	n who had g ge of safe o	given live/s delivery, ac	till births du cording to ទ	uring three y selected bac	ears preced	ling the su aracteristi	rvey, by ass cs, Mizoram	istance during 2002-04				
		Attendan	t assisting	during home	e delivery ¹							
Background characteristics	Doctor	ANM/ Nurse/ LHV	TBA	Un- trained dai	Relative / friends	None	Number of women	Percentage of safe ² delivery				
Age group (in years)	2.0	444	04.4	24.0	<u></u>	0.0	60	40.2				
	3.9	14.4	24.4	34.0	23.3	0.0	1 162	49.3				
25-34 35 and above	3.5	13.5	21.1 15.2	30.1	30.3	0.0	1,103	01.0 57.2				
Children ever born	2.0	14.5	15.5	39.9	20.0	0.0	102	57.2				
	25	13.4	22.8	30.8	27 9	0.0	200	67.6				
2	3.2	18.9	20.5	22.9	32.5	14	334	68.0				
3	3.5	11.1	18.8	30.9	33.9	0.8	349	56.2				
4+	3.8	11.4	20.6	39.5	24.7	0.0	426	48.1				
Residence	0.0		2010	0010		0.0						
Rural	2.6	13.7	19.7	32.7	30.5	0.3	1.321	46.2				
Urban	12.9	14.1	31.9	15.1	14.5	3.1	91	92.4				
Education												
Non-literate	2.1	7.7	6.2	33.7	50.3	0.0	368	22.9				
0-9@ years	3.2	15.4	25.6	32.3	22.1	0.7	935	58.8				
10 years & above	8.1	18.1	25.6	18.3	22.5	0.4	109	88.3				
Religion												
Christian	3.6	15.9	24.9	30.3	23.4	0.7	1,102	65.5				
Buddhist	2.4	5.4	3.1	36.3	52.8	0.0	282	21.7				
Other	(3.8)	(11.5)	(23.1)	(19.2)	(42.3)	(0.0)	29	61.1				
Caste#												
Scheduled tribe	3.3	13.8	20.8	31.1	29.6	0.5	1,384	60.1				
Standard of living index												
	2.3	12.5	18.7	33.1	33.0	0.4	1,018	37.6				
Medium	4.9	16.7	26.2	29.1	21.8	0.2	345	73.5				
High	13.3	17.3	17.4	17.4	10.1	4.4	50	93.6				
Number of antenatal												
check-ups			10.0	~~ 7				07.0				
No check-up	2.5	5.5	13.2	33.7	44.1	0.4	612	27.0				
1	2.7	18.2	23.2	28.9	27.0	0.0	115	53.7				
2	1.5	16.1	21.3	42.1	18.8	0.2	169	58.1				
3	0.Z	21.3	30.5	21.2	19.8	1.0	175	66.3 90.4				
4+	4.3	21.0	21.5	20.0	14.5	0.0	343	00.4				
Delivery characteristics	16	123	21.1	33.1	31.1	0.4	1 326	58 1				
Normal	1/1	37	27.6	10.2	12.0	7.2	1,520	80.0				
Caesarean	37.0	50.8	27.0	2.8	0.8	0.0	59	00.5 03.4				
Assisted	57.0	50.0	0.0	2.0	0.0	0.0	55	55.4				
Availability of health facility ³ in the village												
No	12	86	18 3	31.7	40 1	02	561	33.8				
Yes	3.7	17.4	20.8	33.4	23.5	0.5	761	53.5				
Total	3.3	13.7	20.5	31.5	29.5	0.5	1,413	60.6				

Note: Total includes 4 women with zero parity and 1 with missing information on women education who were not shown separately. Total includes 18 cases of schedule caste women and 6 other backward classes' caste/tribe were not shown separately. @ Literate women with no years of schooling are also included. # Total figure may not add to N due to do not know and missing cases ¹ If the respondent mentioned more than one attendant, only the most qualified attendant is shown. ² Either institutional delivery or home delivery assisted by doctor/ANM/Nurse/LHV. ³ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

Seventeen percent of births to scheduled tribes were attended by health professionals. Eight percent of home deliveries to women who did not have any antenatal check-ups were attended by health professionals compared to 26 percent of home deliveries to women who had four or more antenatal check-ups. About 14 percent of home deliveries that were normal were attended by health professionals, which differ substantially to births by either caesarean section or assisted (18-88 percent), but the result should be interpreted with caution due to the small number of cases. Ten percent home deliveries were attended by health professionals in villages with non-availability of a health facility and 21 percent home deliveries were attended by health professionals in villages with availability of a health facility.



4.9.3 Delivery Assisted by Skilled Persons

The extent of safe deliveries varied substantially by background characteristics of women (Table 4.11 and Figure 4.5). More than half of the births (61 percent) were safe in Mizoram. In urban areas 92 percent of the deliveries were safe as against little more than two-fifths (46 percent) in rural areas. About 49-62 percent of the deliveries were safe for younger women aged below 35 than to elderly women (57 percent). The proportion of safe deliveries was much lower among Buddhist women (22 percent) than among Christian women and women from other religions (66-61 percent). Sixty percent of births to women from scheduled-tribe were safe deliveries. Proportion of safe deliveries decreases as parity rises from 1 (68 percent)

to 4 and above (48 percent). Safe deliveries were least prevalent among women who did not receive any antenatal check-ups (27 percent), and it is most prevalent among women who had four or more antenatal check-ups (80 percent). The proportion of safe deliveries increased sizeably with women's education and standard of living. Only twenty-three percent of non-literate women had safe deliveries whereas its prevalence is 88 percent among women who had completed at least high school. Women with a high standard of living had 94 percent safe deliveries compared to 74 percent of women with a medium standard of living and 38 percent with a low standard of living. As compared to women who had caesarean and assisted deliveries (81-93 percent) only 58 percent of women with normal deliveries are safe deliveries. The proportion of safe deliveries was slightly higher in villages with a health facility than to women from those villages were health facilities are not available.



4.10 Reasons for Not Going to Health Institutions for Delivery

Table 4.12 shows the percentage distribution of women who did not deliver in health institutions in the three years preceding the survey. The main reason for not going to health institutions has been presented according to residence and availability of health facility in the village. A little more than one-quarter (31 percent) of the women stated that it was not necessary to deliver in health institutions. It is surprising to see that a higher proportion of urban women (33 percent) than rural women (31 percent) felt this way. Also, 29 percent of women stated that it was not necessary to deliver in health institutions when their villages

were equipped with health facilities, when compared to 33 percent of women from villages where a health facility is not available. About 6 percent of the women felt that it was not customary to deliver in health institutions. Other factors contributing for not going to health institutions for delivery were, 'it cost too much' (5 percent), 'no transportation' or 'health facility is too far' (29 percent), 'no time to go' (14 percent), 'family did not allow' (less than one percent), 'better care at home' (6 percent), and 'other' (2 percent). About 5 percent reported lack of knowledge regarding the delivery facilities. Two percent women did not opt for institutional delivery due to poor quality of services. The corresponding figures were 3 percent in urban areas and 1 percent in rural areas. It is also needs mention that 3 percent of women from villages with a health facility reported lack of knowledge as a reason for not having delivery at home.

Percent distribution of women who had given last live/still birth at home during three years preceding the survey by the main reason for not going to health institution for delivery, according to residence and availability of health facility in the village, Mizoram, 2002-04												
		Resid	dence	Availability of health facility ¹ in the village								
Reason	Total	Rural	Urban	No	Yes							
Not Necessary	30.7	30.5	32.5	32.7	29.0							
Not customary	6.3	5.6	16.2	7.2	4.5							
Cost too much	5.0	5.0	5.9	3.5	6.0							
Health facility too far/ No transport	29.1	30.6	7.7	34.5	27.7							
Poor quality service	1.5	1.4	3.4	0.4	2.1							
No time to go	14.3	13.8	21.3	7.5	18.5							
Family did not allow	0.2	0.1	0.8	0.1	.1							
Better care at home	6.4	6.4	6.2	6.0	6.7							
Lack of knowledge	4.6	4.7	3.0	6.7	3.3							
Other	1.9	1.9	2.9	1.5	2.2							
Total percent	100.0	100.0	100.0	100.0	100.0							
Number of women	1,413	1,321	91	561	761							
Note: ¹ Includes sub-centre, primar government hospital, and government	Note: ¹ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.											

4.11 Delivery Characteristics by District

Table 4.13 shows the delivery characteristics by district; institutional delivery (delivery in government or private health institutions), home delivery and attendant assistance during home delivery for last live/still births to women during the three years preceding the survey. The proportion of institutional delivery is lowest in Lawngtlai (22 percent) and followed by Saiha (28 percent) and it is highest in Aizawl (78 percent).

Table 4.13 DELIVERY CHARACTERISTICS BY DISTRICT Place of delivery, assistance during home deliveries, and percentage of safe deliveries by district, Uttaranchal, 2002-04							
Districts	Percentage of women who had institutional delivery	Percentage of women who had delivery at home	Home delivery assisted by skilled ¹ persons	Percentage of safe ² delivery			
Aizawl Champhai Kolasib Lawngtlai	79.8 44.0 85.7 22.1	20.2 55.1 11.6 77.8	21.7 10.2 3.4 12.5	84.2 49.6 86.1 31.8			
Lunglei Mamit Saiha Serchhip Total	56.7 49.9 27.8 49.3 52.6	42.6 49.9 71.8 48.6 46.8	14.7 12.6 29.5 36.7 17.0	62.9 56.2 49.0 67.1 60.6			
Note:*Table includes last live/still birth since 1-1-1999/1-1-2001. ¹ Includes Doctor/ANM/Nurse. ² Either institutional delivery or home delivery assisted by skilled person.							

Compared to delivery in a private health facility, deliveries in a government health facility are more common in all the districts of Mizoram. A little more than half (53 percent) of births are institutional delivery in the state, but in 4 of 8 districts, more than half of the births took place at home and Lawngtlai and Saiha had more than 70 percent of home deliveries. Except Saiha and Serchhip district, less than 30 percent of home deliveries were attended by a health professional. The extent of safe deliveries also varies by district, in 4 of 8 districts, the proportion of safe deliveries are below state average, it ranges from 32 percent in Lawngtlai to 86 percent in Kolasib. The proportion of safe deliveries is less than 40 percent in one district i.e. Lawngtlai. (See Map-4).

4.12 Complications During Delivery

Complications during delivery include 'premature labour', 'obstructed labour', 'prolonged labour (more than 12 hours)', 'breech presentations', 'excessive bleeding during delivery' and 'other problems' at the time of delivery reported by women during the three years preceding the survey. Twenty-three percent the women experienced at least one problem during delivery (Table 4.14 and Figure 4.6). The proportion of delivery complications is higher among urban women (28 percent) than among rural women (20 percent). Older women above the age of 35 years, and women with low parity 1-2 reported more at least one delivery related problem than younger women aged below 20 years and above and women with higher parity. This proportion is relatively high among women who had received some kind of antenatal care during their pregnancy. Forty-three percent of women who had not had any antenatal check-up reported that they experienced at least one problem during their pregnancy when compared to 55-60 percent of women who had received some kind of antenatal check-up. Among women who had assisted or caesarean delivery, 49-38 percent reported experiencing such

problems, and 21 percent women with normal deliveries also cited complications during delivery. A relatively higher proportion of women who delivered in health institutions (26-37 percent) faced at least one delivery complication compared to those who delivered at home (17 percent).

Table 4.14 DELIVERY COMPLICATIONS								
Percentage of women who h	ad given la	st live/still bi	rths during t	hree years	preceding th	e survey by	delivery co	mplication,
	Any Type of delivery complication							
Background characteristics	delivery complic -ation	Prematu -re labour	Excessi- ve bleeding	Prolong- ed labour	Obstruct -ed labour	Breech presnta- tion	Other	Number of women
Age group (in years)								
Below 20	19.1	2.3	5.0	5.4	6.2	1.6	1.6	110
25-34	22.8	4.8	6.5	11.0	8.8	1.5	1.3	2,548
35 and above	23.1	3.9	7.5	14.2	6.8	1.6	0.6	363
Children ever born								
1	27.0	4.5	8.4	12.7	11.1	1.6	1.0	797
2	21.3	4.5	6.0	10.3	8.7	1.7	1.4	824
3	20.7	6.0	5.5	10.4	7.7	1.5	1.5	687
4+	21.2	3.5	6.3	11.1	6.1	1.1	1.2	705
Residence								
Rural	20.3	3.6	6.3	11.0	7.3	1.2	1.2	2.084
Urban	27.9	6.8	7.4	11.6	11.2	2.2	1.3	938
Number of antenatal								
check-ups								
No check-up	15.3	3.2	4.7	6.1	6.2	0.6	1.1	777
1	25.4	5.9	11.0	9.6	10.5	2.4	1.8	196
2	28.4	5.1	7.7	16.1	9.3	1.4	0.3	345
3	24.1	4.3	4.7	14.8	8.3	1.2	1.4	380
4+	24.6	5.1	7.3	11.9	9.4	2.0	1.5	1,320
Delivery characteristics								
Normal	20.8	4.3	6.3	10.6	7.1	1.0	1.0	2,756
Caesarean	48.6	11.3	84	18.3	22.1	5.8	4.2	124
Assisted	38.0	5.9	10.7	16.3	24.8	7.0	3.6	135
Place of delivery								
Place of delivery	26.4	5.9	7.1	12.6	10.9	2.2	1.6	1.423
Government sector	36.5	7.9	9.6	13.9	17.1	3.1	1.4	167
Private sector Home	17.2	2.8	5.8	9.2	5.0	0.6	0.9	1,413
Total	22.7	4.6	6.6	11.2	8.5	1.5	1.3	3,021
Note: Table include 9 women with zero parity 2 missing information on number of ANC visit. 6 missing information on								

Note: Table include 9 women with zero parity, 2 missing information on number of ANC visit, 6 missing information on delivery characterises 7 missing cases of place of delivery and 12 cases with other category on place of delivery were not shown separately.

The major problems reported were 'obstructed labour' (9 percent), 'prolonged labour' (11 percent), 'premature labour' (5 percent), and 'excessive bleeding (7 percent). Only 2 percent reported 'breech presentation', and 1 percent reported 'other' problems related to delivery. Premature labour, prolonged labour, obstructed labour and breech presentation are more common among younger women, and women with low parity. Rural women were more likely to report delivery complications such as excessive bleeding, prolonged labour, and obstructed labour, whereas premature labour and breech presentations are more prevalent

among urban women. Premature labour, prolonged labour, obstructed labour and other health problems related to delivery were more among women whose last delivery was assisted with instruments, and breech presentation was more likely among those who had a caesarean, and excessive bleeding during delivery than by women with normal delivery during the three years preceding the survey. Women whose recent delivery was performed in medical institutions were more likely to report premature labour, prolonged labour, breech presentation and obstructed labour compared with place of delivery other than medical institutions.



4.13 Post Delivery Complications and Treatment

Table 4.15 and Figure 4.7 present information about women who faced complications after delivery according to some selected background characteristics. The incidence of post delivery complications judged by any of the following during the first six-weeks of delivery-'high fever', 'lower abdominal pain', 'foul smelling vaginal discharge', 'excessive bleeding', 'convulsion', 'severe headache', and 'other' problems. Thirty-five percent of women reported that they faced any of the problems during the first six weeks after their delivery. The proportion of women who cited at least one post delivery complication is higher in rural areas (38 percent) than in urban areas (28 percent). Older women aged 20-34 years and above, and women with higher parity 4 and over, had there deliveries assisted with instruments, and those whose deliveries took place at home, and those whose deliveries at home were attended by none are more prone to report at least one post delivery related problem.

Table 4.15 POST DELIVERY COMPLICATIONS

Percentage of women who had given last live/still births during three years preceding the survey by post delivery complication, according to selected background characteristics, Mizoram, 2002-04

Type of post delivery complication									
Background	Any post delivery complic-	High	Lower abdom- inal	Foul smelling vaginal dischar	Excess- ive	Convul	Severe head-		Number of
characteristics	ation	fever	pain	ge	bleeding	-sion	ache	Other	women
Age Below 20	28.5	16.3	13.0	79	1.8	5.2	12.9	13	110
20-34	36.4	13.8	20.4	12.6	6.8	6.8	11.6	1.2	2,548
35 and above	27.8	11.8	14.5	8.6	4.9	3.5	10.4	1.3	363
Children ever born	22.0	117	15 0	0.2	6.6	5.0	11 1	1.6	707
2	33.0 34.8	14.7	20.3	9.2	6.5	5.0	10.9	1.0	824
3	34.1	13.2	19.5	16.4	4.1	5.2	10.7	0.4	687
4+	38.4	15.7	22.1	10.6	7.6	8.2	12.9	2.1	705
Residence		10.0					10.1		0.004
Rural	38.2	16.2	21.3	14.3	6.4	7.0	13.4	1.0	2,084
Urban	28.1	7.9	15.2	6.9	6.2	4.8	7.1	1.5	938
Delivery									
characteristics									
Normal	34.8	13.2	19.3	11.9	5.9	6.1	11.2	1.1	2,756
Caesarean	42.7	22.7	20.4	13.3	10.7	8.3	17.2	0.6	124
Assisted	35.1	13.6	21.9	13.6	12.1	8.2	12.3	4.4	135
Disco of dollars									
Place of delivery	31.0	10.2	16.1	10.0	6.0	5.3	9.9	1.1	1,423
Government sector	32.9	6.8	14.2	5.1	6.6	3.9	9.9	0.9	167
Private sector	39.3	18.0	23.4	14.8	6.4	7.6	13.1	1.3	1,413
Home									
Assistance during									
home delivery	(31.5)	(13.0)	(18.5)	(14.8)	(5.6)	(5.6)	(7.4)	(5.6)	47
Doctor	30.7	10.5	19.2	17.0	7.4	6.6	8 .5	0.3	193
ANM/Nurse/LHV	43.9	14.1	31.5	12.1	7.8	7.9	13.1	0.2	290
IBA	41.0	21.4	17.7	11.7	5.5	5.1	15.6	1.8	446
Relative/friends	38.8	20.5	26.4	19.1	5.6	11.2	13.4	1.6	416
Total	35.1	13.6	19.4	12.0	6.4	6.3	11.5	1.2	3,021

Note: Table include 8 women with zero parity, 2 missing information on number of ANC visit, 6 missing information on delivery characterises 7 missing cases of place of delivery, 12 cases with other category on place of delivery 14 missing cases with assistance during home delivery and 7 none cases with assistance during home delivery were not shown separately.

Women reported high fever (14 percent), severe headache (12 percent), lower abdominal pain (19 percent), foul smelling vaginal discharge (12 percent), excessive vaginal bleeding and convulsion (6 percent each). One percent of women reported other problems. Rural-urban differences in all symptoms of postpartum complication are large. All the postpartum complications, except convulsions, are more prevalent among women aged 20-34 years than among women below 20 years. The symptoms of postpartum complications were increasing steadily with increased parity. There are minimal differences in the likelihood of having different symptoms in the postpartum period by place of delivery. Women who had the last delivery at home and were not assisted by anyone were more likely to have high fever,

lower abdominal pain and other postpartum problems during the first six weeks of delivery. Symptoms like high fever and severe headache are more common for women who delivered at home assisted by a doctor than for women whose home deliveries were assisted by a ANM/nurse/LHV, trained birth attendant, untrained *dai*, or relatives or friends.



Women who reported at least one complication during the postpartum period were asked, whether they had consulted or sought treatment for their problems and also the source of treatment. Table 4.16 shows the percentage of women who had post delivery complications and who sought treatment by source of treatment according to residence and availability of health facility in the village. Nineteen percent of women reported that they had obtained advice or had consulted someone for their problems. The proportion was higher among urban women (28 percent) than among rural women (15 percent), and 19 percent of women sought treatment from those villages where health facility was available as compared to 10 percent of women who did not have a health facility within the village.

Table 4.16 TREATMENT FOR POST DELIVERY COMPLICATIONS

Percentage of women who had last live/still births during three years preceding the survey and who had any post delivery complication, sought treatment for the problems, and source of treatment according to residence and availability of health facility in the village, Mizoram, 2002-04

		Residence		Availabilit facility⁵ in	Availability of health facility ⁵ in the village	
Treatment and source	Total	Rural	Urban	No	Yes	-
Percentage of women sought treatment who had any post delivery complication	18.5	15.3	28.1	9.6	19.2	
Number of women	1,059	796	263	321	475	
Percentage sought treatment at health facility						
Government health facility ¹ Primary health centre Sub centre	80.6 14.0 14.4	79.6 18.1 17.8	82.2 7.2 8.8	(76.2) (19.0) (9.5)	79.4 16.5 22.3	
Private health facility ²	19.2	18.0	21.1	(14.3)	19.9	
ISM ³ facility	3.3	1.3	6.5	(0.0)	1.8	
Other	2.5	3.4	1.1	(9.5)	2.0	
Percent distribution of women who obtained treatment from						
Doctor ANM/nurse/midwife/LHV Other health professionals ⁴ Other	73.1 25.8 0.6 0.6	66.0 32.2 0.9 0.9	84.7 15.3 0.0 0.0	(66.7) (23.8) (4.8) (4.8)	65.4 34.6 0.0 0.0	
Total percent	100.0	100.0	100.0	100.0	100.0	
Number of women	196	122	74	31	91	

Note:¹ Include municipal hospital, dispensary, urban health centre/urban health post/urban family welfare centre, community health centre/rural hospital, primary health centre and sub centre² Include private hospital/clinic and non-governmental organization/ trust hospital³ Either government or private Indian system of medicine⁴ Other health professionals include Dai (trained or untrained), relative/friends and ISM practitioner ⁵ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

Among women who sought treatment for complications in the postpartum period, 81 percent visited a government health facility including primary health centre and sub-centre (14 percent each). Nineteen percent of women visited a private health facility, and 3 percent went to a facility with the Indian system of medicine (either government or private) and another 3 percent obtained advice from other health facilities. The proportion of women who visited a government health facility is relatively higher in urban areas (82 percent) than in rural areas (80 percent). On the other hand, the proportion of women seeking treatment from a private health facility is more among women who belonged to villages with availability of health facility within the village. Among women who sought treatment, 73 percent preferred to go to a doctor and 26 percent visited an auxiliary nurse midwife or nurse or LHV, less than one

percent each went to other health professionals, and to some one else. Eighty-five percent of these women in urban areas, and 66 percent in rural areas went to a doctor, whereas a visit to

an ANM/nurse/LHV was 32 percent in rural areas and 15 percent in urban areas. There are also differences by availability of health facilities and non-availability of health facilities in the village. Sixty-five percent of women who belonged to villages with availability of health facilities were seen by doctor compared to 67 percent of women belonging to villages with non-availability of health facilities.

4.14 Obstetric Morbidity by District

The extent of health problems/ complications women suffer during pregnancy, delivery and post delivery period indicates the state of obstetric morbidity. Table 4.17 presents the incidence of pregnancy, delivery and post-delivery complications and treatment seeking behaviour in case of pregnancy and post delivery complications by district. As mentioned earlier, in the state, 46 percent, 23 percent and 35 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 25 percent of the women sought treatment for pregnancy complications and 19 percent for post delivery complications. In every district, a minimum of 20 percent of the women experienced at least one of the symptoms of pregnancy complications.

Extent of pregnancy, del Mizoram, 2002-04	livery and post delivery comp	plications and tr	eatment seekino	g behaviour by c	listricts,
		Per	centage of wom	ien ¹	
District	Who had complication during pregnancy	Sought ² treatment for pregnancy complication	Who had delivery complication	Who had post delivery complication	Sought ³ treatment for post delivery complication
Aizawl	<i>4</i> 1 Q	37.6	20.0	29.3	29.5
Champhai	31.6	0.0	23.8	32.7	20.7
Kolasib	63.0	24.9	28.9	17.7	25.0
Lawngtlai	72.5	12.6	26.2	63.9	5.2
Lunglei	61.8	22.3	31.0	42.8	13.1
Mamit	47.2	42.9	22.7	35.8	27.4
Saiha	17.6	42.7	9.2	5.9	36.9
Serchhip	50.5	44.1	26.7	51.8	22.6
Mizoram	45.6	24.9	22.7	35.1	18.5

Note:¹ Women who had last live/still birth during three years preceding the survey. ² Women who reported at least one complication of pregnancy. ³ Women who reported at least one post delivery complication.

In a few districts like, Lawngtlai (73 percent), Kolasib (63 percent) and Lunglei (62 percent), the incidence of pregnancy complications is comparatively higher than other districts. The incidence of pregnancy complication is higher than that of delivery and post delivery complications. The percentage of women who experienced at least one type of delivery complication ranges from 9 percent in Saiha to 31 percent in Lunglei, and incidence of post delivery complication varies from 6 percent in Saihai to 64 percent in Lawngtlai. The incidence of all three types of complications seems to be linked with each other in varying proportions.

In most of the districts of Mizoram about three-quarters of the women received some kind of antenatal care. In spite of a large proportion of women having contact with a doctor or any other health workers during the antenatal period, in all districts (except Saiha) less than 30 percent of the women sought treatment for pregnancy complication. Similarly, among women who experienced at least one symptoms of postpartum complication, the proportion seeking treatment also varies across the districts, ranging from 5 percent in Lawngtlai to 37 percent in Saiha.

MAP-3

Percentage of Women Received Three or More AnteNatal Check-Ups









CHAPTER V

CHILD CARE AND IMMUNIZATION

Child health services under the Reproductive and Child Health (RCH) programme include health education to mothers on breast-feeding and services for immunization, Vitamin A supplements and Iron prophylaxis, treatment of diarrhoea and Acute Respiratory Infections (ARIs). The District Level Household Survey (DLHS) covered all the currently married women whose last surviving child was born during the three years preceding the survey, and information on those breastfeeding currently and duration of breastfeeding. They were also asked about their awareness of diarrhoea management and danger signs of pneumonia and practices followed in case of episodes of diarrhoea and ARI among the children. Data on immunization, administering Vitamin A supplements and Iron prophylaxis was collected for the last two living children born after January 1, 1999/2001. This chapter presents an analysis of the data collected on the above aspects.

5.1 Breastfeeding

Educating mothers on correct breastfeeding practices and child nutrition is one of the components of the RCH programme. Infant feeding practices have significant effects on the health of both mothers and children. Mothers are affected through the influences of breastfeeding on the period of postpartum infertility, and hence on fertility levels and the length of birth intervals. These effects vary according to the duration and intensity of breastfeeding. Proper infant feeding, starting from the time of birth, is important for the physical and mental development of the child. Breastfeeding improves the nutritional status of young children and reduces morbidity and mortality. Breast milk not only provides important nutrients, but also protects the child against infection. The timing and type of supplementary foods introduced in an infant's diet have significant effects on the child's nutritional status.

As recommended by the World Health Organization (WHO), breastfeeding should be initiated immediately after birth and should be continued upto a minimum of six months. The WHO also suggests that the yellowish milk, known as colostrums, should be given to the baby because it provides protection against certain infections. Afterwards, it has to be supplemented with other semi-solid and solid foods at the proper time intervals.

Table 5.1 shows the breastfeeding practices among children born during the three years preceding the survey in Mizoram. Although, the practice of breastfeeding is common in Mizoram, the initiation of breastfeeding within two hours of the birth of the child is not always followed. Sixty-seven percent of the children were breastfed within two hours of birth, and 88 percent were breastfed within one day of birth (including those who were breastfed within two hours of birth), while 11 percent of children were breastfed after one day of birth. As shown in Figure 5.1, about 22 percent of the children were breastfed within one day of birth but after two hours of birth, 9 percent were breastfed after the first day of birth but before 3 days, and 2 percent children were put to the breast after three days. Less than one percent of the children were never breastfed. A little more than a quarter of the women (30 percent) who gave birth to children during the three years preceding the survey squeezed the first milk from the breast

before they began breastfeeding. More than 60 percent of children in all the socio-economic groups shown in Table 5.1 were breastfed within two hours of birth. Sixty-six percent of children from scheduled tribe were breastfed within two hours of birth, and 84 percent of children from scheduled castes were breastfed within one day of birth. Women who reside in urban areas, women who have had high school education and above and women who live in households with a high standard of living are much less likely to start breastfeeding their children early. A large proportion of children from rural areas (13 percent), other religion children (17 percent), children from scheduled castes (16 percent), children of educated mothers (13 percent), and children from households with a low standard of living (12 percent) were put to the breast after one day of birth.

	Percent	age started brea	stfeeding	Percentage	
Background characteristic	Within two hours of birth	Within one day of birth ¹	After one day of birth	squeezed first milk from breast	Number of children
Residence					
Rural Urban	64.2 71.6	86.4 92.8	12.8 6.4	25.5 40.2	1,813 818
Mother's education					
Non-literate	61.0	90.3	9.7	30.1	367
0-9@ years	65.5	86.3	12.6	29.2	1,651
10 and above	72.5	92.7	6.5	32.4	612
Religion					
Christian	67.2	87.9	11.1	30.5	2,292
Buddhist	60.0	93.1	6.9	25.1	283
Other	68.5	83.1	16.9	38.7	56
Caste/tribe#					
Scheduled caste	67.5	83.9	16.1	48.2	57
Scheduled tribe	66.4	88.4	10.7	29.5	2,542
Standard of living index					
Low	64.4	86.8	12.3	28.3	1.213
Medium	65.8	88.0	11.3	29.7	931
High	72.9	93.0	6.0	35.1	486
Total	66.5	88.4	10.8	30.1	2,631

The custom of squeezing the first milk from the breast before breastfeeding is widely practised in every group, but it is slightly higher among the mothers of scheduled caste children, children with other religion, and children whose mothers are Non-literate. Children who live in households with a low standard of living are less likely than children in other households to have mothers who squeezed the first milk from the breast before breastfeeding. There is no Rural-Urban differential of the custom of squeezing the first milk from the breast before breastfeeding.

know and missing cases.

Mothers of children born in the three years preceding the survey were asked whether the child had been fed breast milk exclusively and if so, what the duration was. Here it needs to be mentioned that, exclusive breastfeeding includes breastfeeding the child without giving it anything including water. Results are shown in Table 5.2.



Status of exclusive breastfeeding						
Age in months	Exclusive breastfeeding	At least 4 months	At least 6 months	Number of children		
<2	66.7	*	*	87		
2-3	67.4	*	*	189		
4-5	59.1	82.3	*	191		
6-7	34.1	80.9	47.7	174		
8-9	26.0	76.3	36.4	161		
10-11	19.3	73.2	29.1	151		
12-13	20.7	77.1	29.4	181		
14-15	19.3	68.8	37.8	203		
16-17	17.1	73.9	32.2	182		
18-19	14.1	78.3	34.0	153		
20-21	13.3	68.5	24.3	117		
22-23	3.9	50.0	18.5	74		
24-25	4.4	69.2	22.4	178		
26-27	5.3	67.1	29.8	161		
28-29	5.4	67.9	31.6	157		
30-31	2.9	65.1	26.0	92		
32-33	4.1	63.4	22.6	95		
34-35	0.0	72.4	27.0	85		
< 4 months	67.2	*	*	276		
4-6 months	51.9	82.6	*	271		
7-9 Months	28.8	77.2	38.1	255		

In Mizoram, 67 percent of children under four months of age are exclusively breastfed. The percentage of infants exclusively breastfed drops steadily from 67 percent for children under 2 months of age to 59 percent for children who are 4-5 months old. About 83 percent of children in the age group 4-6 months were exclusively breastfed up to 4 months and 38 percent of children in the age group 7-9 months are exclusively breastfed up to 6 months.

5.1.1 Breastfeeding by Districts

Table 5.3 shows that in all the districts of Mizoram, except Champhai and Lawngtlai, more than 67 percent of the children were put to the breast within two hours of birth. About 38 percent of the children were breastfed within two hours of birth in Lawngtlai district. Twenty-two percent of the children were put to the breast after one day of birth in Champhai, followed by Serchhip (20 percent) and Lawngtlai (19 percent). In 3 of the 8 districts, the mothers of more than 67 percent children squeezed the first milk before breastfeeding.

Table 5.3 BREASTFEEDING BY DISTRICT

Percentage of children under age 3 who started breastfeeding within two hours of births, within one day of birth and after one day of birth, percentage whose mother squeezed the first milk from her breast before breastfeeding and percentage of children who exclusively breastfeed by District, Mizoram, 2002-04

	Percent	age started breas	Percentage		
District	Within two hours of birth	Within one day of birth ¹	After one day of birth	whose mother squeezed first milk from breast	Exclusive breastfeeding ²
Aizawl Champhai Kolasib Lawngtlai	74.5 51.4 80.6 37.7	96.4 74.4 97.4 81.3	2.9 22.4 2.6 18.7	13.5 7.1 75.8 1.6	36.6 7.5 11.8 41.6
Lunglei Mamit Saiha Serchhip	78.7 70.2 66.6 61.5	91.2 89.8 91.7 78.9	8.2 9.8 8.3 20.4	67.9 8.1 95.0 15.3	37.3 21.2 54.2 37.7
Mizoram	66.5	88.4	10.8	30.1	31.1

Note: Table based on youngest living child born during the three years preceding the survey

¹ Includes children who started breastfeeding within two hours of births. ² Based on youngest children age 6 months and older at the time of survey and breastfeed exclusively 6 months or more as mother reported.

There is a great deal of variation in the extent of exclusive breastfeeding for six months. It is highest in Saiha (54 percent) and lowest in Champhai (8 percent) and in Kolasib (12 percent).

5.2 Immunization of Children

The immunization of children against six serious but preventable diseases namely, tuberculosis, diphtheria, pertusis, poliomyelitis and measles is the main component of the child survival programme. As part of the National Health Policy, the National Immunization Programme is being implemented on a priority basis. The Government of India initiated the Expanded Programme on Immunization (EPI) in 1978 with the objective of reducing morbidity, mortality and disabilities among children from six diseases.

The Universal Immunization Programme (UIP) was introduced in 1985-86 with the objective of covering at least 85 percent of all infants against the six vaccine preventable diseases by 1990. This scheme has been introduced in every district of the country. The standard immunization schedule developed for the child immunization programme specifies the age at which each vaccine should be administrated and the number of doses to be given. Routine vaccinations received by infants and children are usually recorded on a vaccination card that is issued for the child.

In the first phase of Round II, all the women with last and last but one living child born after January 1, 1999 were asked whether the child/children had received the vaccination against polio, tuberculosis (BCG), diphtheria, whooping cough (pertusis), tetanus (DPT) and measles, and for the second phase, the reference period was from January 1, 2001. For Polio and DPT, further information on polio at birth and number of doses was asked. Children who received BCG, three doses of DPT and polio (excluding polio 0) and measles are considered to be fully vaccinated. Information on the source of immunization for last dose and in case where immunization was not given, the reason for not giving immunization was also compiled.

Table 5.4, Figures 5.2 and 5.3 presents vaccination coverage rates for children in the age group 12-25 months. Only 33 percent of the children are fully vaccinated, and around 15 percent have not received any routine vaccination. Coverage of each vaccination except Polio 0 is much higher than the percentage fully vaccinated. BCG, the first and second dose of DPT and Polio vaccine has each been given to more than half of children (Figure 5.3). Only 45 percent of the children have received three doses of DPT and 44 percent of the children received 3 drops of Polio, and only 60 percent of the children have been vaccinated against measles. Moreover, not all children who begin the DPT and polio vaccination series go on to complete them. The differences between the percentage of children receiving the first and third doses is 32 percentage point for DPT and 33 percentage points for polio.

There has been some improvement in full vaccination coverage in Mizoram since the time of Round I in 1998-99. These data indicate that despite the progress that has been made in immunization coverage for children in Mizoram, coverage levels are still low and a large proportion of children who received some early vaccinations dropped out of the programme before receiving all of the recommended vaccinations.
Table 5.4 VACCINATION OF CH	ILDREN											
Percentage of children age 12-23	8 months who	received va	accination ac	cording to so	ome selected	background cl	haracteristics	, Mizoram, 2	2002-04			
		-	DPT			Polio			_			Number
				_	_		_	_		Full '	No	of
Background characteristic	Polio 0	BCG	1	2	3	1	2	3	Measles	vaccination	vaccination	children
Residence												
Rural	50.0	71.6	72.1	59.6	40.5	72.7	62.3	39.0	50.9	28.5	19.3	698
Urban	87.1	95.3	88.1	76.7	55.0	89.1	76.5	58.6	81.7	43.1	2.0	269
Sex of the child												
Male	62.1	80.2	79.5	64.5	44.8	78.9	69.0	47.6	58.4	34.4	12.6	547
Female	58.0	75.5	72.7	64.3	44.1	75.2	62.6	40.3	60.9	30.2	16.8	420
Birth order												
1	66.8	82.9	81.6	67.1	43.6	81.7	69.7	47.6	58.3	31.6	11.4	284
2	59.8	76.9	73.6	60.3	43.4	74.9	63.0	42.3	60.8	29.1	13.8	274
3	58.0	76.2	72.4	62.0	42.0	74.4	64.2	43.9	59.5	34.6	19.1	203
4+	54.3	75.2	77.8	68.4	49.7	77.3	67.7	43.4	59.2	36.4	15.0	207
Mother's education												
Non-literate	34.4	33.2	36.3	18.0	12.2	33.0	22.0	12.3	21.7	4.3	58.9	140
0-9@ years	57.7	82.3	80.5	69.4	48.6	83.2	71.6	47.2	62.6	35.6	9.3	616
10 years and above	85.4	95.9	91.7	80.5	53.6	89.5	79.9	57.4	75.4	42.2	0.2	210
Religion												
Christian	62.3	83.9	82.2	70.9	49.2	81.8	72.8	49.3	65.0	36.9	9.2	843
Buddhist	43.2	30.0	28.1	11.2	7.7	39.0	14.9	9.5	18.1	0.7	58.2	104
Caste/tribe #												
Scheduled tribe	60.6	78.6	77.1	66.2	45.8	77.8	67.4	45.6	60.3	33.5	14.4	933
Standard of living index												
Low	43.6	64.8	66.4	52.9	36.1	67.9	55.9	34.6	47.5	24.5	23.9	484
Medium	70.7	88.2	83.4	70.3	49.0	83.8	73.6	49.9	64.0	34.8	7.5	309
High	88.3	97.5	92.6	85.9	60.0	92.0	82.1	62.0	84.7	50.8	0.7	174
Total	60.3	78.2	76.6	64.4	44.5	77.3	66.2	44.4	59.5	32.6	14.5	967
Night Table Scalester and clear a	a different boost in	and Phylophysical Phylophysics	I de la seconda de la seconda	- 4 4 4000/4	4 0004 NI-1	 Transfer 	Let a de la la la de la	di sette ette et	· . (a second se		a second base

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001. Note: Total includes 1 child with missing information on mother's education, 20 cases on other religion, 22 cases on scheduled caste and 11 cases with other backward class who were not shown separately. @ Literate mothers with no years of schooling are included. # Total figure may not add to N due to do not know and missing cases.¹ BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles

The data indicates that the coverage of each type of vaccine is more in urban areas than in rural areas. Twenty-nine percent of the children in rural areas had received all the recommended vaccinations by the time of the survey, compared with 43 percent in urban areas. Differentials in rural-urban against polio 0 may be observed from the table. Eighty-seven percent of the children have received polio vaccine at the time of birth in urban areas whereas just 50 percent received the same in the rural areas.



Male children (30 percent) are more likely than female children (34 percent) to be fully vaccinated. Male children are also much more likely than female children to have received most of the individual vaccinations. The relationship between vaccination coverage and birth order is consistently negative for almost all vaccinations. A large majority of first-order births occur to younger women who are more likely than older women to utilize child health care services. As with the use of child health care services, there is a positive relationship between mother's education and children's vaccination coverage. Only 4 percent children of non-literate mothers are fully vaccinated compared to 36 percent of children with mothers' education below high school and 42 percent of mothers who have at least completed high school. Christian children are much more likely than Buddhist children to have received each of the recommended vaccinations. The standard of living index of the household has a strong positive relationship with vaccinated, whereas only 26 percent of children are from households with a low standard of living.





Table 5.5 shows the percentage of children in the age group 12-23 months and 24-35 months with a vaccination card, and the percentage who received various vaccinations during the first year of life by current age of children and place of residence. The interviewer was shown this vaccination card.

The proportion of children fully vaccinated by age 12 months increased slightly from 33 percent for children in the age group 12-23 months to 38 percent for children in the age group 24-35 months. A rural-urban differential for the coverage of full vaccination is also observed. Twenty-nine percent of children in the age group 12-23 months are fully vaccinated against 33 percent of children in the age group 24-35 months in rural areas, and this gap is much wider in

urban areas (Figure 5.4). Only 43 percent of children in the age group 12-23 months have received all vaccinations in urban areas compared to 49 percent with children in the age group 24-35 months. Younger children aged 12-23 months are more likely to receive each type of vaccine except Polio-3, DPT-3 and measles.

	Тс	otal	Ru	ıral	Urban		
Vaccination status	12-23 months	24-35 months	12-23 months	24-35 months	12-23 months	24-35 months	
Vaccination card shown to interviewer	41.7	37.9	35.5	30.7	57.8	54.2	
Percentage vaccinated by 12 months of age							
Polio 0	60.3	59.5	50.0	48.4	87.1	84.6	
BCG	78.2	79.7	71.6	73.0	95.3	94.9	
Polio doses							
No Polio	19.0	22.0	24.4	29.0	5.0	6.3	
1	11.1	8.0	10.5	7.6	12.6	8.9	
2	21.9	16.4	23.4	15.9	17.9	17.6	
3	44.5	47.9	39.1	43.1	58.6	58.8	
Don't remember	3.5	5.7	2.6	4.4	5.8	8.5	
DPT injection							
No DPT	20.1	20.8	25.6	26.0	5.7	9.1	
1	12.2	9.7	12.5	9.7	11.3	9.7	
2	19.9	12.2	19.2	12.5	21.8	11.7	
3	44.5	52.3	40.5	47.9	55.0	62.4	
Don't remember	3.3	4.9	2.2	3.9	6.3	7.1	
Measles	59.5	63.5	50.9	55.7	81.7	81.1	
Full ¹ vaccination	32.6	37.7	28.5	32.7	43.1	49.1	
No vaccination at all	14.5	15.1	19.3	21.1	2.0	1.6	
Number of children	967	1,095	698	759	269	336	



5.3 Source of Immunization

Table 5.6 gives the percent distribution of children under three years of age who have received any vaccination by the source of last vaccine, according to place of residence and availability of health facilities in the village. The sub-centre is the primary provider of childhood vaccinations in Mizoram. Most of the children (92 percent) were immunized at the government health facilities and only four percent at private health facilities. Further, among the children immunized, 79 percent of them had received vaccination from the sub-centre, 4 percent from municipal hospital, and 5 percent from community health centre or from primary health centre. The percentage of children receiving vaccination from the private sector is considerably lower in rural areas (2 percent) than in urban areas (7 percent). Even in urban areas, however, 90 percent of children received their vaccination from the government health facility. Children from those villages where health facilities are available are slightly more likely to receive vaccination from the government health facility.

Percent distribution of children under according to place of residence and ava	age 3 who ha	ave received a	any vaccination I e village, Mizoram	by source of las 1, 2002-04	st vaccination,	
		Resi	dence	Availability of health facility ¹ in the village		
Source of vaccination	Total	Rural	Urban	No	Yes	
Government health sector						
Government/municipal hospital	4.2	2.9	6.4	3.9	2.5	
Community/primary health centre	4.5	5.6	2.7	6.6	5.1	
Sub-centre	79.2	78.5	80.6	60.5	85.8	
RCH/MCP camp	3.7	5.4	0.5	14.9	1.6	
Private health sector						
Private hospital	2.5	1.3	4.7	0.4	1.6	
Private doctor	1.0	0.6	1.8	0.8	0.5	
ISM ² health facility	1.2	0.3	2.9	0.2	0.4	
Other	3.6	5.2	0.5	12.2	2.4	
Do not remember	0.1	0.1	0.0	0.5	0.0	
Total percent	100.0	100.0	100.0	100.0	100.0	
Number of children	2,522	1,637	886	478	1,159	
Note: Table includes last and last but on ¹ Includes sub-centre, primary health ce government dispensary within the village	e living childrer entre, Commun e. ² Either gove	born in the the ity health centr rnment or priva	ree years precedi re or referral hos te health facility c	ng the survey pital, governmen of Indian System	t hospital, and of Medicine	

5.4 Reason for Not Immunizing the Children

Table 5.7 presents the percent distribution of children under the age of three years who did not receive any vaccination by reason as reported by the mother according to place of residence and availability of health facilities in the village. About 37 percent of the children did not receive any vaccination because the mothers of children were unaware of the need for immunization, and 29 percent of children were not vaccinated, as the mothers feel that they were too young. The other reasons for not immunizing the children as reported by the mothers were place or time of vaccination was not known (8 percent), place or time of vaccination was inconvenient (10 percent), fear of side effects and no faith in vaccination (less than one percent) and ANM absent/ vaccine not available (9 percent), family problems (5 percent) and other reasons (1 percent). The percentage of children who did not receive any vaccinations is considerably higher in rural areas (38 percent) than in urban areas (15 percent), as they were unaware of the need for immunization as reported by their mothers. Children from those villages where health facilities are available are less likely to report that they were unaware of the need for immunization as compared to those villages where health facilities are not available. Where health facilities were available, fear of side effects and no faith in immunization were reported more as reasons for not immunizing the children compared to the areas without having the same.

Table 5.7 REASON FOR NOT GIVING V	ACCINATION					
Percent distribution of children under age for not giving vaccination, according to Mizoram, 2002-04	3 who did not place of reside	receive any nce and ava	vaccination by a ailability of hea	reason reported Ith facilities in	d by mother the village,	
		Resi	dence	Availability of health facility ¹ in the village		
Reason	Total	Rural	Urban	No	Yes	
Unaware of need for immunization Place/time unknown Place/time inconvenient Fear of side effect No faith ANM absent/vaccine not Child too young Family problems	36.7 8.3 9.6 0.6 0.2 9.3 29.2 4.9	38.3 8.7 10.2 0.7 0.2 9.9 25.6 5.0	(14.8) (5.6) (7.4) (0.0) (5.6) (61.1) (5.6)	50.7 7.2 6.5 0.2 0.0 10.9 18.7 4.8	20.2 10.8 15.7 1.3 0.5 8.5 35.7 5.4	
Other	1.2	1.3	(0.0)	0.8	1.9	
Total percent	100.0	100.0	(100.0)	100.0	100.0	
Number of children	531	483	48	287	196	
Note: Table includes last and last but one	living children	born in the th	nree years prec	eding the surve	ey ¹ Includes	

sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village² Includes mother too busy, family problems, including illness of mother, and illness of child.() Based on less than 50 unweighted cases.

5.5 Vitamin A and IFA Supplements

Vitamin A deficiency is one of the most common nutritional deficiency disorders in the world, affecting more than 250 million children worldwide (Bolem et. al., 1997). The child survival programme also includes administration of five doses of Vitamin A for prevention of night blindness and distribution of IFA for iron supplement. In Round II, mothers of children born

during the three years before the survey were asked whether their children had received a dose of Vitamin A and IFA tablets/syrup. Those who said that their children had received a dose of Vitamin A and IFA tablets/syrup were further asked how many doses were given. Table 5.8 shows the percentage of children in the age group 12-35 months who received at least one dose of Vitamin A and IFA tablets/syrup by selected background characteristics. In the state of Mizoram as a whole, 30 percent of the children received at least one dose of Vitamin A, and only ten percent received IFA tablets/syrup. This indicates that a large number of children in Mizoram did not receive Vitamin A supplements and very few children received IFA tablets/syrup supplementation.

Table 5.8 VITAMIN A AND IFA SUPPLEMEN	TATION FOR CHIL	DREN	
Percentage of children age 12-35 months who acid tablets/syrup, according to selected backg	have received at lea pround characteristic	ast one dose of Vitamin cs, Mizoram, 2002-04	A and iron folic
	Percentage who		
	received at	Percentage who	
	least one dose	received iron folic	Number of
Background characteristic	of vitamin A	acid tablets/syrup	children
Age of the shild			
12 22 months	20.2	10.0	067
24-35 months	30.2	9.0	1 095
	50.5	5.0	1,000
Sex of the child			
Male	30.6	9.0	1,108
Female	29.9	10.8	954
Birth order			
1	31.6	9.0	614
2	29.1	11.4	601
3	30.4	9.9	429
4+	29.9	8.8	418
Residence			
Rural	23.9	6.7	1,457
Urban	45.6	17.5	605
Mother's education			
Non-literate	4.7	2.5	323
0-9 years@	31.1	9.1	1,259
10 years and above	45.2	16.8	479
Religion			
Christian	33.7	10.8	1 780
Buddhist	3.0	0.8	238
Other	(43.2)	(18.2)	44
	· · · ·		
Caste/tribe #	10.0	10.1	56
Scheduled tribe	12.0	12.1	1 094
Scheduled libe	51.0	9.9	1,904
Standard of living index			
Low	19.0	6.6	993
Medium	37.0	9.6	707
High	48.0	19.0	362
Availability of health facility in the village ¹			
Yes	29.9	7.5	923
No	13.6	5.4	535
Total	30.3	9.9	2,062
Note: Table includes last and last but one livir	ng children born in t	he three years precedin	g the survey. Total
includes 1 women with missing information on	mother's education	, 18 cases on other bac	kward and 2 cases
on other category on caste/tribe who were	not shown separat	ely. @ Literate mother	with no years of

Note: Table includes last and last but one living children born in the three years preceding the survey. Total includes 1 women with missing information on mother's education, 18 cases on other backward and 2 cases on other category on caste/tribe who were not shown separately. @ Literate mother with no years of schooling are also included here. # Total figure may not add to N due to do not know and missing cases. ¹ Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. () Based on less than 50 unweighted cases

Children in the age group 24-35 months are less likely to receive at least one dose of Vitamin A and IFA tablets/syrup each than children in the age group 12-23 months. Female children are more likely to receive Vitamin A than male children but in case of IFA tablets/syrup the pattern is reverse. Children living in urban areas, children whose mother completed high school and above, children living in households with a high standard of living, and children living in those villages where health facilities are available are more likely to receive a dose of Vitamin A and IFA tablets/syrup. Children of birth order 4 or above are much less likely than children of birth order 1, 2 or 3 to receive any dose of vitamin A and IFA tablets/syrup. Similarly, children from Schedule castes are less likely to receive at least one dose of Vitamin A and a dose of IFA tablets/syrup than other caste category.

Table 5.9 CHILDHOOD VACCIN	ATION BY	DSITRICT						
Percentage of children age 12-23 received specific vaccinations by	months wit district, Miz	h a vaccin oram 2002	ation card t 2-04	hat shown	to the interv	iewer and	percentag	le who
			Perce	ntage vacc	inated			Percentage
District	Polio 0	BCG	DPT3	Polio3	Measles	Full ¹	None	showing vaccination card
Aizawl	77.1	98.1	62.0	66.5	79.4	51.7	0.0	56.3
Champhai	35.0	76.3	31.4	29.1	53.0	19.8	11.1	34.0
Kolasib	83.5	91.6	59.1	48.5	77.3	40.2	6.0	66.2
Lawngtlai	35.9	26.4	14.2	10.1	17.1	7.4	58.1	12.6
Lunglei	70.3	70.6	29.4	36.1	47.7	18.4	21.4	32.4
Mamit	63.1	81.0	52.5	47.7	56.7	30.1	16.2	21.1
Saiha	91.0	89.2	61.7	59.3	81.4	53.1	0.7	76.5
Serchhip	33.5	96.3	79.3	73.7	83.2	59.5	0.8	61.2
Total	60.3	78.2	55.5	55.6	59.5	67.4	14.5	41.7
Note:Table includes only last an three doses of Polio (excluding P	d last but o	one living measles	child born :	since 1.1.1	999/1.1.200	1. ¹ BCG	, three inje	ection of DPT,

5.6 Immunization Coverage by District

The coverage of vaccination rates for all vaccines for children in the age group 12-23 months in each district is presented in Table 5.9. There are inter-district differentials in the coverage for different vaccinations, and for children receiving all vaccinations and those that did not receive any vaccination at all. The percentage of children who are fully vaccinated ranges from 7 percent in Lawngtlai to 60 percent in Serchhip. In four districts, namely Champhai (20 percent), Lawngtlai (7 percent), Lunglei (18 percent) and Mamit (30 percent) the coverage of full immunization is below 40 percent (see Map-5) and in all the districts of Mizoram the coverage rate of full immunization is below the state average of 67 percent. Fifty-eight percent of children in Lawngtlai district were not vaccinated at all, and in three districts, the percentage of children have received the measles vaccine than any of the other vaccinations. The coverage of polio drops at the time of birth varies from the lowest in Serchhip (34 percent) to the highest in Saiha (91 percent).

5.7 Child Morbidity and Treatment

This section discusses the awareness, prevalence and treatment of diarrhoea and acute respiratory infection (ARI). Mothers of surviving children born during the three years preceding the survey were asked if their children suffered from cough and cold or diarrhoea during the two weeks preceding the survey, and if so, the type of treatment that had been given. Accuracy of all these measures is affected by the reliability of the mother's recall of when the diseases occurred.

5.7.1 Awareness of Diarrhoea

Diarrhoea is a major killer disease of children under five years of age. Deaths from acute diarrhoea are mostly due to dehydration resulting from loss of water and electrolytes. An attempt was made to collect data on awareness of diarrhoea management and the practice followed during the episode of diarrhoea. This has been presented in Table 5.10.

In Mizoram, 90 percent of the mothers with births three years preceding the survey were aware of what to do when a child had diarrhoea, as compared to68 percent in Round I, and 71 percent were aware of ORS, which was three percent point down from Round I. Nineteen percent of the women were aware of salt and sugar solution. Some of the women also reported that they would continue normal food (11 percent), continue breastfeeding (17 percent), and give plenty of fluids (17 percent), and about 28 percent of women did not know what to give a child who had diarrhoea. As expected, knowledge of ORS is higher among urban women (83 percent) than rural women (65 percent), and among high school and above educated women (85 percent) as compared to non-literate women (48 percent). Women belonging to Schedule Tribes (71 percent) are more likely to know about ORS than women belonging to scheduled caste (57 percent) and other backward classes (58 percent). Eighty-seven percent of women with children having a high standard of living know about ORS and it declines to 74 percent for women with a medium standard of living and 62 percent with a low standard of living. Knowledge of ORS is more among middle age groups and among older women than among younger women. Women from villages with availability of health facilities are more aware of diarrhoea management than women from other villages.

Table 5.10 AWARENESS OF DIARRHOEA

Percentage of women who are aware of diarrhoea management, type of practice followed if child gets diarrhoea, and percentage of women whose child suffered¹ from diarrhoea by selected background characteristics, Mizoram, 2002-04

	Knowledge	Type of p	practices to b	e followed do	if child gets dia	arrhoea*		
Background characteristic	of diarrhoea manage- ment	Give ORS	Salt and sugar solution	Continue normal food	Continue breastfe- ding	Give plenty of fluids	Do not know	Number of women
A == -								
Age	87.6	67.4	16.8	9.6	18.0	15.8	31.6	989
15-24	90.9	73.7	19.4	11.5	16.3	17.8	27.7	1 687
25-34	89.2	66.7	20.0	8.0	15.2	12.4	23.1	374
33-44	00.2	00.7	20.0	0.0	10.2	12.4	20.1	014
Residence								
Rural	87.1	65.3	17.6	8.0	15.2	12.8	32.9	2,108
Urban	95.1	83.1	20.9	16.0	21.0	24.7	18.3	943
Mother's education								
Non-literate	81.0	48.4	10.0	5.0	19.3	5.8	57.2	441
0-9@ vears	88.8	70.6	19.1	9.1	15.7	15.7	26.2	1,905
10 and above	97.2	85.4	22.6	17.5	19.1	25.1	16.1	704
Religion								
Christian	90.7	72.6	20.5	11.2	17.6	18.1	22.9	2646
Buddhist	80.3	56.0	5.3	5.2	12.7	4.1	70.5	342
Other	92.6	76.9	13.0	9.4	16.6	15.7	29.1	63
Caste/tribe#								
Scheduled caste	75.7	56.5	12.4	2.8	4.3	9.5	28.6	71
Scheduled tribe	90.2	71.4	18.9	10.7	17.4	16.8	28.3	2,945
Other backward classes	(83.3)	(58.3)	(8.3)	(8.3)	(4.20	(12.5)	(29.2)	28
Standard of living index								
Low	85.4	62.1	17.1	7.9	15.9	12.5	38.0	1,420
Medium	91.0	74.2	18.5	10.8	16.0	17.6	21.8	1,069
High	97.6	86.5	22.7	16.3	21.7	24.4	16.7	562
Availability of health facility ² in the village								
Yes	88.5	69.0	20.3	9.6	12.3	11.3	27.8	1,327
No	84.8	59.1	13.0	5.3	20.3	15.3	41.6	781
Total	89.6	70.8	18.6	10.5	17.0	16.5	28.4	3,051

Note: Total includes 1 woman missing information on education and 4 women on other category of caste were not shown separately. Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. ¹ Last two weeks prior to survey. @ Literate mother with no years of schooling are included. # Total figure may not add to N due to do not know and missing cases. ² Includes sub-centre, primary health canter, Community health centre or referral hospital, government hospital, and government dispensary within the village.

5.7.2 Treatment of Diarrhoea

During the two weeks before the survey, 22 percent of the women reported that their children suffered from diarrhoea (Table 5.11). Women, whose children had diarrhoea, were further asked about treatment with ORS, any other medical treatment and source of treatment. About 62 percent of the women mentioned that they gave ORS therapy, and 39 percent of the women said that their child had been treated at health facility. Use of ORS for the treatment of childhood diarrhoea in Mizoram is relatively high among urban women than among rural women.

It was observed that a relatively high proportion of women from those villages where health facilities are available within the village used ORS for the treatment of childhood diarrhoea.

Table 5.11 TREATMENT OF DIARRHO Percentage of women who sought treat according to place of residence and ava	DEA ment whose c ailability of hea	hild suffered fr	om diarrhoea a e village, Mizor	nd by source of am, 2002-04	f treatment,
Sought tractment/ course of	, , , , , , , , , , , , , , , , , , ,	Resid	dence	Availabilit fcaility ² in	y of health the village
treatment	Total	Rural	Urban	Yes	No
Percentage of women whose child suffered ¹ from diarrhoea	22.2	22.7	21.2	20.1	27.1
Number of women	3,051	2,108	943	1,327	781
Percentage of women whose child suffered ¹ from diarrhoea treated with ORS	61.6	56.3	74.4	62.6	48.4
Percentage of women whose child suffered ¹ from diarrhoea sought treatment	39.4	3.5	53.5	44.2	19.9
Number of women	679	479	200	267	212
Source of treatment					
Government health facility Hospital/dispensary UHC/UHP/UFWC CHC/ Rural hospital Primary health centre Sub centre	37.3 4.3 4.4 10.4 21.1	18.4 5.3 6.3 15.9 31.9	65.5 2.8 1.6 2.1 4.8	18.7 6.1 7.4 17.8 33.4	17.8 3.1 3.1 10.7 27.5
Private health facility NGO/Trust hospital/clinic Private hospital clinic	6.7 14.3	10.4 2.6	1.0 31.8	13.2 2.3	2.8 3.5
ISM ³ facility Home remedy Other	32.8 10.6 4.5	17.5 14.0 7.2	55.7 5.6 0.4	18.0 8.6 7.3	16.1 28.9 7.0
Percent distribution of women who seek treatment by					
Doctor ANM/Nurse/LHV Relative/friends Dai (trained or untrained) Chemist/medical shop ISM	59.1 27.4 6.3 3.9 3.2 0.1	38.9 41.2 8.5 6.0 5.2 0.2	89.5 6.7 3.0 0.7 0.2 0.0	39.6 44.8 2.5 8.2 4.5 0.3	(53.7) (25.9) (14.8) (0.0) (5.6) (0.0)
Total percent	100.0	100.0	100.0	100.0	(100.0)
Number of women	267	160	107	118	42

Note: Table based on women with living children born since 01.01.1999 for phase - I/01.01.2001 for phase - II. ¹ Last two weeks prior to survey. ² Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. ³ Either government or private health facility of Indian System of Medicine. () Based on less than 50 unweighted cases. Among those mothers whose children suffered from diarrhoea during the last two weeks before the survey and those women who consulted or obtained advice, about 78 percent visited a government health facility, 21 percent of women visited private hospitals/clinics and 33 percent of women treated their children through the Indian System of Medicine.

5.7.3 Awareness of Pneumonia

Another major killer disease among infants and children is Acute Respiratory Infections (ARI) including pneumonia. Early diagnosis and treatment with antibiotics can prevent a large proportion of ARI/pneumonia deaths. An attempt was made to understand the awareness level of pneumonia, and the proportion of children who had suffered from pneumonia during the last two weeks before the survey and their health seeking behaviour. This is presented in Table 5.12. It was found that a low proportion (41 percent) of women with births three years preceding the survey in Mizoram were aware of danger signs of pneumonia. The figure was slightly up from 43 percent in Round I. A relatively high proportion of women in urban areas (57 percent) were aware of the danger signs of pneumonia is higher among older women (44 percent), Christian women (45 percent), other backward classes (50 percent), highly educated women (62 percent), women living in high standard of living household (63 percent), and women living in those villages with health facilities (40 percent).

Women, who were aware of the danger signs of pneumonia, were further asked about different types of signs of pneumonia. Most of the women mentioned about 'difficulty in breathing' (54 percent), 'pain in chest and productive cough' (53 percent), 'wheezing / whistling' (59 percent), 'chest in drawing' (44 percent), 'not able to drink or take a feed' (16 percent), 'rapid breathing' (24 percent), 'condition get worse than before' (13 percent) and 'excessive drowsy and difficulty in keeping awake' (16 percent).

5.7.4 Treatment of Pneumonia

About 23 percent of women reported that their child had suffered from pneumonia during two weeks before the survey, the corresponding figures were 19 percent in rural areas and 8 percent in urban areas (Table 5.13). The incidence of pneumonia varies little with availability of health facilities in the villages.

Table 5.13 also shows that the percentage of women whose children suffered from ARI symptoms in the last two weeks before the survey who sought advice/treatment and taken to a health facility or provider. Fifty-seven percent of women received some advice or treatment whose children were ill with ARI. This percentage is relatively low in rural areas (54 percent) than in urban areas (63 percent) and village without health facilities (46 percent) than village with health facility (57 percent).

Among them who got advice for children ill with ARI, 43 percent went to government hospital/dispensary, 14 percent of women visited private hospital/clinic, whereas 4 percent of them obtained treatment through Indian System of Medicine.

Table 5.12 AWARENESS O	F PNUEMONIA										
Percentage of women who a	are aware of dang	er signs of pheu	umonia by signs	by selected b	ackground chara	acteristics and a Dange	availability of he	ealth facility in th	ie village, Mizoi	ram, 2002-04	
Background characteristic	Percentage of women aware of danger signs of pneumonia	Number of women	Difficulty in breathing	Chest in- drawing	Not able to drink or take a feeding	Excessive drowsy and difficulty in keeping awake	Pain in chest and productive cough	Conditions get worse than before	Wheezing/ whistling	Rapid breathing	- Number of women
Age											
15-24	34.9	989	49.0	40.9	16.6	13.5	47.7	13.3	54.8	23.6	346
25-34	44.1	1.687	56.6	46.4	15.9	16.6	56.3	14.2	58.5	24.7	744
35-44	44.2	374	54.7	39.9	16.9	16.5	49.5	9.1	69.3	23.1	165
Residence	=	0.1	• …	0010			1010	011	0010	2011	
Rural	34.3	2.108	53.1	42.1	15.7	15.6	50.3	13.2	52.9	21.4	722
Urban	56.5	943	55.9	46.6	17.0	15.9	56.6	13.4	67.1	28.0	533
Mother's education	0010	0.0	0010				0010		••••	2010	000
Non-literate	15.5	441	57.3	50.7	18.2	6.2	33.6	3.7	34.6	23.6	68
0-9@ vears	39.2	1.905	52.4	43.7	15.8	15.5	50.7	15.0	56.7	24.6	747
10 and above	62.4	704	57.1	43.4	16.8	17.6	59.9	11.8	66.5	23.7	439
Religion											
Christian	45.3	2.646	54.2	43.7	16.3	15.9	53.3	13.5	59.7	24.6	1.199
Buddhist	10.4	342	(66.7)	(47.6)	(23.8)	(9.5)	(28.6)	(9.5)	(61.9)	(19.0)	36
Other	32.9	63	(47.8)	(47.8)	(17.4)	(21.7)	(43.5)	(26.1)	(43.5)	(39.1)	21
Caste/tribe#			(-)	(-)	()	()	(/	(-)	(/	()	
Scheduled caste	25.4	71	*	*	*	*	*	*	*	*	18
Scheduled tribe	41.5	2,945	54.0	44.0	16.2	15.8	53.6	13.3	59.1	23.5	1,222
Other backward class	(50.0)	28	(41.7)	(58.3)	(16.7)	(25.0)	(41.7)	(33.3)	(50.0)	(41.7)	13
Standard of living index	()		()	· · /	()	()	、	· · · ·	· · /	· · ·	
Low	30.3	1,420	56.1	47.3	17.2	15.3	48.0	13.7	47.3	22.0	430
Medium	44.0	1,069	50.9	41.2	15.8	15.3	53.3	14.6	62.0	22.8	470
High	63.2	562	56.6	43.6	15.7	16.9	58.7	11.1	68.8	28.8	355
Availability of health											
facility ² in the village											
Yes	40.3	1,327	53.9	42.6	14.5	15.2	54.1	13.3	55.6	22.5	535
No	24.0	781	50.9	40.6	19.0	16.9	39.6	13.1	45.1	18.2	187
Total	41.1	3,051	54.3	44.0	16.2	15.7	53.0	13.3	58.9	24.2	1,255

Note: Total includes 1 case with missing information on mother's education and 4 cases on other caste/tribe were not shown separately. Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. ¹ Last two weeks prior to survey. @ Literate mother with no years of schooling are included. # Total figure may not add to N due to do not know and missing cases. ² Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. () Based on less than 50 unweighted cases. * Percentage not shown: Bases on very few cases,

Sought treatment/ source of		Resi	dence	Availabili fcaility ² ir	ty of health the village
treatment	Total	Rural	Urban	Yes	No
Dereentege of women where shild					
suffered from cough, cold and difficulty in breathing	22.5	21.6	24.6	22.5	20.1
Number of women	3,051	2,108	943	1,327	781
Percentage of women sought treatment whose child suffered from cough and cold	56.6	53.5	62.7	57.3	46.3
Number of women	687	456	232	298	157
Source of treatment					
Government health facility					
Hospital/dispensary	42.6	24.7	72.6	20.8	33.6
JHC UHPUWFC	1.5	1.1	2.2	0.7	2.0
CHC/ Rural hospital	4.0	5.1	2.1	4.0	7.7
Primary health centre	16.9	25.1	3.3	22.7	30.6
Sub centre	17.3	26.0	2.6	32.3	11.1
Private nearth facility	0.0	2.4	0.5	0.5	
NGO/ ITUSI NOSPILAI/CIINIC	2.0	3.1	2.5	2.5	4.4
-nvate nospital clinic	14.5	9.1	23.0	7.0	12.0
SM ³ facility	35	35	35	3.0	48
Home remedy	6.6	7.5	5.2	8.2	6.0
Other	5.9	7.7	2.7	6.7	10.3
Percent distribution of women who seek treatment by					
Doctor	69.2	56.2	91.1	52.1	65.8
ANM/Nurse/LHV	21.9	30.0	8.4	33.6	21.7
Relative/friends	0.5	0.8	0.0	0.5	1.5
Dai (trained or untrained)	3.4	5.4	0.0	7.0	1.5
Chemist/medical shop	1.9	2.9	0.3	3.5	1.5
SM practitioner	0.3	0.5	0.0	0.2	1.3
other	2.7	4.1	0.2	3.1	6.7
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	389	244	145	171	73

¹ Last two weeks prior to survey. ² Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. ³ Either government or private health facility of Indian System of Medicine

5.7.5 Awareness of Diarrhoea, ORS and Pneumonia and Incidence of Diarrhoea and Pneumonia by District

Table 5.14 presents the knowledge of diarrhoea management, knowledge of ORS, and incidence of diarrhoea by district. Although knowledge of diarrhoea management is high in almost all districts but knowledge about ORS is comparatively low. Knowledge of ORS is lowest in

Lunglei (41 percent) and highest in Serchhip (97 percent). The incidence of diarrhoea is 22 percent in the state as a whole and it varies from 9 percent in Serchhip to 36 percent in Lunglei. Table 5.14 also shows differentials in the awareness of danger signs of pneumonia and incidence of pneumonia. In comparison to awareness about diarrhoea management, the awareness of danger signs of pneumonia is quite low. It is the lowest in Lawngtlai (10 percent) and highest in Saiha (70 percent). Incidence of ARI symptoms is comparatively high in nearly all the districts in Mizoram. It is highest in Saiha (38 percent), Lunglei (36 percent), Serchhip (26 percent), and lowest in Kolasib (10 percent).

Table 5.14 KNOWLED	GE OF DIARRHOEA MA	NAGEMEN	T AND PNEUMONIA	A BY DISTRICT	
Percentage of women b suffered from diarrhoea	by awareness of diarrhoe and pneumonia during la	a managen ist two weel	ent, ORS, danger signs for the second s	gns of pneumonia and district, Uttaranchal, 20	whose child had 002-04
	Percentage o aware	f women of	Percentage of	Percentage of	Percentage of
	Diarrhoea	Diarrhoea		danger signs of	child suffered ¹
District	Management	ORS	from diarrhoea	pneumonia	from pneumonia
Aizawl	100.0	88.5	12.6	57.4	21.4
Champhai	87.2	58.2	29.9	29.8	14.9
Kolasib	73.7	68.0	31.1	40.5	9.9
Lawngtlai	97.9	87.7	22.3	10.3	15.0
Lunglei	78.1	41.2	35.6	38.4	35.8
Mamit	100.0	80.8	11.6	43.1	14.6
Saiha	74.5	66.5	28.0	69.6	37.9
Serchhip	100.0	96.8	9.3	24.0	26.4
Mizoram	88.4	71.4	23.1	40.4	23.2
Note:Table based on wo prior to survey.	omen with last and last bu	ut one living	children born since	01.01.1999 /01.01.200	1. ¹ Last two weeks

Under the RCH programme, the government health facilities are strengthened to provide treatment of ARI. However, the percentage of women who visited to a government health facility for treatment of their children sick with ARI symptoms was very low.

MAP -5

Percentage of Children (age 12-23 months), Who Have Received Full Vaccination



CHAPTER VI

FAMILY PLANNING

The Reproductive and Child Health Programme has been implemented with a new philosophy and direction to meet the health care needs of women and children. It envisages the provision of couples to control their fertility and have sexual relations free from the fear of pregnancy. Provision of free contraceptive services to all the needy couples is one of the components of the RCH programme. In DLHS-RCH a separate section on family planning was canvassed to all the eligible women to assess the knowledge and practice of various family planning methods. The information on source of currently adopted contraceptive method, source of supply of the method and health problems related to contraceptive use were collected from current users. The current non-users were asked about the past status of contraceptive use, reason for not using contraceptives currently and future intention to adopt a family planning method.

An attempt was made to understand why male methods of family planning especially that of vasectomy was not in common use. The husbands of sampled eligible women were asked about the contraceptive method they would recommend to a couple who was not desirous of any additional children. They were also asked about the reasons for not preferring male methods and their knowledge about the no-scalpel vasectomy. This chapter presents the results of data on contraceptive practices collected from both the sampled women and their husbands.

6.1 Knowledge of Family Planning Methods

Lack of knowledge of various contraceptive choices can be a major barrier to promotion and use of contraceptives among couples. In DLHS-RCH information on knowledge of contraceptives was obtained by asking a question, "Which are the family planning methods you know?" to each sampled eligible women. The knowledge of no-scalpel vasectomy was also asked to the husbands of eligible women. If the respondent did not recognise the name of the family planning method, he was given a brief description on how the particular method was to be used. The DLHS-RCH assesses the knowledge of female sterilisation, male sterilisation including NSV, IUD, Pills, condom and traditional methods along similar lines.

The extent of knowledge of contraceptive methods among currently married women for specific methods and selected background characteristics are shown in Table 6.1 and Figure 6.1. Knowledge of any method including any modern contraceptive method is almost universal in the state of Mizoram. The knowledge of any method and any modern method do not vary much by residence. The knowledge of modern spacing method among currently married women is around 78 percent, and slightly higher among the women with an urban residence. There are large differentials in knowledge of all modern methods with respect to the aforesaid background characteristics. For instance, 13 percent of women from rural areas are aware about all modern methods compared to 46 percent of their urban counterparts.

Table 6.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and selected 1background characteristics, Mizoram, 2002-04

		Resid	dence	Availability of health facility in the village ³			
Contraceptive methods	Total	Rural	Urban	No	Yes		
Any method	94.4	92.2	98.4	87.6	94.4		
Any modern method	94.1	91.9	98.2	87.3	94.1		
Any modern spacing method ¹	78.2	70.6	91.9	59.1	76.1		
All modern methods ²	24.8	13.3	45.5	9.2	15.2		
Female sterilization	91.8	89.4	96.0	84.5	91.8		
Tubectomy	70.7	66.7	78.0	61.4	69.2		
Laparoscopy	52.2	42.2	70.2	40.1	43.2		
Male sterilization	35.6	24 4	55.9	16.9	28 1		
Vasectomy	25.1	12.3	48.3	9.0	13.8		
No-scalpel vasectomy	20.5	7.9	43.2	7.8	8.0		
IUD/Loop	46.3	32.5	71.1	25.9	35.8		
Pills	73.3	64.9	88.6	53.1	70.5		
Daily	59.3	47.8	80.1	39.0	52.1		
Weekly	49.4	36.5	72.5	28.5	40.4		
Condom/Nirodh	56.0	45.2	75.5	34.1	50.6		
Sponge (today)	33.1	27.4	43.3	25.5	28.3		
Injectables	9.2	5.5	15.9	4.7	5.9		
Norplant	3.4	2.3	5.3	2.2	2.4		
Contraceptive herbs	1.6	0.7	3.4	0.8	0.6		
Any traditional method	12.1	7.7	19.8	5.1	9.0		
Any other Indian system of	4.4	2.1	8.6	3.5	1.4		
medicinal contraceptives							
Number of women	7,541	4,846	2,695	1,583	3,263		

government dispensary within the village.

Female sterilisation is the most widely known method of all contraceptive methods in Mizoram followed by Pills. Overall, 92 percent of currently married women are aware of female sterilization and 36 percent knew about male sterilization. There is little rural - urban difference in knowledge of female sterilization but it is not the case of male sterilization. A sizable number of urban women (56 percent) know about male sterilization as compared to 24 percent of rural women. There are differentials in spacing methods such as IUD/Loop, Pill and condom users with respect to the background characteristics. The best-known spacing methods are Pills (73 percent) and condoms (56 percent) respectively. Only 46 percent of women know about the IUD/Loop. There is a large differential in knowledge of spacing methods by residence only 45 percent of the rural women know condom compared to 76 percent of rural women. The modern spacing methods, Pill and IUD are known by 65 and 33 percent of rural women respectively while the corresponding figures in urban areas are 73 and 71 percent respectively of eligible women respondents. The knowledge of these spacing methods remains low as compared to knowledge of sterilization.

In Mizoram, more than 12 percent of the women are aware of a traditional method and four percent are also aware of other contraceptives of the Indian System of Medicine. It is also observed that women from villages with a health facility are slightly more aware about modern spacing methods.



Table 6.2 KNOWLEDGE OF	Table 6.2 KNOWLEDGE OF CONTRACEPTIVE METHODS BY DISTRICT									
Percentage of currently mar 2002-04	ried women a	ge 15-44 ye	ears who kn	ow any cont	raceptive i	method by	specific	method	and district	, Mizoram,
Districts	Any method	Any modern ¹ method	Any modern spacing ² method	All modern ³ methods	Male steriliz -ation	Female steriliz- ation	IUD	Pill	Condom /Nirodh	Any traditio- nal method
Aizawl Champhai	100.0 98.1	100.0 98.1	96.1 85.3	52.3 7.0	66.1 21.1	99.9 96.3	73.7 27.1	94.3 80.0	80.2 53.5	19.7 2.1
Kolasib Lawngtlai	97.1 83.6	96.9 83.2	86.2 33.0	25.9 11.1	35.8 11.7	95.4 82.1	69.8 12.2	83.5 32.5	71.5 11.4	3.6 0.8
Lunglei Mamit Saiha Serchhip	83.8 97.1 96.5 100.0	83.1 96.8 95.3 99.8	64.1 80.9 77.2 86.0	5.5 13.9 29.6 9.7	15.4 24.5 44.0 16.9	74.2 95.0 94.4 95.3	29.5 28.2 55.9 52.0	54.8 75.0 66.9 76.9	39.2 41.4 66.4 58.6	7.9 9.3 32.3 25.9
Mizoram	94.4	94.1	78.2	24.8	35.6	91.8	46.3	73.3	56.0	12.1
Note: ¹ Includes Female ste sterilization & Male sterilization	erilization, Mal	e sterilization	on, IUD, Pill om.	s and Cond	lom. ² Inclu	ides IUD,	Pills and	d Cond	om. ³ Include	es Female

6.1.1 Knowledge of Family Planning Methods by Districts

Table 6.2 shows the knowledge of contraceptive methods by districts in Mizoram. In all districts more than 84 percent of women know about contraceptives including modern methods. A large differential is noticed in the knowledge of all modern methods by districts. The awareness ranges from 6 percent women in Lunglei to 30 percent in Saiha district. There is not much variation in the knowledge of female sterilization, which is the lowest in Lunglei (74 percent) and the highest, in Aizawl (100 percent). Knowledge about IUD/Loop and condom are 12 and 33 percent respectively in Lawngtlai, whereas the same is around 73 and 94 percent for each method in Aizawl district. As for any traditional method, awareness is 2 and percent in Champhai and highest in Saiha district (32 percent).

6.1.2 Knowledge of No-Scalpel Vasectomy (NSV)

Knowledge of no-scalpel vasectomy among the husbands of currently married women in the state of Mizoram is shown in Table 6.3. Only one-fourth (26 percent) of the husbands know about the no-scalpel vasectomy. In rural areas, 21 percent of husbands know about NSV compared to 35 percent in urban areas. For women residing in villages with a health facility, 23 percent of their husbands are aware of No-scalpel vasectomy and it is nearly the same, that is, 16 percent for those living in villages without health facilities. Among the husbands who know about NSV, 51 percent reported that NSV is simpler than a conventional family planning method, 33 percent feel that reported as NSV does not lead to any complication and 34 percent reported that NSV does not affect a man's sexual performance. Only 23 percent of the husbands in villages without a health facility.

	Residence			Availability of health facility in the village ¹		
Knowledge of NSV	Total	Rural	Urban	No	Yes	
Percentage of husband who had knowledge about NSV	25.7	20.8	35.3	16.4	22.9	
Number of husbands	6,065	4,010	2,055	1,311	2,700	
Who know that NSV is simpler than conventional vasectomy	51.2	55.8	45.8	53.5	56.6	
Who feel that NSV does not lead to any complication	32.7	28.3	37.8	43.1	23.2	
Who feel that NSV does not affect man's sexual performance	34.0	28.1	40.9	41.4	23.4	
Number of husbands	1,559	834	725	215	619	

6.1.3 Knowledge of No-Scalpel Vasectomy (NSV) by Districts

No-scalpel vasectomy awareness by districts in Mizoram are provided in Table 6.4. The districts in which at least 26 percent of husbands know about NSV are Kolasib (1 percent), Lawngtlai (4 percent), Lunglei (3 percent), Saiha (5 percent), Serchhip (19 percent Only 1 percent of the husbands in Kolasib district know about the no-scalpel vasectomy. That NSV does not lead to any complications was reported by 57 percent of the husbands in Saiha district, followed by 48 percent in Lunglie and 44 percent in Serchhip, and only 16 percent in Mamit. The husbands who reported that the NSV does not affect a man's sexual performance were highest 87 percent in Kolasib district and the lowest in Mamit (18 percent).

Table 6.4 NO-SCALPEL VASECTOMY BY DISTRICT Percentage of husband of eligible women by knowledge of NSV by district, Mizoram, 2002-04									
Districts	Knowledge about NSV	NSV is simpler than conventional method	Who reported NSV does not lead to any complication	Who reported NSV does not affect man's sexual performance					
Aizawl Champhai Kolasib Lawngtlai Lunglei Mamit	52.8 29.6 0.8 4.1 2.6 34.7	48.1 52.2 37.7 52.8 63.9 51.9	36.0 25.8 43.4 28.5 48.3 16.0	37.9 27.5 87.0 31.5 43.4					
Saiha Serchhip Mizoram	5.0 18.6 25.7	83.9 70.7 51.2	56.8 44.2 32.7	73.1 32.7 34.0					

6.2 Current use of Family Planning Methods

Table 6.5 and Figure 6.2 provide the information on current use of family planning methods for currently married women in Mizoram. At the time of DLHS-RCH, 54 percent of currently married women were using some method of contraception, 7 percentage points up from Round I. Current contraceptive use is slightly higher in urban areas (64 percent) than in rural areas (48 percent). Use of modern method is reported by 53 percent of the women, the breakdown of which is 39 percent for permanent methods and 13 percent for spacing methods. Among the users of sterilization methods most prefer female sterilization, which invalidates the use of male sterilization (0.1 percent).

Table 6.5 CONTRACEPTIVE	Table 6.5 CONTRACEPTIVE PREVALENCE RATE												
Percentage of currently marri	ied women ag	e 15-44 year	s currently us	sing any cont	raceptive me	thod by selec	ted backgro	ound chara	acteristics, Miz	zoram, 2002-	04		
Method	Any method	Any modern ¹ method	Any modern spacing method ²	Any steriliza- tion	Male steriliza- tion	Female steriliza- tion	IUD/ Loop	Pill	Condom / Nirodh	Any traditio- nal method ³	Rhythm/ periodic abstinence	Withdr- awal	Number of women
Residence	48.2	47 0	11 3	35 5	0.1	35 5	4 0	52	21	1 1	0.1	05	4 846
Rural Urban	64.0	62.7	16.5	46.1	0.1	45.9	6.6	7.1	2.8	1.2	0.2	0.2	2,695
Education													
Non-literate	32.2	30.9	6.6	24.3	0.0	24.3	1.1	1.9	3.6	1.3	0.2	0.3	1,073
0-9@ years	55.9	54.7	11.6	42.8	0.1	42.7	4.5	5.4	1.8	1.2	0.2	0.4	4,775
10 years & above	61.7	60.7	21.6	38.9	0.1	38.8	8.5	9.9	3.2	1.0	0.1	0.2	1,684
Religion	21.0	20.4	5 1	24.2	0.0	04.2	25	0.0	0.7	25	15	0.0	117
Hindu	31.9	29.4 19.6	5.1 24.4	24.3	0.0	24.3	3.5	0.9	0.7	2.5	1.5	0.0	54
Muslim	49.0 57.0	49.0 55.8	24.4 13.0	25.2 41.6	0.0	20.2 41.5	3.9 5.6	63	2.1	0.0	0.0	0.0	6 561
Christian Buddhist	30.7	30.1	6.6	23.4	0.0	23.4	0.1	2.9	3.6	0.6	0.0	0.0	789
Caste/tribe#													
Scheduled caste	41.8	38.4	8.4	28.3	0.0	28.3	1.6	4.5	2.2	3.4	0.8	2.2	192
Scheduled tribe	54.3	53.2	13.3	39.8	0.1	39.7	5.0	5.9	2.4	1.1	0.1	0.4	7,265
Other backward class	34.3	25.9	7.1	18.7	0.0	18.7	5.8	1.3	0.0	8.5	0.0	0.0	60
Standard of living index													
Low	42.4	41.4	10.4	30.9	0.1	30.8	3.2	5.2	2.0	1.0	0.1	0.4	3.058
Medium	57.8	56.5	14.0	42.2	0.1	42.1	4.8	6.3	2.8	1.4	0.2	0.5	2,758
High	67.7	66.5	16.8	49.6	0.2	49.5	8.1	6.4	2.3	1.2	0.2	0.2	1,726
Availability of health facility in the village ⁴													
No	39.6	38.5	9.9	28.6	0.0	28.5	4.6	3.2	2.1	1.1	0.1	0.3	1,583
Yes	52.3	51.2	12.0	38.9	0.1	38.8	3.7	6.2	2.1	1.1	0.1	0.5	3,263
Total	53.8	52.6	13.2	39.3	0.1	39.2	4.9	5.9	2.3	1.2	0.2	0.4	7,541

Note: Total includes 20 cases of other religion and 14 cases with other case/tribe for contraceptive prevalence rate were not shown separately. ¹ Include Female sterilization, Male sterilization, IUD, Pills and Condom. ² Include IUD, Pills and Condom. ³ Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method. @ Literate women with no years of schooling are also included. #Total figure may not add to N due to don't know and missing cases. ⁴ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

The use of traditional methods is reported by 1 percent of the women of which 0.4 percent are using withdrawal and 0.2 percent follow the rhythm or periodic abstinence practice. The rural-urban differential is almost nil in the case of traditional methods.



Current use of contraception is high among women of scheduled tribes (54 percent) than among scheduled castes (42 percent) and other backward class women (34 percent). The current use is also high among the women who have 10 or more years of schooling (62 percent) than the women who have less than 10 years of schooling (56 percent) and also among non-literate women (32 percent). Similarly, current contraceptive use varies positively with respect to the standard of living of the women, increasing the prevalence rate from 42 percent to 68 percent for women from the lowest to the highest standard of living households. The availability of the health facility in the village is an important factor in motivating eligible women to use contraceptives. Fifty-two percent of the women living in villages with a health facility are currently under contraception and this is higher than the women from villages deprived of a health facility (40 percent)..

6.2.1 Current Use of Family Planning Methods by Districts

Table 6.6 presents a picture of current contraceptive use in the districts of Mizoram. The contraceptive use is a couple concepts as family planning methods can be used either by women or by their husbands. In most of the districts, the current use of contraception exceeds 45 percent of eligible women except for the district of Lawngtlai (see Map-6). The state figure of current spacing methods use is 13 percent and it ranges from 2 percent in Lawngtlai district to 19 percent in Aizawl. The variation in contraceptive prevalence at district level is basically due to the

variation in the use of spacing methods while both modern and traditional contraceptive uses do not show much variation across districts.

Districts	Any method	Any modern ¹ method	Any modern spacing ² method	Male steriliz- ation	Female steriliz- ation	IUD	Pill	Condom / Nirodh	Any traditio- nal ³ methoo
Aizawl	67.2	66 7	18 7	0.1	47 8	76	85	26	0.6
Champhai	48.9	48.3	15.1	0.1	33.0	9.2	5.5	0.4	0.6
Kolasib	70.1	70.0	13.3	0.2	56.6	5.5	6.9	0.9	0.0
Lawngtlai	35.9	35.6	2.0	0.1	33.5	0.9	0.6	0.4	0.3
Lunglei	42.1	38.6	11.5	0.1	26.5	1.7	3.7	6.1	3.5
Mamit	50.7	50.6	14.6	0.0	36.0	3.7	9.4	1.4	0.2
Saiha	47.9	43.7	3.4	0.2	39.4	0.0	1.6	1.8	4.3
Serchhip	55.8	55.5	14.6	0.2	40.7	5.0	8.0	1.6	0.3
Mizoram	53.8	52.6	13.2	0.1	39.2	4.9	5.9	2.3	1.2

³ Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method

The pattern of use of contraceptive methods in Mizoram is different from the general existing pattern in India. The contraceptive prevalence rate of 1 percent for traditional methods in the state is much lower than that in other states in the country. The use of oral Pills exceeds 9 percent in the districts of Aizawl and Mamit. The district in which the use of condom is more than 5 percent is Lunglei.

6.2.2 Current Use and Ever Use of Family Planning Methods by Women

Table 6.7 provides information on current contraceptive use and ever used of contraception by age and number of surviving children, living sons and daughters. The current use of any method of contraception among currently married women in the 15-19 years age group is 11 percent and this attains a peak of 74 percent in the age group, 40-44 years. A similar age pattern of contraceptive use is also observed both in case of modern and traditional methods. The use of traditional method is 2 percent for the women aged 35-39 years and one percent for the women aged 40-44 years and it is nil for the women in younger age groups 15-19 years. The use of modern methods ranges from 11 percent for women in the age group 15-19 years to 73 percent for women in the age group 40-44 years.

Table 6.7 USE OF CONTRACEPTION BY WOMEN

Percentage of currently married women in 15-44 years by current use and ever use of contraception according to selected demographic characteristics, Mizoram, 2002-04

	Por	centage of wom	en/husbands i	Ising	Perce women/h	Percentage of women/husbands by contraceptive status			
Demographic Characteristic	Any modern method ¹	Any traditional method ²	Any method	Not using any method	Ever used	Never used	Number of women		
Age-group									
15-19 20-24 25-29 30-34 35-39 40-44	10.5 24.0 40.7 58.7 67.5 73.3	0.0 0.8 1.3 0.9 1.8 1.2	10.5 24.8 42.0 59.6 69.4 74.4	89.5 75.2 58.0 40.4 30.6 25.6	12.4 31.3 48.4 63.6 73.3 75.8	87.3 68.5 51.3 36.3 26.5 24.1	219 1,135 1,724 1,493 1,405 1,565		
Surviving children									
0 1 2 3 or more	13.0 30.5 49.0 66.6	0.0 0.8 0.9 1.5	13.0 31.3 49.9 68.1	87.0 68.7 50.1 31.9	14.3 37.2 56.2 71.6	84.7 62.5 43.8 28.3	598 1,232 1,619 4,093		
Surviving sons									
0 1 2 or more	30.4 51.3 65.8	0.7 1.0 1.5	31.2 52.3 67.3	68.8 47.6 32.7	36.4 57.5 70.4	63.0 42.5 29.5	1,717 2,656 3,169		
Surviving daughters 0 1 2 or more	34.1 57.3 61.8	0.8 1.1 1.6	34.9 58.4 63.3	65.1 41.6 36.6	39.0 62.8 67.6	60.6 37.1 32.3	2,042 2,770 2,730		
All women	52.6	1.2	53.8	46.2	58.1	41.7	7,541		
Note: ¹ Include Female st	erilization, Ma	le sterilization,	IUD, Pills and	Condom. Inc	lude Rhythm/Perio	odic abstinence,	Withdrawal and		

It is crucial to understand the association between the number of living children and contraceptive use. The contraceptive use is high among the women who have three or more surviving children invariably of methods in Mizoram. The use of any method of contraception is 67 percent for the women who have two or more sons and is marginally higher than the women who have two or more daughters (63 percent). The same trend can be observed in the case of use of any modern method which is 66 percent for the women who have two or more surviving sons and it is higher than the women who have two or more daughters (62 percent).

6.2.3 Current Use and Ever Use of Family Planning Methods as Reported by Husbands

Information pertaining to current use of family planning methods among the husbands of currently married women in Mizoram by age and number of surviving children, sons and daughters are given in Table 6.8. The current use of any method of contraception among the husbands (aged below 25 years) of currently married women is 24 percent and it gradually picks up with the age of husband, to a peak of 73 percent in the age group above 45 years. Similar age

patterns of contraceptive use are observed both in the case of modern methods. Among the husbands in the age group, 45 years and above the use of traditional methods is one percent and it is least less than one percent among the husbands in the younger age group of below 25 years. The use of modern methods ranges from 23 percent for husbands below 25 years of age to 60 percent for the husbands in the age group 35-44 years.

	Pe	rcentage of husb	ands/women usi	ng	
Demographic	Any modern	Any traditionalm		Not using	Number of
Characteristics	method ¹	ethod ²	Any method	any method	men
Ago-group					
Age-group	23.4	0.8	24.2	75.8	403
<25	37.2	0.6	37.9	62.1	2,133
25-34	60.3	1.6	62.0	38.0	2,341
35-44	72.0	1.2	73.3	26.7	1,189
45+					
Surviving children					
0	6.5	0.3	6.8	93.2	442
1	27.5	2.8	30.4	69.6	957
2	47.8	0.4	48.2	51.8	1,362
3 or more	67.0	1.0	68.1	31.9	3,304
Surviving sons					
0	27.8	13	20.2	70.8	1 330
1	51.0	1.0	52.4	47.6	2 185
2 or more	65.4	1.1	66.5	33.5	2,542
Surviving daughters					
	31.0	1.2	32.2	67.8	1.579
0	56.6	1.3	57.9	42.1	2,175
	62.1	0.9	63.1	36.9	2,312
2 of more	0211	0.0		0010	2,012
All men	52.0	1.1	53.2	46.8	6.065

6.3 Reasons for Not Using Male Methods

The DLHS-RCH asked husbands of currently married women about the contraceptive methods that he or his wife was using currently. The husbands who were not using male methods were further asked the reasons for it. Table 6.9 provides information about reasons for not using male contraceptive methods in Mizoram. Among all the husbands interviewed, 92 percent reported about female methods. Reporting of female methods is same in rural areas as well as in urban areas (92 percent each). The reasons cited for not preferring the male methods are fear of weakness (7 percent), greater popularity of female methods (88 percent), lack of sexual pleasure (1 percent), fear of method failure (1 percent) and fear of operation (1 percent). Only two percent reported fear of impotency as one of the reasons for not using male methods. However, there is

not much rural-urban differential in the reasons for not using male methods, except in the case of fear of impotency and fear of weakness. The expression for fear of weakness is higher in rural areas (8 percent) than in urban areas (7 percent) and the expression of fear of impotency was reported by 3 percent in rural areas while the same was reported by only one percent in urban areas. Popularity of female methods as a reason for not using male methods of contraception is more in urban areas (90 percent) than in rural areas (86 percent).

Percentage of husbands with their choice of fami according to residence, Mizoram, 2002-04	ly planning methods a	and reasons for not acc	epting male methods
Female method users and reason for not		Resi	dence
accepting male methods	Total	Rural	Urban
Percentage of husband who have reported female methods	91.8	91.5	92.3
Number of men	3,226	1,930	1,296
Reasons for not accepting male methods* Fear of impotency Lack of sexual pleasure Fear of method failure Fear of operation Fear of weakness Female methods are more popular	2.2 1.2 1.4 1.2 7.3 87.5	3.0 1.2 1.7 1.4 7.9 86.0	1.0 1.1 0.9 0.8 6.5 89.7
Other	2.4	2.3	2.5
Number of men	2,963	1,767	1,197

6.4 Source of Contraceptive Methods

To asses the various sources of contraceptive methods, DLHS-RCH collected information on source of obtaining methods. Table 6.10 and Figure 6.3 show the percent distribution of current users of modern contraceptives by source of contraceptives. Family planning methods and services in Mizoram are provided primarily through a network of government hospitals. The services are also provided by private hospitals and clinics, as well as non-governmental organisations (NGOs). Modern spacing methods like IUD, Pill and condom are available through both the government and private sectors. Government/municipal hospitals are the main source for female sterilization (70 percent) followed by community health centres or primary health centres (19 percent), sub-centres (4 percent) and private hospital (4 percent). Among the IUD users, 28 percent reported the source as government/municipal hospital and 15 percent from the community health centres and 28 percent each from sub-centre and 5 percent from the community health centres are the main source for Pills (56 percent) and condom (40 percent).

		Contrac	eptive meth	od		_	
Source	Female sterilization	Male sterilization	IUD/ Loop	Pills	Condom / Nirodh	All modern methods ¹	
Government medical centre	94.2	*	75.4	76.4	54.7	88.7	
Government/Municipal hospital	70.3	*	28.1	13.5	8.4	57.2	
CHC/PHC	19.0	*	15.1	2.5	4.5	16.1	
Sub-centre	3.6	*	28.4	55.7	39.5	13.4	
Government doctor	0.1	*	2.2	0.4	1.2	0.4	
Government nurse/ ANM	0.0	*	1.0	0.0	0.0	0.1	
Family planning/RCH camp	0.4	*	0.6	0.6	0.0	0.4	
Out reach/MCP clinic in village	0.3	*	0.0	3.0	0.3	0.6	
Mobile clinic	0.4	*	0.0	0.8	0.8	0.5	
Private medical centre	4.7	*	23.6	2.0	3.8	6.2	
Private hospital	4.4	*	4.9	0.4	1.9	3.9	
Private doctor	0.2	*	18.4	1.6	1.9	2.1	
Private nurse	0.1	*	0.2	0.0	0.0	0.1	
Chemist	NA	NA	NA	19.2	33.0	3.6	
Other	0.6	*	1.0	2.0	5.9	1.1	
Do not know	0.2	*	0.0	0.0	2.2	0.2	
Missing	0.2	*	0.0	0.4	0.3	0.2	
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	
Number of users	2,957	7	372	444	177	3,956	



6.5 **Problems with Current Use of Contraceptive Methods**

Women who were using a modern contraceptive method were asked if they had experienced any problems related with the current methods they are using. Table 6.11 shows the percentage of

current contraceptive users who reported specific health problems, treatment seeking behaviour and their satisfaction about the method. The analysis of the method specific problems reveals that 4 percent of the sterilized women have problem with the contraceptive methods in use. The most common problems experienced by sterilized women are weakness or inability to work (46 percent), white discharge (17 percent), dizziness (36 percent), body ache or backache (64 percent), cramps (32 percent), irregular periods (35 percent), nausea or vomiting (12 percent) and excessive bleeding (11 percent). With regard to the modern spacing methods, 3 percent and 8 percent of women had problems in using Pills and IUD respectively.

		Type of method	
Health problems/side effect	Female sterilizations	IUD/loop	Pill
Women who were informed about all the available methods	60.6	0.0	0.0
Women who were informed about the side effects before adoption of the method	41.3	73.9	42.0
Women who had side effect/health problem due to use of contraceptive method	3.8	7.8	3.0
Number of current users	2,957	372	444
Type of health problems/side effects ¹			
Weakness/inability to work	46.2	(34.6)	*
Body ache/ backache	63.5	(53.8)	*
Cramps	32.1	(23.1)	*
Weight gain	7.5	(3.8)	*
Dizziness	36.4	(26.9)	*
Nausea/vomiting	11.5	(11.5)	*
Breast tenderness	9.5	(0.0)	*
Irregular periods	34.8	(19.2)	*
Excessive bleeding	10.5	(19.2)	*
Spotting	2.9	(3.8)	*
White discharge	16.8	(0.0)	*
Number of users with side effects	112	29	13

Table 6.11 HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION

6.6 Treatment for Health Problems with Current Use of Contraception

The study of respondents who sought treatment for contraceptive related health problems reveals that 47 percent of the sterilized women sought treatment and 46 percent in the case of IUD/Loop. Regarding the satisfaction about the method, 91 percent of the sterilized women reported satisfaction with sterilization. In the case of spacing methods, 92 percent of women using Pills and 93 percent of women using IUD were satisfied with the respective methods.

Those women who had sought treatment for contraceptive use related problems, majority of them have taken treatment from government hospitals/dispensary. For female sterilization related health problems, 55 percent had taken treatment from government hospitals/dispensary, 27 percent from private hospitals/clinics, 7 percent from Indian System of Medicine health facilities and 5 percent got treatment from Chemist shop.

Table 6.12 FOLLOW-UP VISIT AND SOUGHT TR CONTRACEPTION	EATMENT FOR HEAI	LTH PROBLEMS WITH	CURRENT USE OF
Percentage of women who had follow-up visit, sa the method by use of method, Mizoram, 2002-04	tisfied with current me	thod, and sought treat	ment with side effect with
		Type of method	
Health problems/side effect	Female sterilizations	IUD/loop	Pill
Women who had follow up visit by health worker adoption of method	8.5	7.4	4.9
Women who are satisfied with method of current use	90.8	93.0	91.9
Number of current users	2,957	372	444
Women who sought treatment for the health problem	47.0	(46.2)	*
Number of women with side effects	112	29	13
Source of treatments			
Government health facility Government hospital/dispensary UHC/UHP/UFWC CHC/Rural hospital PHC Sub-centre	54.6 3.0 4.1 10.0 7.1	* * * *	* * * *
Private health facility Private hospital/clinic	27.3	*	*
ISM health facility ¹ Chemist/Medical shop Home remedy Other	7.1 4.8 1.2 7.5	* * *	* * *
Number of women with side effects	52	11	3
Note: ¹ Either government or Private. * Percenta unweighted cases	ge not shown: Based	d on very few cases.	() Based on less than 50

6.7 Advice to Non-Users and their Future Intention to Use Contraception

Information about non-users who were advised by the ANM/health worker to adopt contraceptives and their future intention to use by preferred method according to their background characteristics are presented in Table 6.13. In DLHS-RCH currently married women who were not using any method of contraception, were asked about advice given by ANM/health worker for adoption of any contraceptive method. It is evident that 9 percent of the women were advised by ANM/health worker to adopt any family planning method in Mizoram. Among rural women, 9 percent were advised by ANM/health worker to adopt any method and it is higher than the urban women (8 percent) who were advised so.

Table 6.13 ADVICE ON CONTRACEPTIVE USE									
Percentage of current non-users* who we	ere advised by	the ANM/health	worker to use	contraception by su	iggested method				
according to place of residence and avail	ability of healt	h facility in the v	illage, Mizoram	2002-04					
		Resi	dence	Availability of	health facility				
				in the	village				
Advise/future intension to use	Total	Rural	Urban	No	Yes				
Percentage of current non-users									
advised by ANM/health worker to use									
of contraceptive method	9.1	9.4	8.4	7.3	10.7				
Number of non-users	3,337	2,412	925	913	1,499				
Percent distribution of women who									
were advised by method									
Female sterilization	45.8	46.6	43.3	33.9	51.9				
Male sterilization	11.1	12.7	6.3	21.4	9.0				
IUD/loop	18.9	15.2	29.9	24.0	11.5				
Pill	20.0	20.4	18.9	16.3	22.1				
Condom/Nirodh	1.1	1.1	0.9	0.0	1.6				
Rhythmic /periodic abstinence	0.7	1.0	0.0	0.0	1.4				
Withdrawal	2.1	2.8	0.0	3.7	2.5				
Other	0.3	0.2	0.6	0.7	0.0				
Total percent	100.0	100.0	100.0	100.0	100.0				
Number of non-users	305	227	78	67	161				
Note:* Exclude women in menopause or	those who ha	ave undergone	hysterectomy. 1	Includes sub-cent	re, primary health				

centre, community health centre or referral hospital, government hospital, and government dispensary within the village. () Based on less than 50 unweighted cases.

The recommended contraceptive methods by ANM/health worker is dominated by female sterilization (46 percent) and Pill and IUD/Loop (19 percent each). Only 1 percent were advised either to adopt Condom/Nirodh as spacing methods. Male sterilization has been advised to 11 percent. This pattern of advice also emerges irrespective of residence and availability of health facility in the village.

6.7.1 Future Intentions

Among the non-users, 23 percent of women have expressed their intention to use any method of contraception in the future. The intention to use any method of contraception is higher in urban areas (28 percent) than in rural areas (21 percent).

Among the women who intended to use permanent methods of contraception, 65 percent preferred female sterilization whereas only three percent of the women preferred male sterilization. In case of temporary methods, the preferred methods by women are oral Pills (12 percent), rhythm/periodic abstinence (less than one percent), condoms (1 percent), withdrawal (1 percent), IUD (15 percent) and other methods (3 percent) respectively.

Thirty percent of the husbands intended to use contraception in the future, among them 28 percent belong to rural areas and 35 from urban areas. Method wise choice in intention to use contraception is dominated female sterilization being reported by 65 percent, followed by IUD/Loop (11 percent), Pills (6 percent), rhythm/periodic abstinence (3 percent), condom (9 percent) and withdrawal (1 percent)

Table 6.14 FUTURE INTENTION TO I Percentage of current non-users* who residence, Mizoram, 2002-04	USE were intende	ed to use cont	raception in futu	re by preferred n	nethod accord	ling to place of
· · · · · · · · · · · · · · · · · · ·		Women			Husband	
Future intention to use/method	Total	Rural	Urban	Total	Rural	Urban
Percentage of respondents who intend to use contraceptive in future	22.9	20.8	28.2	29.6	27.6	34.9
Number of non-users	3,337	2,412	925	2,839	2,080	759
Percent distribution of non-user who were preferred to use family methods by preferred method						
Female sterilization	65.0	67.4	60.3	65.3	69.4	56.4
Male sterilization	2.5	2.8	1.8	3.3	3.2	3.6
IUD/copper-T/loop	14.8	12.0	20.1	10.5	8.5	14.7
Oral pills	11.8	11.6	12.0	6.3	7.0	4.9
Condom/Nirodh	1.3	1.4	1.2	8.9	5.6	16.1
Rhythm/periodic abstinence	0.2	0.2	0.1	2.9	3.3	2.0
Withdrawal	1.0	1.4	0.3	1.0	0.7	1.5
Other	3.2	2.9	3.8	1.7	2.4	0.3
Missing	0.3	0.2	0.4	0.1	0.0	0.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of non-users	763	503	260	836	574	262
Note: * Exclude women who are in me	nopause or th	nose who have	- undergone hvs	sterectomy		

6.7.2 Future Intention to Use Among Women by Number of Living Children

Currently married women who were not using any contraceptive method at the time of survey were asked about their intentions to use a method in the future. Those women who intended to use contraceptives in the future were further asked about preferred methods. This type of information aids the managers and programmers to identify the potential groups of future users and to provide the type of contraceptives that are likely to be in demand. Table 6.15 provides the information on intention to use contraception in future according to number of living children and residence background in Mizoram. Among the current non-users, around 7 percent of the women intended to use contraception within the next twelve months. Only 3 percent of women

wanted to use within one to two years whereas 13 percent reported their intention to use contraceptives after two years. About 54 percent are not sure of their intention to use, where as 24 percent reported no intention to use. The intention of using contraception is high among the women who have two or more living children compared to the women who have either one or no living children. Around 66 percent of the women who have no living children reported that they are yet to decide about the use of contraceptives.

Table 6.15 FUTURE USE OF CONT	RACEPTION I	BY NUMBER O	F LIVING CHI	LDREN		
Percent distribution of currently marr	ied women* wh	o were not curr	rently using any	y contraceptive	method by inte	ntion to use in the
future, according to number of living	children and re	SIGENCE, MIZOR	am, 2002-04 abor of living d	hildron		
Intention to use in the future	0	1		3	<i>1</i> ±	- Total
	0	I	Total	5	71	
			Total			
Intends to use in next 12 months	1.9	5.5	8.1	8.8	12.1	7.4
One to two years	2.9	2.0	2.8	3.3	4.3	3.0
More than two years	9.5	16.7	14.2	11.3	8.3	12.5
Does not intend to use	18.3	21.5	21.7	22.6	34.8	23.6
Not yet decided	67.4	54.3	53.2	53.8	40.5	53.5
Missing	0.0	0.0	0.0	0.1	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	505	824	778	644	586	3,337
			Rural			
Intends to use in next 12 months	0.8	3.7	6.1	7.4	10.5	5.9
One to two years	3.0	1.9	3.2	3.0	4.9	3.2
More than two years	8.6	16.1	13.0	10.1	9.1	11.7
Does not intend to use	15.6	19.3	17.9	18.4	31.3	20.7
Not yet decided	72.0	59.1	59.7	61.0	44.2	58.4
Missing	0.0	0.0	0.0	0.2	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	343	557	539	483	489	2,412
			Urban			
Intends to use in next 12 months	4.2	9.3	12.5	13.1	20.4	11.1
One to two years	2.6	2.1	1.9	4.3	1.0	2.4
More than two years	11.5	18.1	16.9	15.0	4.4	14.7
Does not intend to use	24.0	26.1	30.4	35.1	52.6	31.2
Not yet decided	57.7	44.3	38.2	32.4	21.6	40.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	162	267	239	161	97	925

6.8 **Reasons for Discontinuation and Non-Use of Contraception**

Currently married non-pregnant women who were not using any contraceptive method at the time of survey were categorised as past users and never users according to their contraceptive experience. In DLHS-RCH, women who had discontinued contraceptive use were asked about the main reason for discontinuation. The survey also asked women who had never used contraceptives about the main reason for not doing so. Table 6.16 shows the main reason for not using contraceptives among both the past never users and current non users. Among the past users, around 50 percent of the women mentioned that they discontinued the use because they had wanted child, method failed/became pregnant (9 percent), weakness/inability to work (7 percent), irregular periods (6 percent), and method was inconvenient (2 percent), and dizziness (4 percent) and other reasons (4 percent). For urban women 1 percent have reported method failure/become pregnant due to discontinuation whereas the same was reported as a reason for discontinuation by 14 percent rural women.

contraceptive method according to place of residence, Mizoram, 2002-04						
	Tatal	Place of residence				
Reasons	Totai	Rural	Urban			
Reason for discontinuation						
Wanted child	50.1	38.9	64.9			
Method failed/became pregnant	8.6	14.1	1.4			
Supply not available	2.4	3.7	0.6			
Difficult to get method	4.1	3.1	5.4			
Weakness/inability to work	6.6	8.4	4.3			
Body ache/ Backache	4.1	5.3	2.6			
Moight gain	0.3	0.5	0.0			
Dizzinoss	3.6	3.9	3.2			
Neuroselvemiting	1.8	2.8	0.4			
Report tondernoop	1.4	0.3	2.7			
breast tenuemess	6.3	6.6	6.1			
Evenesive blooding	0.9	0.6	1.3			
	2.5	4.0	0.4			
	0.5	0.0	1.3			
Lack of pleasure	1.8	29	0.3			
Method was inconvenient	4 1	43	3.8			
Other	0.9	4.0 0.6	13			
Missing	0.5	0.0	1.5			
Total percent	100.0	100.0	100.0			
Number of past users	324	184	139			

6.8.1 Reasons for Not Using Contraceptive Methods

DLHS asked women and husbands who are currently not using any contraception and main reasons why they were not currently using a method. The reported main reasons for not using contraceptives are, difficult to become pregnant (6 percent), health does not permit (10 percent), lack of knowledge about family planning methods (26 percent), hard/inconvenient to get method (18 percent), opposed to family planning (11 percent), against the religion (2 percent) and afraid of sterilization (2 percent). About 13 percent of the women reported other reasons for not using contraception. As far as rural-urban differentials are concerned, a little variation is observed in the reasons for not using any contraceptive.

Table 6.17 REASON FOR NOT USING CONTRACEPTIVE METHOD

Percentage of current non-users who were currently not using contraceptive method by reason according to place of residence, Mizoram, 2002-04

		Husband*				
Reason	Total	Rural	Urban	Total	Rural	Urban
Lack of Knowledge about EP method	25.6	31.8	10 1	17.6	21.8	78
Against the Religion	2.3	2.2	2.5	3.2	2.2	5.6
Opposed to family planning	11.4	10.3	14.1	19.0	18.3	20.5
Not like existing method	1.0	0.7	1.8	1.3	0.3	3.7
Afraid of sterilization	2.0	1.8	2.4	2.3	0.5	6.6
Can not work after sterilization	0.3	0.1	0.8	3.0	1.8	5.5
Worry about side effects	4.6	5.8	1.7	4.5	4.3	4.8
Costs too much	0.7	0.5	1.1	3.7	4.6	1.7
Health does not permit	10.3	9.0	13.7	8.4	7.4	10.7
Hard/inconvenient to get method	18.1	16.1	23.0	19.8	21.6	15.5
Inconvenient to use method	4.1	4.5	3.2	2.7	1.7	5.2
Difficult to become pregnant	5.9	4.8	8.6	4.8	6.0	2.0
Wife is pregnant ¹	-	-	-	0.5	0.3	0.8
Other	12.5	12.3	13.3	8.9	8.8	9.4
Missing	1.1	0.1	3.7	0.3	0.3	0.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of current non-users	1,887	1,347	540	801	561	240

Note: ¹ Not applicable for women. * Excluding not decided cases on timing of next child.

6.9 Unmet Need for Family Planning Services

Unmet need for family planning is one of the indicators to assess the effectiveness of the family planning programme. Policy makers and family planning programme planners use this to know the demand for family planning services/supplies. Unmet need is defined in this report separately for limiting and spacing. Unmet need for spacing includes the proportion of currently married women who are neither in menopause nor had hysterectomy nor are currently pregnant and who want more children after two years or later and are currently not using any family planning method. The women who are not sure about whether and when to have next child, are also included in unmet need for spacing. The women who are not sure about the timing of the next child are also included in the unmet need for spacing. Unmet need for limiting includes the proportion of currently married women who are neither in menopause nor had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method. Total unmet need refers to the totality of unmet for limiting and spacing. Table 6.18 provides the information about unmet need for limiting and spacing in Mizoram by background characteristics.

The unmet need is high for women below 20 years, mainly for spacing rather than for limiting. Unmet need is also relatively high for women aged 20-24 years (38 percent) for both spacing and limiting. Among the older women of age 25-29 years, 29 percent have unmet need, and mostly for spacing. Among the women age 30 years and above, unmet need is mostly for limiting. The rural women have high unmet need (28 percent) than the urban women (20 percent). The unmet need for family planning is higher (36 percent) among the non-literate women than among the women with 0-9 years of schooling (25 percent) and 10 or more years of schooling (18 percent) women. Christian women have lesser unmet need for family planning (23 percent) compared to the Buddhist women (38 percent), Muslim women (31 percent) or Hindu
women (36 percent). Unmet need for family planning is higher (53 percent) for other backward class followed by Scheduled caste (38 percent) and Scheduled tribe (24 percent) women.

Table 6.18 UNMET NEED FOR FAMILY PLANNING SERVICES				
Percentage of currently married women with unmet need for family planning services by selected background characteristics, Mizoram, 2002-04				
	U	Inmet need for FP		Number of
Background Characteristic	Spacing ¹	Limiting ²	Total	women
Age				
15-19	29.8	4.2	34.0	219
20-24	31.8	5.8	37.6	1,135
25-29	19.5	9.1	28.5	1,724
30-34	14.3	10.2	24.5	1,493
35-39	10.0	10.7	20.7	1,405
40-44	6.1	8.7	14.9	1,565
Residence				
Rural	18.4	9.4	27.8	4.846
Urban	12.0	8.0	20.0	2,695
Education				
Illiterate	18.8	17.0	35.8	1.073
0-9 @ vears	16.5	8.4	24.9	4,775
10 years and above	13.2	5.1	18.3	1,684
		0.1	1010	.,
Religion				
Hindu	12.9	23.0	35.9	117
Muslim	15.0	16.0	31.0	54
Christian	15.7	7.5	23.2	6,561
Buddhist	20.0	17.7	37.8	789
Caste/tribe#				
Scheduled caste	12.4	26.0	38.3	192
Scheduled tribe	16.0	8.3	24.3	7.265
Other backward class	38.7	14.3	53.0	60
Number of living children				
0	8.0	4.2	12.1	598
1	29.9	5.4	35.3	1.232
2	21.1	8.3	29.4	1,619
3	13.3	8.4	21.7	1,993
4+	9.1	13.3	22.3	2,100
Standard of living Index				
Low	20.1	11.9	32.0	3.058
Medium	15.6	7.2	22.8	2 758
High	9.8	6.2	16.0	1,726
Allwomen	16.1	8 0	25.0	7 5/1
All women	10.1	0.9	23.0	7,541
Note: Total includes 20 cases of other religion and 14 cases with other caste/tribe for unmet need for family planning were not shown separately. ¹ Unmet need for spacing includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and who want more children after two years or later and are currently not using any family planning method. The women who are not sure about whether and when to have next child are also included in unmet need for spacing. ² Unmet need for limiting includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method. Total upmet need refers to upmet for limiting and spacing. ^(M) Literate				

using any family planning method. Total unmet need refers to unmet for limiting and spacing. @ Literate women with no years of schooling are also included. # The total figure may not add to N due to do not know and missing cases.

Women in low standard of living have high (32 percent) unmet need than the women of medium (23 percent) and high standard of living (16 percent). Unmet need is much higher for the women with one living child (35 percent) than women with either no children (12 percent) or two or more children (29 percent). Among the women with no children or one child the unmet need is

mainly for spacing, where as for women with four children or more unmet need is exclusively for limiting.

6.9.1 Unmet Need for Family Planning Services by Districts

Table 6.19 provides the information about unmet need for limiting, spacing and total by district. The unmet need for family planning services for state is 25 percent and it ranges from 11 percent in Kolasib to 36 percent in Lunglei. In 4, out of 8 districts unmet need for family planning is more than state average. Unmet need for limiting was found lowest in Kolasib (3 percent) followed by Serchhip (5 percent) and Mamit (7 percent), and highest in Lunglei (20 percent). Similarly, unmet need for spacing was lowest to eight percent in Kolasib to 23 percent in Champhai. It may also observe that except Lunglei district, in all the districts of Mizoram unmet need for spacing was more than limiting.

Table 6.19 UNMET NE Percentage of currently	ED BY DISTRICT married women with unm	et need by district, N	<i>l</i> izoram, 2002-04
		Unmet need for	
Districts	Spacing	Limiting	Total
Aizawl Champhai Kolasib Lawngtlai	12.5 22.9 8.3 19.4	6.3 6.0 2.7 9.5	18.8 28.9 11.0 29.0
Lunglei Mamit Saiha Serchhip	15.6 16.1 18.8 18.4	20.3 7.4 8.7 4.8	36.0 23.5 27.5 23.2
Mizoram	16.1	8.9	25.0

MAP-6





CHAPTER VII

ACCESSIBILITY AND PERCEPTION ABOUT GOVERNMENT HEALTH FACILITIES

The government health facilities at all the levels provide various RCH services. Auxiliary Nurse Midwife (ANM), family planning worker or male health worker plays a key role in delivering the services to the community. Health workers are expected to make regular visits to all the households in their assigned area. During these contacts, the health workers are supposed to monitor various aspects of the health of women and children, provide information related to health and family planning, counsel and motivate to adopt appropriate health and family planning practices, and deliver other selected services. These contacts are also important as they enhance the creditability of services and establish necessary rapport with the clients. In order to assess the extent of utilisation of government health facilities by all eligible women and to find out whether ANM/health workers reach the households for providing RCH services, a separate section in the women's questionnaire was canvassed to all the eligible women. This chapter deals with the accessibility and the opinion of women about the services provided by the government health workers. The quality of care offered by the government health programme as perceived by currently married women is also presented.

7.1 Home Visit by Health Workers

Table 7.1 shows the percentage of currently married women visited by health workers at home during the three months prior to the survey. Around 5 percent of the women in Mizoram reported that the health worker visited them at their residence at least once in last three months preceding the survey. Younger women seemed more likely to report a home visit than older women. Seven percent of women in the age group 15-24 years reported at least one home visit compared to only 4 percent of women in the age group 35 years and older. The percentage of women in Mizoram receiving home visits is higher in rural areas (7 percent) than in urban areas (3 percent). Women who were literate (6 percent) and women with a low standard of living (6 percent) seemed more likely to report home visits. More Christian women (6 percent) reported home visits than Muslim women (3 percent) and Hindu women (2 percent). There was not much variation by caste/tribe. Home visits were less common for women residing in the villages with a health facility.

Women who reported a home visit during the three months preceding the survey were asked who visited their household during the past three months and whether they were satisfied with the kind of services/advice received, and the time spent by these health workers. Among women who received services at home, 38 percent received services from ANM/LHV, 65 percent from male health worker and eight percent from a doctor. There were less rural-urban differentials by visit of households by health worker. Ninety-three percent of women who received services at home were satisfied with the time spent with them and 96 percent of women were satisfied with the services or advice given to them.

Table 7.1 HOME VISIT BY HEALTH WORKER

Percentage of women who had home visit by a doctor, ANM/LHV, or male health worker in the 3 months preceding the survey, among women who had home visit, satisfied with time spent by health workers and with services provided by selected background characteristics, Mizoram, 2002-04

			Home visit by ¹		Perce women sa	ntage of atisfied with		
De desse de la secto de la	Percentage with home	Number of women	Doctor	ANM /	Male health worker	Amount	Services/	Number of women
Background characteristic	VISIC	women	Dootor	LIIV	Worker	ortime	advices	wonnen
Age								
15.24	6.7	1,354	0.4	41.4	69.6	95.3	98.3	91
25-34	5.5	3,218	12.7	32.1	65.6	93.9	97.1	176
35-44	4.1	2,970	7.7	43.1	60.1	90.2	91.7	121
Residence								
Rural	6.5	4.846	6.0	36.8	65.8	91.9	94.9	314
Urban	2.8	2,695	17.9	41.6	60.9	98.1	99.2	74
	0.0	4 070	*	*	*	*	*	40
Non-literate	0.9	1,073	<u> </u>	24.0	67.6	02.2	05.2	10
0-9 years@	0.3	4,775	0.0	34.9 46.9	07.0 56.1	92.2	95.3	300
	4.0	1,004	15.7	40.0	50.1	90.7	57.4	10
Religion								
Hindu	2.4	117	*	*	*	*	*	3
Muslim	3.3	54	*	*	*	*	*	2
Christian	5.8	6,561	7.7	37.4	64.4	93.0	95.6	382
Buddhist	0.1	789	*	*	*	*	*	1
Caste/tribe#								
Scheduled caste	5.6	192	*	*	*	*	*	11
Scheduled tribe	5.1	7,265	7.7	36.9	65.2	92.9	95.5	374
Other backward class	4.1	60	*	*	*	*	*	2
Standard of living index								
	59	3 058	56	37 5	63.7	90.9	94 3	181
Medium	5.6	2,758	5.0	37.2	70.2	94.5	96.1	153
High	3.1	1,726	26.8	39.8	53.2	96.8	99.3	53
Availability of health								
$facility^2$ in the village								
racinty in the vinage								
No	7 1	3 190	22	34.8	71.3	92.8	96.3	228
Yes	5.2	1.656	16.3	41.9	51.1	89.5	91.0	85
		.,					• · · •	
Total	5.1	7,541	8.3	37.7	64.8	93.1	95.7	388

Note: Total includes 9 cases with missing information on education were not shown separately. Total includes 20 cases on other religious women and 14 women on other caste category women, who were not shown separately. ¹ Percentage add to more than 100.0 due to multiple responses. [@] Literate women with no years of schooling are also included. # Total number may not add to N due to do not know and missing cases. ² Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village. *Percentage not shown: based on vary few cases.

The proportion of women who were satisfied with the amount of time spent, and advices provided by health workers varied across various background characteristics. As compared to older women younger women were more likely to report about satisfaction with amount of time spent by the health workers during home visits. Ninety-five percent of women in the age group, 15-24 years and 94 percent in the age group 25-34 years reported satisfaction with the time spent by health workers as compared to 90 percent of women aged 35 years and older. Ninety-eight percent of women in the age group 15-24 years reported

satisfaction with services as compared to 97 percent of women in the age group 25-34 and 92 percent of women of age 35 years and older. Urban women (98 percent) were more likely than rural women (92 percent) to report that they satisfaction with the time spent by health workers during home visits. Women who were non-literate and women with a low standard of living are less likely to report satisfied with amount of time spends by health workers during home visits. Women residing in the village with availability of health facility are slightly less satisfied with the time spent than women from those villages where health facilities are not available.

7.2 Home Visit by Health Workers by Districts

In half of the districts in Mizoram, health workers visited less than 5 percent of the women at home (Table 7.2 and Figure 7.1). In districts like Lawngtlai and Lunglei less than one percent of the women were visited by health workers. There are only two districts in which number of women who received home visits is more than the state average. In Saiha district, health workers approached 30 percent of women. Among women who were visited by health worker at home, more than 38 percent of them approached by ANM/LHV in almost all the districts. Approached by male worker at home is lowest in Champhai (44 percent)) district and highest in Saiha (75 percent) district, and except Champhai (22 percent) and Aizawl (13 percent) percentage of women visited by doctor at home was below 9 percent in all districts.

In all the districts more than 80 percent of the women said that the worker had spent enough time with them. On the other hand, more than 100 percent women in Aizawland Serchhip, Saiha (97 percent), and Mamit (90 percent) and (87 percent) in Champhai reported satisfaction with services/advices given by health workers.



Table 7.2 HOME VISIT BY HEALTH WORKER BY DISTRICT

Percentage of women who had home visit by a doctor, ANM/LHV, or male health worker in the 3 months preceding the survey, among women who had home visit, satisfied with time spent by health workers and with services provided by district, Mizoram, 2002-04

		Home visit by ¹			Perce women sa	ntage of atisfied with
District	Percentage with home visit	Doctor	ANM / LHV	Male health worker	Time spent	Services
A in a state	0.7	40.0	07.0	50.7	400.0	100.0
Alzawi	3.7	13.3	37.6	59.7	100.0	100.0
Champhai	5.8	21.9	34.0	44.1	80.2	87.1
Kolasib	1.5	*	*	*	*	*
Lawngtlai	0.5	*	*	*	*	*
Lunglei	0.9	*	*	*	*	*
Mamit	4.0	4.4	43.3	49.7	90.2	90.2
Saiha	30.3	2.2	40.6	74.8	95.3	96.8
Serchhip	4.2	9.4	31.9	72.7	96.8	100.0
Mizoram	5.1	8.3	37.7	64.8	93.1	95.7
Note: ¹ Percentage add to more than 100.0 due to multiple responses. * Percentage not shown – based on very few cases.						

7.3 Matters Discussed during Home visits or Visits to Health Facilities

Women who were visited at home by a family planning worker, as well as those who visited government health facility or other health facility during the three months preceding the survey were asked about the different topics discussed with the workers during any of these visits. Table 7.3 shows the percentage of women who discussed the health and family planning or any health related matters to the health workers during home visits or visits to a health facility during the past three months. There are 247 pregnant woman or women with children born during the reference period, and other women includes 109 current users and 32 current non-users, who were visited by health workers at home.

The major focus of discussion during home visits was treatment of health problems (43 percent), childcare (37 percent) and immunization (38 percent). In addition, discussions were also made on disease prevention (10 percent), family planning (28 percent), and antenatal care and delivery care (10 percent each) and nutrition (13 percent). Discussions about family planning were mentioned more often by current users (31 percent) of contraception than by current non- users (11 percent) than pregnant women or women with child born after reference period (28 percent). As expected, pregnant women or women with child born after reference period were much more likely than other women to report that they discussed childcare, immunization, antenatal care, postpartum care, and breastfeeding. A higher proportion of current contraceptive users and current non-users discussed, disease prevention, treatment of health problems, sanitation/cleanliness and other health related matters during home visit by health workers past three months preceding the survey.

Table 7.3 MATTER DISCUSSED DURING CONTACT WITH A HEALTH WORKER

Percentage of women who were visited by health worker in the three months preceding the survey, and percentage of women who visited health facility, and the percentage of women¹ who discussed specific topics with the health worker, Mizoram, 2002-04

	Pregnant women or	Other w	Other women		
	women with	Current			
l opic discussed	children after	contraceptive	Current		
	reference period ²	users	nonusers	Total	
During home visit					
Family planning	28.0	31.2	(10.9)	27.3	
Breastfeeding	20.0	64	(10.5)	60	
Supplementary feeding	1 9	7 1	(2.2)	33	
Immunization	38.2	16.8	(13.0)	30.0	
Nutrition	12.8	14.0	(13.0)	12.6	
Diseases prevention	10.4	14.0	(19.6)	12.0	
Treatment of health problem	43.1	59.1	(65.2)	49.2	
Antenatal care	95	6.8	(4.3)	83	
Delivery care	9.6	10.3	(4.5)	9.7	
Postpartum care	8.4	73	(2.2)	7.5	
Childcare	36.5	26.4	(2.2)	31.2	
Sanitation / cleanliness	12.0	26.4	(0.7)	16.6	
Oral rehydration	4.5	20.5 Q 1	(43)	57	
Other	4.5 2 7	85	(4.3)	4.4	
Other	2.1	0.0	(4.3)	4.4	
Number of women	247	109	32	388	
During visit to health facility					
Family planning	14 7	16.9	46	14.3	
Breastfeeding	3.8	21	0.0	31	
Supplementary feeding	1.1	2.1	0.0	1.3	
Immunization	34.1	4.0	5.5	24.2	
Nutrition	9.5	3.8	2.1	7.4	
Diseases prevention	8.7	5.8	5.2	7.7	
Treatment of health problem	28.5	63.7	69.9	40.9	
Antenatal care	16.5	11.3	3.5	14.0	
Delivery care	8.2	3.7	1.8	6.5	
Postpartum care	2.5	3.0	0.3	2.4	
Childcare	19.8	9.5	7.8	16.2	
Sanitation / cleanliness	5.6	2.8	0.5	4.4	
Oral rehydration	1.7	3.3	0.0	1.9	
Other	2.3	4.6	9.2	3.5	
Number of women	542	197	77	816	
Note: Percentage add to more than 100.0 due to multiple responses. ¹ Women who visited private health facility					

are not included. (): Based on less than 50 unweighted cases. * Percentage not shown- based on few cases. ² Reference period for phase I, January 1st 1999 and for phase II, January 1st .2001

The topic discussed most often during visits to health facility by women was treatment of health problems (41 percent), immunization (24 percent), disease prevention (8 percent), childcare (16 percent) antenatal care (14 percent) and family planning (14 percent). During visit to health facility about 34 percent of the pregnant women or women with children born during reference period discussed on immunization, 17 percent discussed about antenatal care, 20 percent discussed childcare, 29 percent discussed treatment of a health problem, and 9 percent discussed disease prevention. A few pregnant women or women with children born after reference period also discussed about delivery care, postpartum care, breastfeeding, nutrition, oral re-hydration and breastfeeding during visit to health facility. A higher proportion of current users and non-users discussed on treatment of health problems, disease prevention, and other health related problems than pregnant women with children after reference period during visit to health facility in three months prior to survey.

7.4 Visit to Health Facility

Table 7.4 presents the percentage of currently married women who needed to visit health facility and visited the health facility by residence and availability of health facility in the village. Around 62 percent of women needed to visit health facility but did not visit in comparison with 15 percent of women who needed to visit health facility and visited in past three months of the survey. The proportion of such women was higher in urban areas (17 percent) than in rural areas (14 percent). Among them who visited any health facility, 6 percent of women reported that they had visited a private dispensary, (4 percent in rural areas and 9 percent in urban areas).

Table 7.4 VISIT TO HEALTH FACILITY

Percentage of women who need to visit health facility and visited, and percent distribution of women visited health facility by type of health facility and according to place of residence and availability of health facilities in the village, Mizoram, 2002-04

		Residence		Availability Residence facility ¹ in f		ity of health h the village	
Health facility	Total	Rural	Urban	No	Yes		
Percentage of women who needed to visit health facility and not visited	62.1	65.8	55.4	70.5	64.0		
Percentage of women who needed to visit health facility and visited	14.8	13.7	16.7	11.2	14.6		
Number of women	7,541	4,848	2,693	1,352	3,496		
Government health facility Hospital / CHC / FRU /RH Dispensary Primary health center Sub-center	28.2 0.6 11.3 50.5	22.8 0.5 14.2 56.7	36.2 0.9 7.1 41.3	27.2 0.7 11.9 55.6	21.5 0.4 14.8 57.0		
Private health facility Hospital Dispensary	5.9 2.2	3.9 0.9	8.9 4.0	3.3 0.7	4.1 1.0		
Other	0.8	0.5	0.2	0.7	0.4		
Total percent	100.0	100.0	100.0	100.0	100.0		
Number of women	1,113	663	450	151	512		

Note: CHC: Community health center, FRU: First referral unit, RH: Referral Hospital. ¹ Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village. ² Either government or private health facility of Indian System of Medicine.

As many as ninety-one percent of the women visited a government health facility, of which 28 percent visited government health facility such as, hospital/CHC/FRU/RH, 51 percent visited sub-centres, 11 percent visited primary health centre and less than one percent visited to government dispensary. Less than one percent of the women reported that they visited Indian system of medicine hospital/ dispensary either government or private. There are not

much differences in visit to any health facility according to availability of health facility in the village in the past three months of the survey.

7.5 Visit to Health Facility by Districts

Table 7.5 presents the percentage of currently married women who needed to visit health facility and visited the health facility by districts. Ninety-three percent of currently married women in Lawngtlai and 71 percent each in Lunglei and Serchhip, needed to visit a health facility, but they did not visit. Out of 8, in 4 districts i.e. Champhai, Mamit, Saiha and Serchhip more than 15 percent of the women visited health facility for their health problems In Lawngtlai only 4 percent of women visited health facility when needed. Among them who visited health facility, more than 80 percent women visited government health facility in 7 districts (Champhai, Kolasib, Lawngtlai, Lunglei, Serchhip, Mamit and Lunglei). In all districts, the number of women who visited a private health facility in past three months the survey, ranged from nil in Saiha to 34 percent in Aizawl.

Table 7.5 VISIT TO HEALTH FACILITY BY DISTRICT					
Percentage of women who needed to visit health facility, but not visited and percentage of women who visited health facility by type of health facility and by district, Mizoram, 2002-04					
	Percentage of Percentage of women who women who		Percentage of women who visited to		
Districts	need to visit health facility, but not visited	health facility and visited	Government health facility	Private health facility	
Aizawl	66.6	12.5	66.0	34.0	
Champhai	60.2	17.0	94.2	5.8	
Kolasib	59.5	13.6	99.1	0.9	
Lawngtlai	92.9	4.0	84.6	15.4	
Lunglei	71.0	8.3	81.9	17.6	
Mamit	56.7	22.3	91.7	7.5	
Saiha	34.1	20.5	100.0	0.0	
Serchhip	71.3	15.3	97.4	1.4	
Mizoram	62.1	14.8	85.4	14.3	

7.6 Client's Perception of Quality of Government Health Services

Utilization of services is an essential indicator reflecting the quality of services. Better quality of services would have a higher utilization rate, which is very important from the policy point of view. Unless clients are satisfied with the services provided by the government, efforts made by the government will be wasted. In order to assess the utilization of government health facilities, a question was asked whether they had visited any health facility for their health problem during past three months to the survey. Those who visited the government health facility were asked their perceptions about quality of services, (personal manner like courtesy, respect, sensitivity, and friendliness of the physician and staff, technical skills and quality like thoroughness, carefulness, and competence and waiting time for receiving the services) and same is presented in Table 7.6. Women in general perceived that the quality of

services, personal manner as well technical skills and quality of physician, ANM/nurse and other staff was good. Majority of the respondents perceived that personal manner (courtesy, respect, sensitivity, and friendliness) and technical skills (thoroughness, carefulness, and competence) of the physician, nurses and other staff were good, a few respondents mentioned that personnel manner of doctor (1 percent) and nurse (2 percent) was excellent.

Table 7.6 QUALITY OF GOVERNMENT HEALTH FAC					
Percentage of women who visited government health facility and rated quality and availability of services during most recent visit to a government health facility in the three months proceeding the survey, Mizoram , 2002-04					
Quality indicator	Poor	Good	Excellent		
The convenience of the health facility location Length ¹ of time spend towards waiting Personal manner ² of the physician ⁵ The technical skills and quality ³ of the physician ⁵ Personal manner ² of nurse The technical skills and quality ³ of nurse Personal manner of other staff ⁵ The technical skills and quality of other ⁴ staff The explanation of what was done to her Medical, surgical and diagnostic equipment General comfort	19.3 19.5 8.3 4.5 5.0 4.9 5.7 4.8 10.7 39.7 8.4	78.4 71.9 89.6 92.0 93.1 94.2 93.8 94.4 87.5 59.6 90.6	2.3 8.1 2.2 3.5 1.9 0.9 0.6 0.8 1.9 0.7 0.9		
Note: ¹ Poor indicate long waiting time, good indicate average waiting time, and excellent indicate short waiting time. ² Courtesy, respect, sensitivity, friendliness. ³ Thoroughness, carefulness, competence ⁴ Including paramedical staff. ⁵ Includes hospital/community health center/ first referral unit/ referral hospital, dispensary, and primacy health center last visit made by women.					

7.7 Reason for not visiting Government Health Centre

Women who visited the private health centre were asked the main reason for not visiting the government health centre and the results are presented in Table 7.7. Twenty-seven percent of the currently married women reported inconvenient location of the centre as one of the reason for not visiting the government health centre for their health problems, as expected this reason is more reported by rural women (41 percent) than urban women (25 percent). About 14 percent reported that they did not feel necessity to visit the government health centre due to poor quality of service, 12 percent in rural area and 15 percent in urban area. Other reasons for not visiting government health centres were: time is not suited (6 percent), heavy rush (34 percent), referred by a government doctor (10 percent), doctor/ health workers do not examine properly (4 percent), non-availability or rare availability of doctors/ health workers (less than one percent).

Table 7.7 REASON FOR NOT PREFERRING GOVERN	MENT HEALTH	FACILITY			
Percent distribution of women who visited private health facility by reason for not visiting government health facility and according to residence, Mizoram, 2002-04					
	Residence				
Reason	Total	Rural	Urban		
Not conveniently located	26.7	(41.2)	24.5		
Time is not suited	5.9	(11.8)	5.7		
Poor quality of services	13.5	(11.8)	14.5		
Heavy rush	33.9	(20.6)	37.0		
Non/rare-availability of doctors/health workers	0.6	(2.9)	0.2		
Doctors/health workers do not examine properly	3.5	(0.0)	4.7		
Doctors/paramedical staff does not behave properly	0.6	(0.0)	0.9		
Referred by government doctor	10.0	(8.8)	5.8		
Other	5.5	(2.9)	6.7		
Total percent	100.0	100.0	100.0		
Number of women	136	35	101		

7.8 Family Planning Information and Advice Received

Women who are currently not using any contraceptive method were asked whether they were ever advised by ANM or family planning health worker to adopt family planning method and method advised during any of the contact. Nine percent of currently non-users said that they had advices or discussion on method of family planning with ANM or family planning health worker (Table 7.8). The most frequently discussed method was female sterilization (46 percent), pills (20 percent) and IUD (19 percent). Only one percent of women received advices to adopt condom and 11 percent to adopt male sterilization as a contraceptive method. Discussions about traditional method, such as rhythm or withdrawal were rare. There is no much variation by types of residence in terms of family planning information and advice received.

7.9 Availability of Pills and Condom

To explore difficulties faced in the procurement of condoms and pills, current users of these methods were asked that they had been able to get their supply whenever needed. The results are presented in Table 7.9. Only 13 percent of condom users and 17 percent of pills users reported that they had a problem in getting these methods. A little higher proportion of rural women than urban women had problems in getting a supply of condom and pills.

Table 7.8 ADVISE TO ADOPT FAMILY PLANNING METHOD						
Percentage of current non-users who reported ever advised to adopt family planning method by method of family planning by ANM/health worker, according to residence, Mizoram, 2002-04						
Advice/method	Total	Rural	Urban			
Percentage of non-users who were advised to adopt family planning method	9.1	9.4	8.4			
Number of women	3,337	2,412	925			
Method Female sterilization Male sterilization IUD Pills Condom Rhythm/periodic abstinence Withdrawal Other	45.8 11.1 18.9 20.0 1.1 0.7 2.1 0.3	46.6 12.7 15.2 20.4 1.1 1.0 2.8 0.2	43.3 6.3 29.9 18.9 0.9 0.0 0.0 0.0 0.6			
Total percent	100.0	100.0	100.0			
Number of women	305	227	78			

Table 7.9 AVAILABILITY O	Table 7.9 AVAILABILITY OF REGULAR SUPPLY OF CONDOMS/PILLS					
Percentage of current condom or pill users who ever had a problem getting a supply of condoms/pills by residence, Mizoram, 2002-04						
Percentage who had a Method/residence problem getting supply Number of users						
Condom						
Rural	15.5	253				
Urban	8.7	190				
Total	12.6	444				
Pills						
Rural	17.2	102				
Urban	16.5	75				
Total	16.9	177				

7.10 Quality of Care of Family Planning Services

Several aspects of quality of care of family planning services were also investigated. Current user of a sterilization was asked whether the person or centre where sterilization had been performed, informed her about other alternative methods of family planning; and further it was asked whether she was told by a ANM or health worker about possible side effects of the modern method at the time she accepted the method; whether she received any follow-up care after accepting the method. Tables 7.10 and 7.11 present the results of this investigation.

Around 61 percent of sterilized women reported that ANM or health worker informed them about alternative methods that they could use (Table 7.10) before adopting sterilization. Around 60 percent of sterilized women received such information by a ANM or health worker

in the government health facilities compared to around 68 percent of women who were sterilized in private health facilities.

Table 7.10 INFORMATION OF OTHER MODERN METHOD BEFORE STERILIZATIONPercentage of current users of sterilization who were informed about other modern method by the source where they get sterilized, according to the source of sterilization and residence, Mizoram, 2002-04				
Source of sterilization	Total	Rural	Urban	Number of users
Government health facility Private health facility	60.3 68.1	55.9 86.7	66.8 60.4	2,758 140
Total	60.5	56 7	65.9	2 964

Note: Total includes 21, 13,19 and 12 women who said that they sterilized at Family planning or RCH camp/ village session, mobile clinic, and at other source of sterilization respectively were not shown separately.

Table 7.11 INFORMATION ON SIDE	EFFECT AND FOLL	OW-UP FOR CUR	RENT METHOD				
Percentage of current users of modern contraceptive methods who were told about side effects or other problems of current method by a health worker or ANM/Nurse at the time of accepting the method and percentage who received follow-up services after accepting the method by current method and according to place of residence, Mizoram, 2002-04							
Information/follow-up Total Rural Urban							
Told about side effectsSterilization41.240.542.2Other modern method51.652.650.3Any modern method43.843.444.3							
Received follow-up8.510.06.4Sterilization6.810.02.7Other modern method8.110.15.4							

Another important facet of informed contraceptive choice is being fully informed about any side effects and any other problems associated with the method. In Mizoram, only 44 percent of users of any modern method were informed about possible side effects or health problems associated with their current method. Forty-one percent of acceptors of sterilization in rural area and 42 percent in urban area reported that they were informed about side effects. Among users of modern method other than sterilization, 53 percent of rural users and 50 percent of urban users were informed about side effects. It is clear from the result that ANM or health workers in Mizoram are providing sufficient information to couples who need to make an informed choice about contraceptive methods. The situation with respect to follow-up services is also not encouraging. Follow-up services among sterilization users in rural area and about 6 percent in urban area reported that they received follow-up services by ANM or health worker. Only 7 percent of the users of other modern method in rural area and only 5 percent in urban areas received follow-up services.

7.11 Quality of Care Indicators for Contraceptive Users by District

Table 7.12 shows inter-district variations in the percentage of users of sterilization who were told about alternative methods before adopting sterilization and about side effects or other problems related to the current method or users of modern contraceptive methods, and the percentage of users who received follow-up services.

Table 7.12 QUALITY OF CARE	E INDICATORS FO	OR CONTRAC	EPTIVE USERS	BY DISTRICT			
Among currently married wome use of their current contraceptive	Among currently married women who are current users of modern contraceptive methods, quality of care indicators related to the use of their current contraceptive method by district, Mizoram, 2002-04						
	Percentage	Percentage to effects or oth with m	old about side ner problems ethod ²	Percentage follow	Percentage non-user told		
District	informed about other methods before getting sterilization ¹	Sterilizat- ion	Other modern method	Sterilizat- ion	Other modern method	ever had advised to adopt contraceptive method	
Aizowl	76.0	40.2	55.9	7.4	5 9	7 1	
Champhai	65.2	49.2	65.3	6.3	7.5	6.6	
Kolasib	25.8	19.0	25.0	4.4	4.1	3.9	
Lawngtlai	18.1	13.2	(39.2)	3.2	(7.8)	0.8	
Lunglei	36.3	22.0	31.3	4.6	6.3	5.3	
Mamit	69.5	54.4	59.0	8.5	5.0	21.2	
Saiha	81.7	62.8	61.1	37.1	43.6	37.9	
Serchhip	88.4	55.6	53.0	9.2	7.4	8.2	
Mizoram	60.5	41.2	51.6	8.5	6.8	9.1	
Note: ¹ At the time of accepting the current method. ² By a health worker or ANM/Nurse after accepting the current method. () Based on less number of Cases.							

The percentage of sterilization-users who were told about alternate method is lowest in Lawngtlai (18 percent) but it is highest in Serchhip (88 percent). There are also large interdistrict variations in the percentage of sterilization- users and users of modern contraceptive methods who were told about the possible side effect. In case of sterilization, the proportion varied from a low of 13 percent in Lawngtlai to a high of 56 percent in Serchhip. For other modern contraceptive methods, more than 65 percent users in Champhai and a minimum of 25 percent of users in Kolasib were told about the side effects of the method. Follow-up services are slightly better for acceptors of sterilization than for other modern methods in most of the districts of Mizoram. Table 7.12 also shows district wise variation in the percentage of currently non-users who were ever advised to adopt contraceptive methods, which varies from a low less than one percent in Lawngtlai to a high of 38 percent in Saiha.

Overall, the quality of care for family planning and health services is far from satisfactory in many of the district of Mizoram; almost all districts need to work much more to improve their health and family planning services, particularly services that are provided by the government sector.

7.12 Quality of Care of Maternal Health Care

Information on few other aspects of quality of care in terms of maternal care was also collected. Women with last live/still births during three years preceding the survey were asked whether the Doctor/ANM/health worker advised you to go to health facility for delivery when they were pregnant, and received any follow-up care after delivering the baby within 2 weeks of delivery and received follow care at least one visit within six weeks of delivery. The same information is presented in Table 7.13.

Table 7.13 ADVISED TO HAVE DELIVERY A	T HEALTH FAC	ILITY AND FOLL	OW-UP				
SERVICES FOR POSTPARTUM CHECK-UP			<u></u>				
Percentage of women* who were advised to have delivery at health facility by doctor/ health worker and percentage who receive follow-up services within 2 weeks and within 6 weeks of delivery by ANM, according to residence, Mizoram, 2002-04							
Advise/follow-up service	Total	Rural	Urban				
Percentage of women who were advised to have delivery at health facility	37.4	32.3	48.8				
Percentage of women who were visited within 2 weeks of delivery	11.7	13.3	8.0				
Percentage of women who were visited at least once within 6 weeks of delivery14.715.911.8							
Number of women 3,021 2,084 938							
Note: * Women who had their last live/still birth	n during three ye	ars preceding the	survey				

About thirty-seven percent of the women with last live/still births during three years preceding the survey reported that they were advised by doctor or health worker to have delivery in health facility. Women from urban areas (49 percent) were more likely than rural areas (32 percent) to get advised to deliver their child at health facility.

In district wise variation, the percentage varies from as low as 10 percent in Lawngtlai to as high as 52 percent in Mamit (Table 7.14). In seven of the 8 districts, more than 30 percent women were advised for deliver their child in health facility.

Table 7.14 QUALITY OF CARE I	NDICATORS FOR M	ATERNAL CARE						
Among currently married women* survey, quality of care indicators r	who are given last line elated to delivery car	ve/still birth three ye re by district, Mizora	ars preceding the m, 2002-04					
	F	Percentage of wome	n					
District	Advised to have delivery at Visited at least health facility by Visited within 2 one within 6 doctor/ health weeks of weeks of worker delivery by ANM delivery by ANM							
Aizawl Champhai Kolasib Lawngtlai	50.5 32.9 40.6 9.6	9.8 10.0 1.8 3.5	11.2 11.7 7.9 3.5					
Lunglei Mamit Saiha Serchhip	29.7 52.1 44.6 35.7	4.6 12.2 41.4 19.7	14.7 12.7 44.0 19.9					
Mizoram	37.4	11.7	14.7					

Twelve percent of the women reported that they were visited by an ANM within two weeks of delivery; such visit was only 8 percent in urban areas and 13 percent in rural areas. Only 16 percent of the women in rural area and 12 percent in urban areas received at least one follow-up service within six weeks of delivery. Not more than one quarter women were received postpartum check-up within 2 weeks of delivery in any district of Mizoram, and the proportion of women who had at least one postpartum check-up within six weeks of delivery varied from a low of 4 percent in Lawngtlai to high of 44 percent in Saiha (Table 7.14).

CHAPTER – VIII

REPRODUCTIVE HEALTH PROBLEMS AND AWARENESS OF RTIs/STIs AND HIV/AIDS

One of the important components of the Reproductive and Child Health Programme is to have a healthy sexual life without any fear of contracting disease. With this approach, the RCH programme places a lot of emphasis on promoting and encouraging healthy sexual behaviour among couples through various Information, Education and Communication (IEC) activities. Health workers are also expected to educate women and men about Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs) and motivate those people with RTI/STI problems to seek medical help. The DLHS-RCH has made an attempt to collect information on awareness and prevalence of RTI/STI. Apart from this, information on knowledge of HIV/AIDS, source of information and ways of avoiding AIDS were also collected.

8.1 Awareness of RTI/STI

An attempt was made to assess whether couples were aware of RTI/STI. Currently married women and their husbands were asked about their awareness of RTI/STI and if they were aware, they were further questioned about the source of information and mode of transmission of the disease.

Table 8.1 shows the percentage of women aware of RTI/STI by background characteristics. About 49 percent of the women in Mizoram were aware of RTI/STI. The proportion of women who were aware of RTI/STI is higher in urban areas (65 percent) than in rural areas (40 percent) as shown in Figure 8.1. Awareness of RTI/STI is lower among younger women, non-literate women, and women from Buddhist religion, women from other backward classes and women from households with a low standard of living. Awareness of RTI/STI increases from 8 percent among non-literate women to 75 percent among women who have completed 10 or more years of schooling. The standard of living index shows a positive relationship with awareness of RTI/STI, ranging from 32 percent among women with a low standard of living.

Those women who had heard of RTI/STI were further asked about the source of information of RTI/STI, which is also presented in Table 8.1. About 33 percent of the women reported that they received information of RTI/STI from television and 76 percent from friends or relatives. Other sources of information of RTI/STI as reported by women were newspaper or books or magazines (45 percent), radio (59 percent), slogans or posters or pamphlets or wall hoardings (20 percent) and community meetings (23 percent). About 18 percent of women received this information from doctors and 16 percent from health workers, and about 3 percent of the women reported that they had heard of RTI/STI from other sources.

Table 8.2 shows the percentage of husbands of currently married women who heard of RTI/STI by specific source of information according to some selected background characteristics. In Mizoram, the percentage of men who heard of RTI/STI is a little higher than that of women (Figure 8.1). About 56 percent of the men had heard of RTI/STI. Men from urban areas were relatively more aware of RTI/STI. Men who are non-literate, men belonging to

Buddhist religion and those belonging to scheduled castes are less likely to report awareness of RTI/STI. The level of awareness of RTI/STI increases with an increase in education level and standard of living. Only 8 percent of non-literate men were aware of RTI/STI as compared to 71 percent of men who had completed 10 or more years of schooling. About 42 percent of men from households with a low standard of living were aware of RTI/STI as compared to 74 percent of men with a high standard of living.



The radio is the most prominent source of information about RTI/STI for men in Mizoram. About 62 percent of men who knew about RTI/STI received information from radio. Other important sources of information about RTI/STI are newspapers or books or magazines (55 percent), television (37 percent), slogans or posters or pamphlets or wall hoardings (23 percent) and relatives or friends (71 percent). About 22 percent of the men received this information from a doctor, 28 percent from community meetings, 15 percent from health workers and 11 percent mentioned that they had received information about RTI/STI from school teachers. About 4 percent of the men reported that they had heard of RTI/STI from other sources. The television is the most important source of information of RTI/STI in all the groups. The 'television' is a bigger source of information of RTI/STI for men who are from urban areas than for those who come from rural areas. The differences in the knowledge of RTI/STI from television as a source of information by educational level and standard of living are quite visible. About 27 percent of men who had completed 0-9 years of schooling had heard of RTI/STI from television, which increased to 50 percent for men who have completed 10 or more years of schooling. Men from rural areas, men who have completed 0-9 years of schooling, men belonging to Christian religion, men from scheduled tribes, men with a low standard of living and younger men are more prone to receive information from relatives or friends.

Table 8.1 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG WOMEN

Percentage of currently married women aged 15 - 44 who have heard about RTI/STI and among women who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Mizoram, 2002-04.

Among those who have heard about RTI/STI, percentage who received information from.													
Background Characteristic	Percentage who have heard about RTI/STI	Number of Women	Radio	Televi sion	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Communit y Meeting	Relative/ Friends	Others	Number of women who have heard about RTI/STI
Age group (vears)													
15-19	44.2	210	54.7	14.2	30.5	11.6	15 1	18 7	47	32.2	81.3	34	97
20-24	46.6	1 135	52.0	24.6	41.0	15.4	13.8	13.7	69	21.2	78.2	3.8	529
25-29	48.3	1,100	59.9	31.6	43.9	19.9	18.0	18.9	6.4	22.8	75.8	29	834
30-34	52.0	1,493	58.0	34.0	46.9	21.4	20.2	15.5	5.6	19.8	75.9	3.8	776
35-39	49.8	1,405	53.9	34.8	46.5	19.5	14.3	14.9	4.2	21.2	73.4	2.6	699
40-44	48.4	1.565	66.9	42.2	49.6	20.9	24.3	13.8	9.6	27.7	75.5	3.7	757
Residence	-	,					-					-	-
Rural	40.2	4,846	51.8	14.5	30.0	9.9	8.6	18.0	4.7	20.5	82.1	2.4	1,947
Urban	64.8	2,695	66.1	54.6	62.7	30.2	29.3	13.0	8.5	25.6	68.7	4.3	1,746
Education													
Non-literate	8.4	1,073	30.8	3.9	3.9	5.4	4.4	28.5	9.5	18.6	90.1	6.7	90
0-9@ years	49.0	4,775	53.4	24.0	35.8	16.2	14.9	16.7	4.3	20.6	77.6	2.7	2,339
10 and above	74.9	1,684	70.2	53.1	66.2	26.6	25.8	12.8	10.4	27.5	71.5	4.2	1,261
Religion													
Hindu	19.9	117	*	*	*	*	*	*	*	*	*	*	23
Christian	53.9	6,561	59.2	34.0	46.2	19.8	18.4	15.4	6.5	23.4	75.8	3.3	3,534
Buddhist	12.8	789	29.3	0.7	12.7	5.5	5.1	15.5	2.1	1.3	85.9	0.9	101
Other	46.6	74	(80.0)	(45.7)	(57.1)	(28.6)	(22.9)	(31.4)	(14.3)	(42.9)	(68.6)	(11.4)	35
Caste/tribe [#]													
Scheduled caste	20.2	192	(59.4)	(53.1)	(50.0)	(9.4)	(18.8)	(18.8)	(6.3)	(28.1)	(71.9)	(12.5)	39
Scheduled tribe	50.0	7,265	58.7	33.2	45.6	19.7	18.2	15.6	6.5	22.9	75.9	3.3	3,634
Other backward class	16.4	60	*	*	*	*	*	*	*	*	*	*	10
Standard of living index													
Low	31.9	3,058	44.1	8.4	19.6	11.9	10.0	22.4	4.6	21.1	82.8	3.6	974
Medium	52.3	2,758	58.7	27.7	42.8	17.0	15.2	13.4	5.3	21.7	76.1	2.7	1,442
High	74.0	1,726	69.4	58.9	68.1	28.2	28.4	13.0	9.3	25.6	70.1	3.9	1,277
Total	49.0	7,541	58.5	33.4	45.4	19.5	18.4	15.6	6.5	22.9	75.8	3.3	3,692

Note: Total includes 9 cases of missing on women education and 14 women with other category on caste/tribe were not shown separately. @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know and missing cases. * Percentage not shown: Base on very few cases. () Based on less than 50 unweighted cases.

Table 8.2 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG MEN

Percentage of husband of eligible women who have heard about RTI/STI and among men who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Mizoram, 2002-04.

	Among those who have heard about RTI/STI, percentage who received information from.												
Background characteristic	Percentage who have heard about RTI/STI	Number of men	Radio	Televi- sion	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Communit y Meeting	Relative/ Friends	Others	Number of men who have heard about RTI/STI
Age group (years) < 25 25-34 35-44 45+ Residence Pural	57.6 57.0 54.5 57.3 51.4	403 2,133 2,341 1,189 4,010	53.4 61.0 61.6 65.5 59.9	30.9 33.2 38.9 43.3 21.9	47.0 57.0 54.3 55.2 46.5	20.4 22.6 23.8 22.4 19.2	16.8 22.6 21.9 24.0 18.1	15.4 15.9 13.5 18.2 18.2	9.3 12.3 9.9 12.5 10.6	24.8 26.1 28.2 31.5 26.9	71.6 71.6 69.7 69.8 77.3	3.0 4.2 3.9 4.2 2.9	232 1,215 1,276 681 2,061
Urban Education Non-literate 0-9@ years	65.3 8.2 54.6 71.2	2,055 561 3,376	64.3 (38.3) 56.3	60.7 (8.3) 27.3	67.9 (15.0) 43.3 70.2	28.5 (8.3) 16.6	28.6 (11.7) 17.3 28.7	11.2 (18.3) 15.6	12.3 (10.0) 8.9	29.3 (25.0) 26.4	60.1 (75.0) 76.4	5.7 (11.7) 3.7	1,343 46 1,842
10 and above Religion Hindu Christian Buddhist	29.2 61.4 13.7	92 5,309 596	66.9 62.0 43.0	83.7 37.4 14.6	67.9 55.7 22.3	25.5 23.1 4.8 (21.2)	23.3 22.8 2.8 (21.2)	11.0 15.7 3.9	16.2 11.1 16.3 (25.0)	29.8 10.0 28.7 2.7 (21.2)	38.1 71.1 62.0	4.3 17.6 3.8 2.3 (12.5)	27 3,259 81
Other Caste/tribe# Scheduled caste Scheduled tribe Other backward class	21.9 57.7 25.6	196 5,793 58	(80.5) 61.5 *	(73.0) (68.3) 36.8	(61.0) 55.0 *	(31.3) (31.7) 22.8 *	(36.6) 22.2 *	(23.0) (22.0) 15.3 *	(22.0) (22.0) 11.1 *	(43.9) 27.8 *	(53.7) 71.0 *	(12.3) (22.0) 3.9 *	43 3,340 15
Standard of living index Low Medium High	42.8 60.3 74.1	2,482 2,286 1,297	52.5 63.4 69.2	15.1 34.1 66.2	37.7 55.7 73.0	17.0 23.4 28.5	17.4 21.0 29.4	19.7 16.1 9.7	11.6 10.8 11.5	30.4 25.4 28.7	77.9 72.0 60.2	3.5 4.0 4.7	1,064 1,379 961
Total	56.1	6,065	61.6	37.2	54.9	22.8	22.2	15.4	11.2	27.9	70.5	4.0	3,404

Note: Total includes 10 cases of other category in caste on aware of RTI/STI were not shown separately. @ Literate men with no year of schooling are also included. #Total figure may not add to N due to do not know and missing cases. () Based on less than 50 unweighted cases. * Percentage not shown: Based on very few cases

8.1.1 Knowledge of Mode of Transmission of RTI/STI

Women who were aware of RTI/STI were asked about the mode of transmission. This is presented in Table 8.3. Among women who reported knowledge of RTI/STI, 6 percent of them did not know anything further about the mode of transmission of this disease. This proportion is relatively higher among rural women, older women, women who have completed 10 or more years of schooling, and women from Buddhist religion, women from scheduled-castes and women coming from households with low standard of living. About 8 percent of rural women do not know about the mode of transmission of RTI/STI compared to 3 percent of urban women. Lack of personal hygiene was mentioned by 20 percent of women and heterosexual intercourse by 75 percent of women as mode of transmission of RTI/STI. Only 64 percent of women reported homosexual intercourse and one percent reported other modes of transmission of RTI/STI.

Table 8.3 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG WOMEN								
Percentage of currently marr background characteristics,	ied women aged Mizoram, 2002-04	15-44 who have he	eard of RTI/STI, k	nowledge of m	ode of transmissio	n by selected		
	Percent	Percentage by knowledge of mode of transmission						
- Background characteristic	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other	Do not know	Number of women who have heard of RTI/STI		
A								
Age 15-19 20-24 25-29 30-34 35-39 40-44 Residence Rural Urban Education Non-literate 0-9@ years 0.9@	50.0 55.6 61.3 64.3 63.5 75.6 51.4 78.5 21.2 58.5	68.7 76.4 75.0 76.9 73.1 72.4 71.5 77.9 53.0 72.4	14.0 14.7 17.9 23.2 22.5 19.8 13.8 26.3 24.6 18.1	7.0 5.4 8.4 6.7 5.7 6.9 4.1 9.7 8.7 5.5	4.9 6.1 6.2 5.6 5.8 4.4 8.3 2.6 29.4 6 5	97 529 834 776 699 757 1,947 1,746 90 2 339		
10 years and above	77.9	80.2	22.4	8.9	2.0	1,261		
Religion Christian Buddhist Other	65.8 6.4 (65.7)	75.0 56.2 (82.9)	19.6 20.2 (34.3)	6.7 6.1 (17.1)	4.7 36.5 (2.9)	3,534 101 35		
Caste/tribe# Scheduled caste Scheduled tribe Standard of living index Low Medium High	(56.3) 64.2 44.8 62.3 81.1	(78.1) 74.7 66.1 75.1 80.3	(40.6) 19.6 16.7 18.5 23.4	(15.6) 6.8 5.7 6.2 8.1	(6.3) 5.5 11.7 4.9 1.7	39 3,634 974 1,442 1,277		
Total	64.2	74.5	19.7	6.7	5.6	3,692		

Note: Total includes 2 cases missing information on education, 23 cases of Hindu on religion and 10 cases of other backward classes on caste/tribe and 6 cases of other caste/tribe were not shown separately. @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases

Table 8.4 presents the knowledge of mode of transmission of RTI/STI among men. Among men who had heard of RTI/STI, 3 percent of them mentioned that they did not know any thing about the mode of transmission of this disease. The percentage of men who did not know about the mode of transmission is higher among younger men, non-literate men, Buddhist men, men from scheduled castes and men from households with a low standard of living. Among the men who knew the modes of transmission of RTI/STI, 83 percent mentioned heterosexual intercourse, 19 percent reported lack of personal hygiene, 44 percent mentioned homosexual intercourse and 6 percent reported other modes of transmission.

background characteristics, N	Table 8.4 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG MEN Percentage of husbands of currently married women who have heard of RTI/STI, knowledge of mode of transmission by selected background characteristics. Mizoram, 2002-04						
		Number of					
Background characteristic	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other	Do not know	men who have heard of RTI/STI	
Age							
<25 25-34 35-44 45+	34.4 42.8 44.9 47.4	85.8 81.5 83.5 84.7	18.9 20.8 17.6 20.6	3.1 5.4 5.9 6.3	5.2 3.1 3.8 2.6	232 1,215 1,276 681	
Residence							
Rural Urban	37.4 53.9	80.6 87.3	18.9 20.3	3.8 8.4	3.5 3.2	2,061 1,343	
Education Non-literate 0-9@ years 10 years and above	(28.3) 39.2 50.4	(76.7) 81.5 85.5	(13.3) 15.0 25.1	(8.3) 4.0 7.5	(13.3) 4.3 1.9	46 1,842 1,516	
Religion Hindu Christian Buddhist Other	(62.5) 44.7 8.4 (47.5)	(68.8) 83.6 71.1 (70.0)	(37.5) 19.1 22.7 (37.5)	(0.0) 5.7 0.0 (15.0)	(6.3) 3.3 10.0 (2.6)	27 3,259 81 37	
Caste/tribe# Scheduled caste Scheduled tribe Standard of living index	(53.7) 44.0	(85.4) 83.4	(46.3) 19.1	(39.0) 5.3	(4.9) 3.3	43 3,340	
Low Medium High Total	36.4 42.1 54.9 44.0	78.7 83.1 88.3 83.2	18.2 18.6 22.1 19.4	4.6 4.9 7.7 5.6	4.5 3.5 2.1 3.4	1,064 1,379 961 3,404	

Note: Total includes15 men with other backward category and 5 men with other category in caste/tribe were not shown separately. @ Literate men with no years of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases.

8.2 Prevalence of RTI/STI

In DLHS-RCH, information was collected on the common symptoms of reproductive tract infections and sexually transmitted infections from women and their husbands, and information on menstruation related problems in the three months immediately preceding the survey.

The prevalence of reproductive tract infections and sexually transmitted infections is judged by their symptoms. All the respondents were told about symptoms of RTI/STI, and were asked whether they had any of them. In case of the presence of at least one symptom, they were further asked whether they sought treatment for such problems, and if they had sought treatment, details regarding the source of treatment were also recorded. The topic of RTI/STI is quite sensitive. The culture of silence prevents people from discussing such topics in front of others. In spite of intensive training of the investigators, the respondent might have hesitated in reporting the symptoms of RTI/STI. What gets reported in the survey though may not have given the exact prevalence, but may have given the lower limit for it.

Table 8.5 and Figure 8.2 show that almost half of the currently married women (48 percent) reported at least one reproductive health problem. The main problems reported by women were 'low backache' (27 percent), 'pain in lower abdomen' (23 percent), 'frequent / painful passage of urine' (6 percent), 'itching over vulva' (17 percent), 'swelling in the groin' (5 percent) and 'fever' (10 percent). Other symptoms of reproductive health problems reported by women were 'painful sexual intercourse (5 percent), 'involuntary escape of urine while coughing or sneezing' (5 percent), 'some mass coming out of vagina' (19 percent) and 'boils/ ulcers/ warts around vulva' (4 percent). Very few women reported 'bleeding after sexual intercourse'(2 percent) and 'swelling / lump in breast' (2 percent). The prevalence of most of the reproductive health problems is more among rural women than urban women.

Table 8.5 SYMPTOMS OF RTI/STI AMONG WOMEN						
Percentage of currently married women aged 15-44 who reported any symptoms RTI/STI and specific symptoms during three months prior to survey, according to residence, Mizoram, 2002-04						
		Resid	ence			
Symptoms	Total	Rural	Urban			
Percentage of women reported any RTI/STI symptoms	48.4	54.3	38.0			
Symptoms						
Itching over vulva	16.8	20.1	10.8			
Boils/ ulcers/ warts around vulva	3.7	4.5	2.4			
Pain in lower abdomen not related to menses	23.1	25.8	18.2			
Low backache	27.2	31.0	20.3			
Pain during sexual intercourse	5.1	5.8	4.0			
Bleeding after sexual intercourse	2.3	2.4	1.9			
Swelling in the groin	5.3	6.4	3.4			
Frequent / painful passage of urine	6.0	6.7	4.9			
Fever	9.7	10.9	7.4			
Some mass coming out of vagina	19.3	22.8	13.0			
Any involuntary escape of urine while coughing or sneezing	4.6	4.7	4.3			
Swelling / lump in breast	1.5	1.5	1.4			
Number of women	7,541	4,846	2,695			





Table 8.6 and Figure 8.3 show the prevalence of reproductive health problems among husbands of currently married women. The prevalence of RTI/STI among men was judged by the reporting of symptoms. About 8 percent of men reported experiencing at least one symptom of reproductive health problem in the last three months preceding the survey. The prevalence of reproductive health problems is higher among rural men (9 percent) than among urban men (5 percent). The problems of reproductive health experienced by men are 'difficulty / pain while urinating or very frequent urination (3 percent), 'discharge from penis' (1 percent), 'itching / irritation around genitals' (4 percent), 'sore / rash / redness on genitals or anal area' (1 percent) and 'swelling of testes or in groin area' (1 percent).

Table 8.6 SYMPTOMS OF RTI/STI AMONG MEN

Percentage of husbands of currently married women who reported any symptoms RTI/STI and specific symptoms during three months prior to survey and sought treatment for RTI/STI by source of treatment, according to residence, Mizoram, 2002-04

		Res	idence
Symptoms and treatment	Total	Rural	Urban
Percentage of men reported any RTI/STI symptoms	7.5	8.5	5.2
Symptoms Any discharge from penis	1.1	1.2	0.9
Any sore / rash / redness on genitals or anal area Difficulty / pain while urinating or very frequent urination Swelling of testis or in groin area	1.0 2.8 0.8	1.2 3.1 1.0	0.6 2.2 0.4
Itching / irritation around genital	3.8	4.7	2.0
Number of Men	6,065	4,010	2,055
Percentage of men sought treatment for any RTI/STI ¹	19.0	17.8	22.9
Percentage sought treatment at health facility ²			
Government health facility ³	54.8	57.1	(80.6)
Sub centre	1.9	0.0	(8.3)
Private health facility ⁴	11.7	4.5	(11.1)
ISM ⁵ facility	10.8	12.0	(5.6)
Chemist/ medical shop Other	23.3 17.8	26.2 19.0	(11.1) (11.1)
Percentage obtained treatment from ²			
Doctor Male health worker	62.2 12.6	55.2 10.6	(77.8) (22.2)
Traditional healer Relative/friends	0.7 3.2	0.0 1.8	(8.3) (8.3)
ISM practitioner Home remedy	4.3 1.9	5.3 0.0	(5.6) (8.3)
Chemist medical shop Other	13.4 7.6	18.0 10.1	(2.8) (2.8)
Number of men	85	61	25
Note: ¹ Based on men with any symptoms of RTI/STI ² Percentag Includes Government municipal hospital, dispensary, UHC/ UHP /UW ⁴ Includes private hospital/ clinic. non-governmental / trust hospital/c	ge may add more /FC, CHC/ rural ho linic. ⁵ Either gove	than 100.0 due to pspital, Primary hear rnment or private	o multiple responses ³ alth centre, sub-centre. hospital/clinic of Indian

system of medicine. () Based on less than 50 unweighted cases.

Among men who reported reproductive health problems, 19 percent of them sought treatment, which comprises of 23 percent of urban men and 18 percent of rural men. Among them only 55 percent visited a government health facility, including a primary health centre (17 percent) and sub-centre (2 percent) whereas 12 percent visited a private health facility. About 11 percent of men were treated by the Indian system of medicine, 23 percent obtained treatment from a chemist or medical shop and about 18 percent of the men reported that they were treated at other sources. A relatively higher proportion of men from urban areas utilised the government health facility and sub centre. On the other hand, utilisation of the Indian system of Medicine facility and chemist or medical shop for treatment is much higher among rural men than among urban men. A large proportion of men saw a doctor (62 percent), 78 percent in urban areas and 55 percent in rural areas. About 13 percent of the men went to a male health worker and 13 percent of the men went to a chemist/medical store. About 3 percent of the men were seen by relatives or friends, 1 percent by a traditional healer and 4 percent by an ISM practitioner. Another 8 percent of the men obtained treatment from other sources. The percentage of men who obtained treatment from chemists and other sources is somewhat higher in rural areas than in urban areas.

The DLHS-RCH also collected information from currently married women on symptoms of RTIs, that is, on abnormal vaginal discharge, texture, colour and odour of discharge in the three months immediately preceding the survey. The prevalence of reproductive health problems among currently married women is estimated from women's experiences. Table 8.7 shows the asymptotic prevalence of vaginal discharge related problems among currently married women in Mizoram during the three months preceding the survey according to residence. About 9 percent of the women reported problems related to vaginal discharge. The prevalence of vaginal discharge problem is relatively higher among rural women (11 percent) than among urban women (7 percent).

Among the women who had reported symptoms of vaginal discharge, 23 percent went for treatment, a higher percentage (27 percent) from urban areas compared to their rural counterparts (22 percent). A considerable proportion (26 percent) visited private health facilities but majority visited a government health facility (75 percent). About 1 percent sought home remedy, 3 percent went to an ISM, 14 percent went to the Primary Health Centre and 3 percent of the women visited other places for treatment. The proportion of women who visited a private health facility is higher in rural areas (25 percent) than in urban areas (21 percent) and the proportion of women who visited a government health facility is marginally higher in urban areas (79 percent) than in rural areas (78 percent). A significantly high proportion (74 percent) of the women in the state of Mizoram obtained treatment from doctors for their problems. Around 18 percent women were treated by ANM/Nurse/Midwife/LHV and 4 percent by other health professionals.

prior to survey and percentage who sought treatm	ent and source of treat	ment according to resider	nce, Mizoram, 2002-04
		Resi	dence
Symptoms and treatment	lotal	Rural	Urban
Percentage of women reported abnormal			
vaginal discharge	9.1	10.6	6.6
5 5			
Number of Women	7,541	4,846	2,695
Percentage of women sought treatment for			
vaginal discharge ¹	23.4	22.3	26.6
	-	-	
Number of Women	689	512	178
Percentage sought treatment at health facility ²			
Government health facility ³	75.3	77.7	(79.1)
Primary health centre	13.5	16.9	(11.9)
Sub centre	15.1	20.2	(3.0)
Private health facility ⁴	26.4	24.6	(20.9)
ISM ⁵ facility	3.3	2.6	(6.0)
Home remedy	1.3	0.6	(4.5)
Other	3.0	3.6	(1.5)
Percent distribution of women who obtained treatment from ²			
Doctor	74.0	66.8	(89.6)
ANM/nurse/midwife/LHV	17.6	21.7	(9.0)
Other health professionals ⁶	3.7	4.8	(1.5)
Other	4.7	6.7	(0.0)
Total percent	100.0	100.0	(100.0)
Number of women	161	114	47

Note: ¹ Based on women who reported having vaginal discharge. ² Based on women who sought treatment for vaginal discharge. ³ Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. ⁴ Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. ⁵ Either government or private hospital/clinic of Indian system of medicine, ⁶ Includes *dai* (trained or untrained), relative or friends and chemist/ medical shop. () Based on less than 50 unweighted cases.

8.3 Menstruation Related Problems

Table 8.8 shows the percentage of women who had menstruation problems and who sought treatment during the three months preceding the survey. Table 8.8 shows that around 14 percent women in Mizoram had menstruation problems and the figures are 17 percent and 9 percent in the rural and urban areas respectively. The main symptoms of menstrual problems that were reported by the women in Mizoram were painful periods (38 percent), scanty bleeding (40 percent) and excessive bleeding (18 percent).

Table 8.8 MENSTRUATION RELATED PROBLEMS

Percentage of currently married women aged 15-44 who had any menstruation related problem during three months prior to survey and percentage who sought treatment and source of treatment according to residence, Mizoram, 2002-04

		Resi	dence
Symptoms and treatment	Total	Rural	Urban
Percentage of women with any menstruation	40.0	17.0	0.4
related problem	13.9	17.0	9.1
Number of Women	6,061	3,696	2,365
Symptoms ¹			
No period	14.8	16.8	8.8
Painful period	38.0	40.9	29.5
Frequent or short period	15.1	15.8	13.2
Delayed period	12.6	14.2	7.8
Brolonged blooding	12.0	12 7	13.6
	12.3	21.2	0.8
Excessive bleeding	10.3	21.2	5.0
Continuous bleeding	1.1	0.0	5.2
Scanty bleeding	39.9	39.8	40.3
Inter-menstrual bleeding	9.5	8.1	13.5
Percentage of women sought treatment who			
had any menstruation related problems	26.2	21.1	41.1
Number of Momen	040	609	215
Number of women	043	020	215
Percentage sought treatment at health facility ⁶			
Government health facility ²	64.4	74.2	49 7
Primary health centre	13.3	20.2	3.0
Sub centre	13.3	20.2	3.0
oub centre	5.4	7.5	2.3
Private health facility ³	35.3	26.4	48.6
ISM ⁴ facility	6.0	4.6	10.4
	0.9	4.0	10.4
Other	1.4	2.3	0.0
Percentage of women obtained treatment from ⁶			
Doctor	89.2	85.6	94.7
ANM/nurse/midwife/LHV	10.5	14.0	5.2
Other health professionals ⁵	3.4	5 1	8
Other	1.6	1.0	2.5
Number of women who are currently menstruating	221	132	88
Note: ¹ Based on women who reported any mension	truated related proble	ems. ² Includes Governm	nent municipal hospital,

Note: Based on women who reported any menstruated related problems. Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. Either government or private hospital/clinic of Indian system of medicine, for Includes dai (trained or untrained), relative or friends and chemist/ medical shop. Multiple responses.

The prevalence of painful periods and excessive bleeding is more among rural women as compared to scanty bleeding which were prevalent more among urban women. Among the women who had menstrual problems, about 26 percent sought treatment in the state and the figures for urban and rural areas are 41 percent and 21 percent respectively. The government health facility is the main sources of treatment for menstrual problems. Around 35 percent of women sought treatment at a private health facility and 64 percent sought treatment at a

government health facility. About 7 percent of the women sought treatment at an ISM facility. Most of the women went to a doctor for treatment (89 percent). The figures for urban and rural areas are 95 and 86 percent respectively.

8.4 **Prevalence of RTIs/STIs by District**

Table 8.9 presents the prevalence of RTIs/STIs among currently married women and their husbands by districts. The percentage of women who reported any symptoms of RTIs/STIs is lowest in Saiha (29 percent) and highest in Lawngtlai (76 percent). The problems related to abnormal vaginal discharge ranges from 5 percent in Aizawl to 16 percent in Champhai. In comparison to women, fewer men from all districts of Mizoram reported symptoms of RTIs/STIs. Men from Kolasib (4 percent) and Aizawl (5 percent) reported the lowest prevalence of symptoms of RTIs/STIs and men from Lawngtlai (13 percent) reported the highest prevalence.

The percentage of women who have sought treatment for RTIs (abnormal vaginal discharge) ranges from 6 percent in Lawngtlai to 51 percent in Serchhip and for men who have sought treatment; it ranges from 7 percent in Kolasib to 39 percent in Serchhip.

Table 8.9 REPRODUCTIVE HEALTH CARE INDICATORS BY DISTRICT Percentage of currently married women and their husbands who reported reproductive health problems and percentage who sought treatment for the problems by district, Mizoram, 2002-04										
	P	ercentage of wome	Percentage of men							
District	With any symptoms of RTI/STI	Reported any abnormal vaginal discharge	Sought treatment for abnormal vaginal discharge	With any symptoms of RTI/STI	Sought treatment for RTI/STI problems					
Aizawl	33.1	5.2	15.0	4.9	28.9					
Champhai	55.7	15.9	31.3	11.8	18.8					
Kolasib	62.9	10.1	24.3	3.6	(7.2)					
Lawngtlai	76.1	19.1	5.7	13.1	19.1					
Lunglei	48.3	8.1	30.1	7.2	11.1					
Mamit	50.0	6.0	43.0	7.3	13.6					
Saiha	29.0	5.5	41.7	5.8	8.2					
Serchhip	70.7	7.8	50.6	6.9	39.3					
Mizoram	48.4	9.1	23.4	7.5	19.0					
Note: () Based on less number of cases.										

8.5 HIV/AIDS

Acquired Immune Deficiency Syndrome (AIDS) is an illness caused by the Human Immune Virus (HIV), which weakens the immune system and leads to death through secondary infection such as tuberculosis or pneumonia. The virus is generally transmitted through sexual contact, through the placenta of HIV-infected women to their children or through contact with contaminated needles (injections) or blood. Prevalence of HIV and AIDS has been on the rise for more than a decade in India and has reached alarming proportions in recent years. To prevent HIV transmission, the government has been making various efforts.

DLHS-RCH has collected information on the general state of awareness of HIV/AIDS, its transmission, its prevention and common misconceptions about HIV/AIDS. All the currently married women in the age group 15-44 years and their husbands were first asked if they had ever heard of an illness called HIV/AIDS. Respondents who had heard of HIV/AIDS were further asked about their source of information, mode of transmission and correct knowledge of HIV/AIDS transfusion.

8.5.1 Knowledge of HIV/AIDS

Table 8.10 shows the percentage of women who had heard about HIV/AIDS by some selected background characteristics. About 84 percent of currently married women in Mizoram have heard of HIV/AIDS, which is higher than RCH Round – I. In Round-I only 88 percent of currently married women were aware of HIV/AIDS.

Knowledge of HIV/AIDS is much lower among rural women, non-literate women, Buddhist women, women from scheduled castes, women from households with a low standard of living, and younger women. About 96 percent of urban women had heard about HIV/AIDS compared to only 76 percent of rural women. Knowledge of HIV/AIDS steadily increased with increase in educational level and household standard of living. As many as, 33 percent of nonliterate women had heard of HIV/AIDS against 97 percent of women who had completed 10 or more years of schooling. Similarly 68 percent of the women with a low standard of living had heard of HIV/AIDS against 98 percent of women with a high standard of living. Except younger women (below the age of 20) more than 80 percent of the women from other age groups have knowledge of HIV/AIDS. Buddhist women (35 percent) were less aware of HIV/AIDS compared to women from Christian (90 percent) and 'other' religions (82 percent). Women from scheduled tribes were more knowledgeable about of HIV/AIDS (84 percent) than women belonging to other backward classes (73 percent) and scheduled-caste women (59 percent).

The government has been using mass media, such as television, radio, and newspaper extensively to increase awareness among the general public about HIV/AIDS and its prevention. Table 8.10 shows the percentage of currently married women who were aware of HIV/AIDS from different sources. The most prominent source of information about HIV/AIDS is radio. About 68.4 percent of women reported that radio was their source of information about HIV/AIDS, followed by relatives or friends (73 percent), newspapers, books or magazines (56 percent), television (41 percent) and slogans or pamphlets, posters or wall hoardings (32 percent). About 14 percent of the women reported that a health worker had informed them about HIV/AIDS and 19 percent of rural women received information about HIV/AIDS from the health worker, and relatives or friends.

Table 8.10 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG WOMEN

Percentage of currently married women aged 15 - 44 who have heard about HIV/AIDS and among women who have heard about HIV/AIDS, percentage who received information from specific sources by selected background characteristics, Mizoram, 2002-04.

		Among those who have heard about HIV/AIDS, percentage who received information from.								Number of			
Background characteristic	Percentage who have heard about HIV/AIDS	Number of Women	Radio	Televi- sion	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others	women who have heard about HIV/AIDS
Age group (years)	00.0	210	62.7	20.9	110	<u></u>	10.2	126	5.0	25.0	016	4.0	175
20.24	00.2	219	67.0	20.0	44.0 56.0	23.2	10.5	12.0	0.Z	33.0	01.0	4.0	020
20-24	01.0	1,155	71.0	34.4 40.6	50.0	33.0	10.2	15.4	7.0	22.3	73.7	2.3	929
20-29	94.0	1,724	60.1	40.0	57.0	31.2	22.0	12.0	1.5	23.1	72.0	2.1	1,419
35-39	83.0	1,495	66.2	43.2	54.8	32.4	23.0 15 /	12.7	4.9	20.0	69.0	2.9	1,207
40-44	85.5	1,405	68.4	41.2	55.7	30.7	22.5	12.7	7.6	30.0	75.6	2.7	1,100
Residence	05.5	1,505	00.4	43.0	55.7	50.7	22.5	12.7	7.0	50.1	75.0	5.5	1,000
Rural	76 3	4 846	66.4	23.9	44 3	25.8	11 9	15.2	47	23.9	78.6	32	3 697
Urban	96.3	2 695	71 4	65.1	73.8	39.7	28.5	11.8	9.1	32.1	64.5	27	2 597
Education	00.0	2,000		00.1	10.0	00.1	20.0	11.0	0.1	02.1	0110		2,001
Non-literate	32.8	1.073	43.8	6.1	8.3	5.4	6.2	8.2	3.3	24.3	78.8	3.9	352
0-9@ vears	90.1	4,775	66.1	33.7	50.9	29.8	16.2	14.7	4.7	24.1	73.5	2.9	4.302
10 and above	97.0	1.684	80.1	67.3	81.5	41.7	28.4	12.7	11.8	36.4	69.6	3.2	1.634
Religion		,					-		-			-	,
Hindu	52.1	117	66.5	74.1	51.2	26.9	20.9	8.5	2.2	5.6	44.6	5.0	61
Christian	89.8	6,561	69.4	42.3	58.3	32.8	19.3	14.2	6.6	27.9	72.8	2.9	5,894
Buddhist	35.3	789	47.9	1.0	17.4	4.4	5.8	3.3	2.5	19.2	80.2	3.3	278
Other	81.5	74	72.6	49.5	62.1	36.8	29.4	30.8	15.1	29.1	63.2	7.6	61
Caste/tribe#													
Scheduled caste	58.5	192	71.1	59.1	59.3	13.1	19.7	16.0	7.0	20.1	46.7	9.5	112
Scheduled tribe	84.2	7,265	68.7	40.6	56.6	31.9	18.8	13.8	6.5	27.5	73.4	2.9	6,120
Other backward class	72.5	60	(55.3)	(34.2)	(36.8)	(26.3)	(13.2)	(10.5)	(7.9)	(23.7)	(65.8)	(2.6)	43
Standard of living index													
Low	68.0	3,058	56.2	15.1	37.1	22.4	13.8	17.1	4.2	23.7	78.3	4.0	2,080
Medium	91.6	2,758	71.2	38.8	56.6	31.1	15.3	12.7	5.6	25.6	72.1	2.4	2,525
High	97.9	1,726	79.4	75.7	80.0	43.4	30.1	11.4	10.5	34.2	67.0	2.7	1,689
Total	83.5	7,541	68.4	40.9	56.4	31.5	18.8	13.8	6.5	27.3	72.8	3.0	6,294

Note: Total includes 9 cases missing information on education and 14 women with other category in caste/tribe who have heard about HIV/AIDS were not shown separately. @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on Less than 50 unweighted cases.

Table 8.11 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG MEN

Percentage of husband of currently married women who have heard about RTI/STI and among men who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Mizoram, 2002-04.

			Among those who have heard about HIV/AIDS, percentage who received information from.								Number		
Background Characteristic	Percentage who have heard about HIV/AIDS	Number of men	Radio	Televi- sion	Newspaper / Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Commun -ity Meeting	Relative/ Friends	Others	of men who have heard about HIV/AIDS
Age group (years)	86.6	403	7/ 0	13.7	65.8	34 3	175	12.2	0.8	33.4	76.0	1.8	340
< 23 25-34	86.4	2 1 3 3	76.2	45.7	68.4	39.5	23.1	14.8	12.2	28.8	68.8	3.8	1 843
35-44	84.2	2,100	75.0		65.2	38.2	20.1	13.3	10.4	20.0	66.8	5.0	1 972
45+	88.9	1 189	72.1	47.3	62.4	40.8	23.6	18.5	12.9	32.0	71 7	43	1,072
Residence	00.0	1,100			02.1	10.0	20.0	10.0	12.0	02.0		1.0	1,000
Rural	81.4	4.010	76.7	33.2	59.1	35.4	18.9	17.0	10.8	29.1	75.6	3.8	3.264
Urban	95.2	2.055	71.6	71.5	77.0	44.9	28.6	11.1	12.7	33.4	58.3	4.8	1.957
Education		,											
Non-literate	30.3	561	52.7	9.9	16.9	9.5	12.4	9.0	3.5	23.0	76.4	4.3	170
0-9@ years	88.9	3,376	72.7	38.1	57.4	33.4	17.9	14.4	8.2	27.4	71.9	4.5	3,003
10 and above	96.2	2,129	79.8	64.6	82.2	49.5	30.2	15.9	16.9	36.3	64.4	3.7	2,048
Religion													
Hindu	52.9	92	(53.8)	(59.0)	(64.1)	(35.9)	(25.6)	(17.9)	(5.1)	(25.6)	(59.0)	(5.1)	49
Christian	91.5	5,309	75.2	49.6	67.4	40.3	23.6	15.3	11.9	32.0	69.6	4.2	4,859
Buddhist	43.6	596	69.5	4.6	37.3	14.7	2.6	5.2	4.5	6.9	60.7	3.2	260
Other	77.2	69	84.8	48.5	56.0	36.7	22.8	16.1	21.4	47.1	74.4	3.6	53
Caste/tribe#													
Scheduled caste	50.8	196	77.7	67.0	66.6	32.9	14.6	10.3	15.8	43.4	66.8	29.9	100
Scheduled tribe	87.2	5,793	75.2	47.4	66.2	39.3	22.8	15.0	11.4	30.6	69.1	3.7	5,054
Other backward class	91.3	58	36.8	22.9	25.9	12.9	10.1	5.6	7.1	21.2	80.3	0.7	53
Standard of living index													
Low	73.8	2,482	71.8	24.1	50.3	31.2	16.5	17.5	10.2	27.0	77.0	4.0	1,832
Medium	92.8	2,286	76.2	48.9	69.2	40.8	21.6	14.2	11.4	31.7	67.7	4.6	2,121
High	97.7	1,297	77.0	79.3	82.4	47.0	32.7	11.9	13.5	34.5	60.0	3.7	1,267
Total	86.1	6,065	74.8	47.6	65.8	38.9	22.5	14.8	11.5	30.7	69.1	4.2	5,221

Note: Table includes 10 cases of other category on caste/tribe who have heard about HIV/AIDS were not shown separately. @ Literate men with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases.



Table 8.11 shows the percentage of husbands of currently married women who had heard about HIV/AIDS. In Mizoram, the proportion of men who had heard about HIV/AIDS is a little higher than that of women. About 86 percent of men had heard of HIV/AIDS as compared to 84 percent of women (Figure 8.4).

About 95 percent of urban men had heard about HIV/AIDS as compared to only 81 percent of rural men. Knowledge of HIV/AIDS varies by men's age, and it is higher for the age group, 25-34 years. Awareness of HIV/AIDS is much lower among non-literate men, Buddhist men, men from scheduled castes, and men who belong to households with a low standard of living. A similar trend is observed in the case of women. About 30 percent of non-literate men had heard of HIV/AIDS, and it increased up to 89 percent for literate men and up to 96 percent of men who had completed 10 or more years of schooling. Thus, it is positively related to level of education.

Table 8.11 also shows the percentage of husbands of currently married women who were aware of HIV/AIDS by different sources. As reported by the men of Mizoram, the most prominent source of information of HIV/AIDS were relatives or friends (69 percent) followed by television (48 percent). Other important sources of HIV/AIDS are the radio (75 percent) newspapers, books or magazines (66 percent), and slogans or pamphlets, posters or wall hoardings (39 percent). About 23 percent of men reported that a doctor had informed them about HIV/AIDS and 15 percent men had received information of HIV/AIDS from a health worker.

About 31 percent reported that they were informed through community meetings and twelve percent received such information from a school teacher. Comparatively, a higher proportion of rural men received information about HIV/AIDS from the radio, health worker, and relative or friends than urban men. The information on awareness of HIV/AIDS through mass media, such as television and newspapers, and books or magazines, was received more by older men (aged 45 and above), urban men, and men from other religions and 'other castes' category, with at least 10 years of schooling, and men from households with a high standard of living. On the other hand, relative or friends were the main source of information for rural men, younger men below 24 years, non-literate men, other religion men, men from other backward classes and men from households with a low standard of living.

8.5.2 Knowledge of Mode of Transmission about HIV/AIDS

Women who were aware of HIV/AIDS were asked about the mode of transmission and this is presented in Table 8.12. Among women who reported awareness of HIV/AIDS, 3 percent of them did not know about the mode of transmission.

Table 8.12 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF HIV/AIDS AMONG WOMEN										
Percentage currently married women aged 15-44 who have heard of HIV/AIDS , knowledge of mode of transmission by selected background characteristics, Mizoram, 2002-04										
	Needles/ Transfusion Homo Hetero blade/ Mother of sexual sexual skin to infected				Do not	Number of women who have heard				
Background characteristic	Intercourse	Intercourse	puncture	child	DIOOD	Other	KNOW	of HIV/AIDS		
Age 15-19 20-24 25-29 30-34 35-39 40-44 Residence Rural Urban Education Non-literate 0.90 worrs	41.3 51.9 58.7 61.2 56.4 62.8 50.2 69.5 24.5 56.6	76.9 78.3 77.1 77.5 73.5 70.9 74.4 76.8 64.2 73.7	38.5 46.1 46.6 50.2 46.6 40.9 41.6 51.9 23.3 43.8	32.5 28.9 31.2 30.6 31.3 25.0 38.8 17.1	40.1 49.5 50.8 54.0 51.7 53.8 44.6 62.0 21.8 49.4	6.1 7.0 8.4 7.4 9.5 6.6 7.8 7.6 9.1	2.6 4.2 3.0 2.3 3.3 4.4 5.2 0.8 21.5	175 929 1,419 1,267 1,165 1,338 3,697 2,597 352 4 202		
10 years and above	55.0 72.1	73.7 823	43.0 56 1	27.0 43.3	40.4 67.2	7.Z 8.8	3.U 0.5	4,302 1,634		
Religion Hindu Christian Buddhist Other	64.6 60.2 13.9 60.9	73.3 75.4 74.7 79.3	18.8 47.2 19.3 58.5	21.9 31.4 12.5 53.9	40.2 53.3 21.5 52.6	3.1 7.9 4.9 10.2	1.1 2.8 17.2 3.2	61 5,894 278 61		
Caste/tribe# Scheduled caste Scheduled tribe Other backward class Standard of living index Low Medium High Total	60.8 58.2 (50.0) 45.2 58.4 73.8 58.2	73.1 75.5 (68.4) 71.7 76.3 78.6 75.4	40.4 46.0 (42.1) 38.5 47.3 52.5 45.8	30.7 30.6 (39.5) 25.0 28.2 41.4 30.7	46.3 52.1 (39.5) 38.3 52.7 66.9 51.8	14.7 7.6 (7.9) 9.0 6.7 7.6 7.7	0.7 3.3 (5.3) 7.6 1.7 0.7 3.4	112 6,120 43 2,080 2,525 1,689 6,294		

Note: Total includes 5 cases missing information on women education and 11cases of other caste/tribe are not shown separately. @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases This proportion is relatively higher among rural women, older women, non-literate women, and Buddhist women, women from other backward classes and women with a low standard of living. About 5 percent of the rural women do not know about the mode of transmission of HIV/AIDS compared to 1 percent of urban women.

Among women who reported different ways of transmission of HIV/AIDS, a large proportion (75 percent) mentioned heterosexual intercourse as a mode of transmission. All the socio-economic groups reported that heterosexual intercourse was the main mode of transmission of HIV/AIDS. Other modes reported by women were transmission through needle or blade or skin puncture (46 percent), transfusion of infected blood (52 percent), mother to child, if pregnancy occurs during a stage of HIV (31 percent); as many as 58 percent of the women mentioned that homosexual intercourse could also be a mode of transmission. As many as 8 percent stated that there were other ways of transmission of HIV/AIDS.

Table 8.13 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF HIV/AIDS AMONG MEN											
Percentage of husbands of currently married women who have heard of HIV/AIDS, knowledge of mode of transmission by selected background characteristics, Mizoram, 2002-04											
		Number of									
Background characteristic	Homosexual intercourse	Heterosexual intercourse	Needles/ blade/ skin puncture	Mother to child	Transfusion of infected blood	Other	Do not know	men who have heard of HIV/AIDS			
Age	45.0	04 5	50.0	04.0	50.0		0.4	0.40			
<25	45.3	81.5	53.9	31.3	53.0	5.4	2.4	349			
25-34	48.1	81.9	53.1	29.4	55.5	7.0	1.1	1,843			
35-44	50.9	81.1	49.6	31.8	52.8	1.8	1.1	1,972			
45+	47.0	60.2	40.9	30.4	49.0	0.0	2.1	1,056			
Residence											
Rural	46.8	80.6	49.0	28.4	48.4	6.3	2.0	3.264			
Urban	52.4	82.3	53.3	34.4	61.1	8.4	0.5	1,957			
-											
Education	05.0	4		10.4	477		10.0	470			
Non-literate	25.3	77.4	24.3	18.1	17.7	5.8	10.8	170			
0-9@ years	44.1	79.0	45.5	24.8	46.8	5.2	1.5	3,003			
TO years and above	57.9	84.8	60.2	40.2	65.4	10.0	0.4	2,048			
Religion											
Hindu	(48.7)	(64.1)	(43.6)	(28.2)	(38.5)	(7.7)	(5.1)	49			
Christian	50.4	81.5	52.4	31.8	55.3	7.4	1.0	4.859			
Buddhist	16.9	80.8	17.0	9.9	12.3	0.4	6.7	260			
Other	59.7	79.5	49.0	29.6	71.0	13.6	6.9	53			
Casta/triba#											
Sebeduled costs	60 F	02 E	FG 1	40 E	62.2	10.0	15	100			
Scheduled tribo	40.0	03.0	50.1	42.0	02.2 52.2	40.0	4.5	100 5 054			
Other backward class	49.0	66.0	37.4	30.0	19.5	0.5	10.6	5,054			
Other backward class	10.7	00.0	57.4	5.2	10.5	4.5	10.0	55			
Standard of living index											
Low	42.1	80.3	45.2	24.9	42.3	5.7	2.5	1,832			
Medium	49.3	80.9	51.5	31.9	55.0	7.7	0.9	2,121			
High	57.9	83.1	56.9	36.7	65.8	8.2	0.6	1,267			
Total	48.9	81.2	50.6	30.6	53.2	7.1	1.4	5,221			

Note: Total includes 9 cases about other in caste/tribe category are not shown separately. @ Literate men with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases.
Table 8.13 presents the knowledge about mode of transmission of HIV/AIDS among men. Only 1 percent of the men who had heard about HIV/AIDS mentioned that they do not know the mode of transmission. The percentage of men not knowing the mode of transmission is higher among younger men, rural men, non-literate men, Muslim men and men from other religions, other backward classes, and men from households with a low standard of living. Among whom reported ways of transmission of HIV/AIDS, 81 percent of them mentioned heterosexual intercourse as a mode of transmission. All the groups reported that heterosexual intercourse was the main mode of transmission of HIV/AIDS. Other modes reported by men are transmission through needle or blade or skin puncture (51 percent), transfusion of infected blood (53 percent), mother to child, if pregnancy occurs during a stage of HIV (31 percent), and 49 percent of men mentioned that homosexual intercourse could also be a mode of transmission of HIV/AIDS. About 7 percent stated that there were other ways of transmission of HIV/AIDS.

8.5.3 How to avoid HIV/AIDS

All the respondents, male and female, were asked about how to prevent HIV/AIDS. The percentage of women who said that HIV/AIDS could be avoided by various ways has been presented in Table 8.14 by some selected background characteristics.

Among women who reported about awareness of HIV/AIDS, about six percent of them did not know how to avoid becoming infected by HIV/AIDS. This percentage is higher among rural women than among urban women. The percentage of women who did not know of any way to avoid infection decreases with increasing levels of education and household standard of living. As many as 29 percent of non-literate women reported that they did not know of any way to avoid infection as compared to 1 percent of women who had completed ten or more years of schooling. Similarly, 12 percent of women with low a standard of living stated that they did not know of any way to avoid infection as compared to 1 percent of women with a high standard of living. The percentage of women who did not know ways to avoid infection is also high among Buddhist women, other backward classes' women and older women.

Among women who mentioned ways to avoid HIV/AIDS, a higher proportion of women (77.4 percent) said that "sex with only one partner is the way to avoid it". Other ways to prevent HIV/AIDS mentioned by women were 'using a condom correctly during each sexual intercourse'(40 percent), 'sterilizing needles and syringe before injecting' (51 percent), 'checking blood prior to transfusion' (53 percent), and 23 percent of the women reported that the pregnancy should be avoided if couples were infected by HIV/AIDS. All the specific ways to avoid becoming infected by HIV/AIDS reported by women are proportionally higher in urban areas, among Christian women, women who belong to 'other castes' category, women with a high level of education and women with a high standard of living.

Table 8.15 shows the percentage of men who reported that HIV/AIDS could be avoided by some selected background characteristics. Among men who are aware of HIV/AIDS, 3 percent of them did not know of any method to avoid infection, compared to 6 percent women in the state.

In Mizoram a higher proportion of men reported that 'sex with only one partner' is the way to avoid HIV/AIDS, a majority of men (81 percent) also reported the same, and this was the most commonly reported way to avoid HIV/AIDS in all the groups.

Table 8.14 KNOWLEDGE	ABOUT AVC	DIDANCE OF HI	V/AIDS AMON	G WOMEN				
Among currently married wo	omen aged 1	5-44 who have I	heard about HI	V/AIDS, the per-	centage of wom	en reporte	d HIV/AIDS can b	e avoided
in specific ways by selected	background	characteristics,	Mizoram, 2002	2-04				
		Pe	ercentage repo	rted HIV/AIDS of	an be avoided l	by		
	Sex With Only	Using condoms correctly during each	Checking	Sterilizing needles and	Avoiding pregnancy when		Do not know To	Number
Background	one	sexual	to	syringes	having		avoid	of
characteristic	partner	intercourse	transfusion	for injection	HIV/AIDS	Other	HIV/AIDS	women
	parator	Intercourse		ior injection		outor		Weinien
Age								
15-19	82.6	36.9	51 4	45.0	27.2	5.0	45	175
20.24	79.7	30.3	19.0	43.0	21.2	5.0	4.5	020
20-24	20.7	J9.J	40.9	47.Z	21.9	5.0	0.1 5.4	929
20-29	00.9 70.4	41.0	54.4	52.2	24.7	0.9	0.4	1,419
30-34	76.4	40.8	54.9	50.3	24.6	6.7	3.5	1,267
35-39	77.1	39.3	52.4	49.7	21.9	1.1	6.9	1,165
40-44	73.2	37.8	52.0	50.6	22.7	5.1	7.0	1,338
Desidence								
Residence	00.0	20.0	40.4	45 4	10.0	5.0	0.7	0.007
Rurai	80.2	36.2	48.4	45.4	19.6	5.6	8.7	3,697
Urban	73.4	44.9	58.9	59.6	28.9	7.5	2.2	2,597
Education								
Non-literate	61.0	22.0	25.3	28.3	13.8	5.0	28.9	352
0-9@ years	78.0	37.5	49.3	48.2	19.7	5.9	5.9	4.302
10 years and above	79.2	49.6	67.6	64.3	35.2	8.1	1.3	1,634
		1010	0110	0 110	00.2	0.1		.,
Religion								
Hindu	57.1	32.6	44.8	46.7	19.8	5.8	8.4	61
Christian	78.0	41.1	53.9	52.2	23.6	6.5	4.9	5,894
Buddhist	69.5	11.8	26.0	31.2	15.7	1.1	29.6	278
Other	74.7	48.6	64.1	62.0	42.8	19.5	7.2	61
Casto/tribe#								
Caste/tribe#	74.0	EE C	FF F	17 7	20.6	01.1	6.0	110
Scheduled caste	71.3	55.6	55.5	47.7	28.0	21.1	6.0	112
Scheduled tribe	//.8	39.5	52.8	51.4	23.4	6.2	5.8	6,120
Other backward class	(71.1)	(34.2)	(47.4)	(44.7)	(23.7)	(5.3)	(13.2)	43
Standard of living index								
Low	76.1	34.5	42.5	41.2	18.8	6.5	12.2	2.080
Medium	78.7	39.6	53.4	52.2	21.7	5.9	4.2	2,525
High	77 1	46.5	64.3	62.3	31.6	7 1	11	1 689
	,,	-0.0	0.10	02.0	01.0			1,000
Total	77.4	39.8	52.7	51.3	23.4	6.4	6.0	6,294
Note: Total includes 5 cases	- miccina inf	ormation on wor	non adjucation (and 11 women i	with other cated	ony in caste	aro not chown c	onaratoly

Note: Total includes 5 cases missing information on women education and 11 women with other category in caste are not shown separately. @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases

Other ways to prevent by HIV/AIDS mentioned by men are 'sterilizing needles and syringe before injecting' (54 percent), 'using a condom correctly during each sexual intercourse' (53 percent) and 'checking blood prior to transfusion' (52 percent). All the specific ways to avoid becoming infected by HIV/AIDS reported by men are proportionally higher in urban areas than in rural areas, and among men who belong to 'other caste' category, men with a high level of education and men with a high standard of living. Hindu men were more likely to report using a condom correctly during each sexual intercourse.

Table 8.15 KNOWLEDGE A	BOUT AVOI	DANCE OF HIV	AIDS AMONO	<u>S MEN</u>				
Among husbands of currently	y married wor	nen who have h	eard about HI	VAIDS, the per	centage of mer	n reported H	IV/AIDS can	be avoided
in specific ways by selected l	background c	haracteristics, N	/lizoram, 2002-	04				
		Percentage	e reported HIV/	AIDS can be av	voided by:		_	
Background characteristic	Sex with only one partner	Using condoms correctly during each sexual intercourse	Checking blood prior to transfusion	Sterilizing needles and syringes for injection	Avoiding pregnancy when having HIV/AIDS	Other	Do not know to avoid HIV/AIDS	Number of men
Δαρ								
~25	84 5	52 5	52.9	50.4	24.2	3.2	34	349
25-34	82.8	52.0	52.6	57.1	24.2	74	17	1 843
35-44	78.7	54.8	51.8	53.6	24.8	7.4	24	1,040
45+	80.4	49.8	50.5	50.4	22.0	6.5	45	1,072
-01	00.4	40.0	00.0	00.4	22.0	0.0	4.0	1,000
Residence								
Rural	85.4	47.2	50.8	51.5	21.4	6.5	3.6	3,264
Urban	73.2	62.6	53.6	58.0	28.8	7.5	1.0	1,957
Education								
Non-literate	66.5	25.1	20.4	31.0	11.4	6.9	19.9	170
0-9@ years	81.0	48.3	46.6	48.3	19.4	5.4	2.8	3,003
10 years and above	81.9	62.2	62.2	64.2	32.3	8.9	1.0	2,048
Poligion								
Hindu	(61 5)	(59.0)	(46.2)	(41.0)	(12.8)	(77)	(77)	10
Christian	(01.3) 91.4	(39.0)	(40.2)	(41.0)	(12.0)	(7.7)	(1.1)	49
Buddhist	72.6	22.9	9.0	33.2	25.5	7.0	12.0	4,039
Other	80.4	23.0	52.8	58.8	1.5	20.8	12.9	200
Other	03.4	45.4	52.0	50.0	41.5	20.0	4.5	55
Caste/tribe#								
Scheduled caste	86.4	72.4	63.2	58.5	55.9	46.5	2.7	100
Scheduled tribe	81.0	52.9	52.0	54.1	23.8	6.1	2.5	5,054
Other backward class	70.5	27.3	19.8	39.2	5.8	2.7	13.1	53
Standard of living index	00.4	44.0	40.0	40.4	40.0	7 4	- 4	4 000
LOW	82.4	44.6	42.6	46.4	18.3	7.4	5.1	1,832
Iviedium	81.9	53.6	57.0	56.9	24.5	b./	1.6	2,121
підп	10.9	04.1	30.7	59.9	32.2	0.3	0.0	1,207
Total	80.9	53.0	51.9	54.0	24.2	6.9	2.6	5,221
Note: Total includes 100 ca	ases about d	o not know in	caste category	are not show	n separately.	@ Literate	men with no	vear of
schooling are also included.	#Total figure	may not add to	N due to do no	t know cases. () Based on les	s than 50 u	nweighted cas	ses.
					, _ 2000 0.1100			

8.5.4 Misconception about HIV/AIDS

People generally have misconceptions about the ways of transmission of HIV/AIDS, such as 'shaking hands with a person having AIDS', hugging and kissing with them, sharing their clothes or sharing eating utensils, stepping on urine/stool, through insect bites, for example, being bitten by mosquitoes, fleas and bedbugs. All these questions were asked to the respondents who had heard of HIV/AIDS.

Table 8.16 shows the percentage of women with misconceptions about spreading HIV/AIDS through specific ways by selected background characteristics. Being bitten by mosquitoes, fleas or bedbugs is commonly reported as the way of getting HIV/AIDS infection by women in all the groups, and this percentage is higher among rural areas (21 percent) than in urban areas (15 percent). Non-literate women who have completed nine years of schooling,

women from households with a low standard of living, women from other religion, and women from scheduled tribes mentioned this method of transmission more often. Other misconceptions about the spreading of HIV/AIDS were 'stepping on urine/stool' (9 percent), 'sharing eating utensils' (3 percent), 'sharing clothes' (4 percent), 'kissing' (16 percent), 'hugging' (3 percent), and 'shaking hands' (3 percent). The percentage of all these misconceptions is also higher among women who belong to scheduled tribes, scheduled castes, among Buddhist women, non-literate women and women with a low standard of living.

misconception about the transmission misconception about the transmission Background characteristic Background characteristic Residence Rural 3.4 Urban 1.4 Education 6.0 Non-literate 6.1 0-9@ years 2.8 10 years and above 1.4 Religion 1.4 Hindu 3.3 Christian 2.4 Buddhist 3.3 Other 7.6 Caste/tribe 3.6	of HIV/AIDS to Percentage have s Hugging 4 3.5 4 1.4 0 5.9 3 2.9 4 1.0	y selected ba aving miscond Kissing 18.3 12.4 20.5 18.0 9.0	Sharing clothes 5.3 3.0 13.0 4.6 1.8	aracteristics, the transmis Sharing eating utensils 4.4 1.8 11.6 3.4 1.3	Mizoram, 20 ssion of HIV// Stepping on Urine / stool 11.4 6.1 17.4 10.5 4.2	AIDS Mosquito , flea, or bedbugs biting 21.4 14.9 20.2 21.4 11.4	- Number of women 3,697 2,597 352 4,302 1,634
Background characteristic Shakii hand Residence 1 Rural 3.4 Urban 1.4 Education 0.9@ years Non-literate 6.0 0.9@ years 2.8 10 years and above 1.4 Religion 1.4 Hindu 3.3 Christian 2.4 Buddhist 3.3 Other 7.6 Caste/tribe 3.4	Percentage ha	Xing miscond Kissing 18.3 12.4 20.5 18.0 9.0	Sharing clothes 5.3 3.0 13.0 4.6 1.8	the transmis Sharing eating utensils 4.4 1.8 11.6 3.4 1.3	ssion of HIV// Stepping on Urine / stool 11.4 6.1 17.4 10.5 4.2	AIDS Mosquito , flea, or bedbugs biting 21.4 14.9 20.2 21.4 11.4	- Number of women 3,697 2,597 352 4,302 1,634
Background characteristic Shakii hand Residence 1.4 Rural 3.4 Urban 1.4 Education 6.0 Non-literate 6.0 0.9@ years 2.8 10 years and above 1.4 Religion 1.4 Hindu 3.3 Christian 2.4 Buddhist 3.3 Other 7.6 Caste/tribe 3.6	ng s Hugging 4 3.5 4 1.4 0 5.9 3 2.9 4 1.0	18.3 12.4 20.5 18.0 9.0	Sharing clothes 5.3 3.0 13.0 4.6 1.8	Sharing eating utensils 4.4 1.8 11.6 3.4 1.3	Stepping on Urine / stool 11.4 6.1 17.4 10.5 4.2	Mosquito , flea, or bedbugs biting 21.4 14.9 20.2 21.4 11.4	- Number of women 3,697 2,597 352 4,302 1,634
ResidenceRural3.4Urban1.4EducationNon-literate6.00-9@ years2.310 years and above1.4ReligionHindu3.3Christian2.4Buddhist3.3Other7.6Caste/tribeScheduled caste3.6	4 3.5 4 1.4 0 5.9 3 2.9 4 1.0	18.3 12.4 20.5 18.0 9.0	5.3 3.0 13.0 4.6 1.8	4.4 1.8 11.6 3.4 1.3	11.4 6.1 17.4 10.5 4.2	21.4 14.9 20.2 21.4 11.4	3,697 2,597 352 4,302 1,634
Rural 3.4 Urban 1.4 Education 1.4 Non-literate 6.6 0-9@ years 2.8 10 years and above 1.4 Religion 1.4 Hindu 3.3 Christian 2.8 Buddhist 3.3 Other 7.6 Caste/tribe 3.6	4 3.5 4 1.4 0 5.9 3 2.9 4 1.0	18.3 12.4 20.5 18.0 9.0	5.3 3.0 13.0 4.6 1.8	4.4 1.8 11.6 3.4 1.3	11.4 6.1 17.4 10.5 4.2	21.4 14.9 20.2 21.4 11.4	3,697 2,597 352 4,302 1,634
Urban 1.4 Education Non-literate 6.0 0-9@ years 2.8 10 years and above 1.4 Religion Hindu 3.9 Christian 2.4 Buddhist 3.3 Other 7.6 Caste/tribe Scheduled caste 3.6	4 1.4 0 5.9 3 2.9 4 1.0	12.4 20.5 18.0 9.0	3.0 13.0 4.6 1.8	1.8 11.6 3.4 1.3	6.1 17.4 10.5 4.2	14.9 20.2 21.4 11.4	2,597 352 4,302 1,634
Education 6.0 Non-literate 6.0 0-9@ years 2.8 10 years and above 1.4 Religion 1.4 Hindu 3.3 Christian 2.8 Buddhist 3.3 Other 7.6 Caste/tribe 3.6 Scheduled caste 3.6) 5.9 3 2.9 4 1.0	20.5 18.0 9.0	13.0 4.6 1.8	11.6 3.4 1.3	17.4 10.5 4.2	20.2 21.4 11.4	352 4,302 1,634
Non-literate6.00-9@ years2.810 years and above1.4Religion3.9Hindu3.9Christian2.9Buddhist3.3Other7.6Caste/tribe3.6Scheduled caste3.6) 5.9 3 2.9 4 1.0	20.5 18.0 9.0	13.0 4.6 1.8	11.6 3.4 1.3	17.4 10.5 4.2	20.2 21.4 11.4	352 4,302 1,634
0-9@ years 2.8 10 years and above 1.4 Religion Hindu 3.9 Christian 2.9 Buddhist 3.3 Other 7.6 Caste/tribe Scheduled caste 3.6	3 2.9 4 1.0	18.0 9.0	4.6 1.8	3.4 1.3	10.5 4.2	21.4 11.4	4,302 1,634
10 years and above1.4Religion3.9Hindu3.9Christian2.9Buddhist3.3Other7.6Caste/tribe3.6Scheduled caste3.6	1.0	9.0	1.8	1.3	4.2	11.4	1,634
Religion 3.3 Hindu 3.3 Christian 2.4 Buddhist 3.3 Other 7.6 Caste/tribe Scheduled caste 3.6							
Hindu 3. Christian 2. Buddhist 3. Other 7.6 Caste/tribe Scheduled caste 3.6							
Christian 2.5 Buddhist 3.5 Other 7.6 Caste/tribe 3.6 Scheduled caste 3.6	9 6.9	23.0	13.6	2.5	4.8	10.9	61
Buddhist 3.: Other 7.6 Caste/tribe Scheduled caste 3.6	5 2.4	15.9	3.8	2.8	9.1	19.0	5,894
Other 7.6 Caste/tribe Scheduled caste 3.6	3.3	12.4	12.7	14.2	12.9	13.9	278
Caste/tribe Scheduled caste 36	5 11.1	17.7	9.5	8.8	12.6	21.8	61
Scheduled caste 3.6							
	5.2	20.2	3.5	1.1	3.7	9.9	112
Scheduled tribe 2.5	5 2.5	15.7	4.3	3.3	9.3	18.9	6,120
Other backward class (5.3) (5.3)	(10.5)	(7.9)	(5.3)	(5.3)	(18.4)	43
Standard of living index							
Low 4.0) 4.6	21.3	6.8	6.1	13.2	24.4	2,080
Medium 2.5	5 2.0	15.3	4.0	2.5	8.9	18.5	2,525
High 0.9	9 1.0	9.9	2.0	1.1	4.8	12.0	1,689
Total 2.6	3 7 G	15.8	4.4	3.3	9.2	18.7	6,294

Note: Total includes 5 cases missing information on women education and 11 women with other category in caste/tribe were not shown separately. @ Literate women with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases

Table 8.17 presents the percentage of men with misconceptions about the spreading of HIV/AIDS through specific ways by selected background characteristics. Again, just like the women, men in all the groups reported that HIV/AIDS is transmitted through insect bites, mosquitoes, through flea or bedbugs. As many as 18 percent of the men in Mizoram felt so. The percentage who reported that HIV/AIDS could be transmitted through the biting by mosquitoes or flees or bedbugs was much higher among rural men (21 percent) than among urban men (14 percent). Literate men who have completed nine years of schooling, men from households with a low standard of living, Hindu men, and scheduled tribe men are of the impression that HIV/AIDS spreads when one is bitten by mosquitoes, fleas or bedbugs. Other misconceptions about the spread of HIV/AIDS are 'sharing eating utensils' (4 percent), 'stepping on

urine/stool'(7 percent), 'sharing clothes' (4 percent), 'hugging' (3 percent), and 'shaking hands' (3 percent). Maximum number of men (72 percent), however reported that HIV/AIDS was spread by 'kissing' All the misconceptions reported by men are relatively higher than those reported by women. The percentage of all these misconceptions is also higher among men who belong to scheduled-tribe or caste, men from other religion, non-literate men and men with a low standard of living.

Table 8.17 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG MEN											
Among husbands currently m	arried wome	n who have h	neard about	HIV/AIDS, th	e percentag	e of men hav	ving miscond	eption			
about the transmission of HIV	//AIDS by se	lected backgi	round charac	cteristics, Mi	zoram, 2002	-04					
	Per	centage havi	ng misconce	eption about	the transmis	sion of HIV/A	AIDS	_			
Background characteristic	Shaking hands	Hugging	Kissing	Sharing clothes	Sharing eating utensils	Stepping on Urine / stool	Mosquito , flea, or bedbugs biting	Number of men			
Residence											
Rural	35	33	69 1	5 1	45	8 9	21.2	3 264			
Urban	1.5	1.4	76.9	3.4	2.3	4.8	13.5	1.957			
								.,			
Education											
Non-literate	7.8	7.8	41.7	9.4	7.2	12.8	19.5	170			
0-9@ years	3.0	3.2	67.2	5.3	4.6	9.4	22.8	3,003			
10 years and above	2.0	1.2	81.7	2.7	1.9	3.9	11.5	2,048			
Religion											
Hindu	(2.6)	(5.1)	(15.4)	(2.6)	(7.7)	(7.7)	(25.6)	49			
Christian	2.5	2.2	73.0	3.9	3.0	6.8	18.0	4,859			
Buddhist	6.3	7.0	56.5	13.0	12.5	15.7	20.7	260			
Other	5.1	13.0	64.6	14.4	15.7	17.8	21.9	53			
Caste/tribe#											
Scheduled caste	12.0	2.5	73.1	4.6	3.5	3.9	11.5	100			
Scheduled tribe	2.5	2.5	72.3	4.4	3.6	7.5	18.5	5,054			
Other backward class	2.4	5.0	44.9	4.4	3.3	2.9	8.2	53			
Standard of living index											
Low	4.4	4.5	61.9	7.1	6.8	11.5	25.6	1.832			
Medium	2.0	1.8	76.4	3.5	2.5	6.5	16.1	2,121			
High	1.6	1.1	79.5	2.1	1.0	2.8	11.4	1,267			
Total	2.7	2.6	72.0	4.4	3.7	7.3	18.3	5,221			

Note: Total includes 9 cases about other category in caste/tribe were not shown separately. @ Literate men with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases

8.5.5 Knowledge of Curability of HIV/AIDS

Table 8.18 shows the percentage distribution of currently married women and their husbands who have heard about HIV/AIDS by knowledge of curability of the same, according to some selected background characteristics. Around 5 percent women and 7 percent men have the notion that HIV/AIDS is curable, whereas 87 percent each of women and men replied that the disease is not curable. About 8 percent women and 7 percent men do not have any idea regarding the curability of the disease. It can be safely asserted from the figures that both men and women of urban area having high level of education, belonging to Christian religion and scheduled tribes and from households of high standard of living are showing better performance as far as the knowledge of curability of HIV/AIDS is concerned.

Among currently married wom by knowledge of curability abo	en and their out HIV/AIDS	husband, v , according	vho have he to some sel	ard about HI\ lected backgr	//AIDS, Perco ound charac	ent distribu teristics, M	ition of resp izoram, 200	ondents 2-04	
	Percent	distribution	of women	Number	Percer	Percent distribution of men			
			Do not	of			Do not	of	
Background characteristic	Yes	No	know	women	Yes	No	know	men	
Posidonco									
Rural	43	85.2	10.6	3 697	62	86.4	74	3 264	
Urban	6.1	88.6	53	2 597	8.1	86.7	5.2	1 957	
orban	0.1	00.0	0.0	2,007	0.1	00.7	0.2	1,007	
Education									
Non-literate	5.0	68.3	26.8	352	10.9	62.0	27.1	170	
0-9@ years	5.2	86.1	8.7	4,302	6.5	86.1	7.4	3,003	
10 years and above	4.6	91.7	3.7	1,634	7.2	89.2	3.6	2,048	
Religion									
Hindu	3.4	82.3	14.3	61	(10.3)	(71.8)	(17.9)	49	
Christian	5.1	87.4	7.6	5.894	7.0	87.0	6.0	4.859	
Buddhist	1.7	71.9	26.4	278	4.7	78.9	16.4	260	
Other	16.7	80.3	3.0	61	9.6	83.5	6.9	53	
Caste/tribe#									
Scheduled caste	10.1	85.3	4.6	112	7.7	89.0	3.3	100	
Scheduled tribe	4.9	86.8	8.3	6,120	6.9	86.7	6.4	5,054	
Other backward class	(5.3)	(78.9)	(15.8)	43	5.0	67.7	27.4	53	
Standard of living index									
Low	4.5	81.9	13.7	2.080	6.6	85.0	8.5	1.832	
Medium	5.7	87.6	6.7	2,525	6.9	86.1	7.0	2,121	
High	4.7	90.8	4.5	1,689	7.4	89.5	3.0	1,267	
Total	5.0	86.6	8.4	6,294	6.9	86.5	6.6	5,221	

Note: Total includes 5 women of missing information on women education, 11 women with other category in caste/tribe and 9 men of other category on caste/tribe were not shown separately. @ Literate persons with no year of schooling are also included. #Total figure may not add to N due to do not know cases. () Based on less than 50 unweighted cases

8.6 Awareness of RTI/STI and HIV/AIDS by Districts

Table 8.19 shows the percentage distribution of currently married women were and their husbands who are aware of RTI/STI and HIV/AIDS by districts.

According to DLHS, 49 percent and 84 percent of women ware aware of RTI/STI and HIV/AIDS respectively and the corresponding figures for husbands of eligible women are 56 and 86 percent respectively. The awareness of RTI/STI and HIV/AIDS among men is higher than that among women by 7 and 3 percentage points.

In general, in all of the districts men are more aware of RTI/STI and HIV/AIDS than women. The highest level of awareness about RTI/STI among women was reported in Aizawl (83 percent), followed by Saiha (70 percent) to the lowest in Lunglei (11 percent). Among men the highest level of awareness of RTI/STI was reported in Aizawl and Saiha (82 percent each), followed by Mamit (72 percent) and Champhai (63 percent) and to the lowest in Lunglei (15 percent).

The proportion of husbands of eligible women for currently married women ages 15-44 who are aware of HIV/AIDS in the districts of state Mizoram are also presented Table 8.19. Among women the awareness about HIV/AIDS ranges from the highest of 100 percent in Aizawl to the lowest of 46 percent in Lawngtlai. With the exception of Lunglei and Lawngtlai in every districts a minimum of 87 percent of women reported awareness of HIV/AIDS. A high level of awareness of HIV/AIDS among men exceeding 96 percent was reported in Aizawl, Champhai and Serchhip.

Table 8.19 AWARENESS OF RTI/ Percentage of currently married wo	Table 8.19 AWARENESS OF RTI/STI AND HIV/AIDS BY DISTRICT Percentage of currently married women and their husbands aware of RTI/STI and HIV/AIDS by district Nicescen 2000 04											
district, Mizoram, 2002-04												
	Percentag	e of women	Percenta	ge of men								
	Aware of	Aware of	Aware of	Aware of								
District	RTI/STI	HIV/AIDS	RTI/STI	HIV/AIDS								
Aizawl	83.1	99.6	82.2	99.2								
Champhai	38.5	86.7	63.0	96.3								
Kolasib	18.4	93.9	30.9	89.3								
Lawngtlai	23.9	45.8	21.9	47.7								
-												
Lunglei	10.9	63.6	14.6	67.1								
Mamit	58.2	88.5	72.0	92.6								
Saiha	69.5	91.1	82.1	94.2								
Serchhip	46.5	96.9	59.7	97.3								
Mizoram	49.0	83.5	56.1	86.1								

Appendix - A Sampling Error Estimation

The accuracy of programme indicators such as contraceptive prevalence rate, unmet need and institutional delivery, antenatal coverage etc. estimated from DLHS-RCH can be assessed in terms of stability of the estimated indicators as measured by the standard errors. Standard errors reflect only the appropriateness and suitability of sampling design adopted for RCH survey. However, the accuracy of estimated programme indicator are also affected to a great extent by non-sampling errors arising from lack of proper operationalisation and non-response cases, and is inherent in large scale surveys. The estimation producers of District Level Reproductive & Child Health survey takes into consideration design appropriateness and non-response rates. DLHS-RCH estimator of a programme indicators is design as

$$\mathbf{r} = \frac{\sum_{h} \sum_{j} \sum_{i} \mathcal{W}_{hji} \mathcal{Y}_{hji}}{\sum_{h} \sum_{j} \sum_{i} \mathcal{W}_{hji} \mathcal{X}_{hji}} = \frac{\mathcal{Y}}{\mathcal{X}} \qquad (1)$$

where the cell (h, j, i) stands for ith observational unit in jth primary sampling unit (PSU) in hth stratum, basically rural-urban areas of a district are taken as strata. W_{hij} is the sampling weight of (h, j, i)th cell inflated by response rates. The variables y and x denote the main and the auxiliary characteristics required for computation of proportion or ratios.

The equation for estimation of variance of programme indicator (${\bf r}$) is obtained after Taylor series linearisation as

var (r) =
$$\frac{1}{x^2}$$
 [var (y) + r² var (x) - 2 r cov (y, x)](2)

$$\operatorname{var}(\mathbf{y}) = \sum_{h} \frac{n_{h}}{n_{h} - 1} \left[\sum_{j} \sum_{i} (w_{hji} y_{hij})^{2} - \frac{\left(\sum_{j} \sum_{i} w_{hji} y_{hji}\right)^{2}}{n_{h}} \right] \dots (3)$$

$$\operatorname{cov}(\mathbf{y},\mathbf{x}) = \sum_{h} \frac{n_{h}}{n_{h}-1} \left[\sum_{j} \sum_{i} w_{hji}^{2} y_{hji} x_{hji} - \frac{(\sum_{j} \sum_{i} w_{hji} y_{hji})(\sum_{j} \sum_{i} w_{hji} x_{hji})}{n_{h}} \right] \dots (4)$$

and $n_{\rm h}$ is the number of sampled PSUs representing rural or urban areas of a district/state.

Variable	Estimate	Base Population
CPR (Any Method)	Proportion	Currently married women age 15-44 years
Unmet Need	Proportion	Currently married women age 15-44 years
Any ANC	Proportion	Last live/still births in the past three years
ANC3+	Proportion	Last live/still births in the past three years
Institutional Delivery	Proportion	Last live/still births in the past three years
Safe Delivery	Proportion	Last live/still births in the past three years
BCG	Proportion	Children age 12-23 months
Measles	Proportion	Children age 12-23months
BO3+	Proportion	Currently married women age 15-44 years with births in past three years

List of Selected Programme Variables for Sampling Errors, RCH 2002-04

Number of cases Design (R) Relative (R) 95% Conf. Interval R-1.96 R+1.96 Variables (R) error (SE) Unweighted Weighted Effect Error (%) SE SE Contraceptive Prevalence Rate (Currently Married Women age 15-44) Total 0.538 0.008 7,541 7,542 1.834 1.4 0.523 0.553 Rural 0.482 0.010 4,848 4,846 1.806 2.0 0.463 0.501 Urban 0.640 0.012 2,693 2,696 1.811 1.9 0.616 0.664 Unmet Need (Currently Married Women age 15-44) Total 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.200 0.010 2,693 2,695 1.834 5.2 0.179 0.220 Received Any Antenatal Check up (last live/still birth of past 3 years) Total 0.7	Sampling errors, Mizoram	, 2002-04							
Estimate Sampling error (SE) Design Relative Effect R-1.96 R+1.96 Variables (R) error (SE) Unweighted Weighted Effect Error (%) SE SE Contraceptive Prevalence Rate (Currently Married Women age 15-44) Total 0.538 0.008 7,541 7,542 1.834 1.4 0.523 0.553 Rural 0.482 0.010 4,848 4,846 1.806 2.0 0.463 0.501 Urban 0.640 0.012 2,693 2,696 1.811 1.9 0.616 0.664 Unmet Need (Currently Married Women age 15-44) Total 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.278 0.009 4,848 4,846 1.920 3.2 0.260 0.295 Urban 0.200 0.010 2,693 2,695 1.834 5.2 0.179 0.220 Received Any Antenatal Check up (last live/still birth of past 3 years) <td></td> <td></td> <td></td> <td>Number</td> <td>of cases</td> <td></td> <td></td> <td>95% Con</td> <td>f. Interval</td>				Number	of cases			95% Con	f. Interval
Variables (R) error (SE) Unweighted Weighted Effect Error (%) SE SE SE Contraceptive Prevalence Rate (Currently Married Women age 15-44) Total 0.538 0.008 7,541 7,542 1.834 1.4 0.523 0.553 Rural 0.482 0.010 4,848 4,846 1.806 2.0 0.463 0.501 Urban 0.640 0.012 2,693 2,696 1.811 1.9 0.616 0.664 Unmet Need (Currently Married Women age 15-44) 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.278 0.009 4,848 4,846 1.920 3.2 0.260 0.295 Urban 0.200 0.010 2,693 2,695 1.834 5.2 0.179 0.220 Received Any Antenatal Check up (last live/still birth of past 3 years) 0.645 0.015 2,088 <t< td=""><td>Veriebles</td><td>Estimate</td><td>Sampling</td><td></td><td></td><td>Design</td><td>Relative</td><td>R-1.96</td><td>R+1.96</td></t<>	Veriebles	Estimate	Sampling			Design	Relative	R-1.96	R+1.96
Contraceptive Prevalence Rate (Currently Married Women age 15-44) Total 0.538 0.008 7,541 7,542 1.834 1.4 0.523 0.553 Rural 0.482 0.010 4,848 4,846 1.806 2.0 0.463 0.501 Urban 0.640 0.012 2,693 2,696 1.811 1.9 0.616 0.664 Unmet Need (Currently Married Women age 15-44) Total 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.278 0.009 4,848 4,846 1.920 3.2 0.260 0.295 Urban 0.200 0.010 2,693 2,695 1.834 5.2 0.179 0.220 Received Any Antenatal Check up (last live/still birth of past 3 years) Total 0.743 0.012 3,069 3,020 2.151 1.6 0.721 0.766 Rural 0.645 0.015 2,088 2,083 2.094		(K)	error (SE)			Effect	Error (%)	5E	SE
Total 0.538 0.008 7,541 7,542 1.834 1.4 0.523 0.553 Rural 0.482 0.010 4,848 4,846 1.806 2.0 0.463 0.501 Urban 0.640 0.012 2,693 2,696 1.811 1.9 0.616 0.664 Unmet Need (Currently Married Women age 15-44) Total 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.278 0.009 4,848 4,846 1.920 3.2 0.260 0.295 Urban 0.200 0.010 2,693 2,695 1.834 5.2 0.179 0.220 Received Any Antenatal Check up (last live/still birth of past 3 years) Total 0.743 0.012 3,069 3,020 2.151 1.6 0.721 0.766 Rural 0.645 0.015 2,088 2,083 2.094 2.4 0.615 0.675 Urban 0.962 0.007 981 937 1.307 0.7 0.948 0.976		e Rate (Currel	ntly Married W	omen age 15-44	4)				
Rural0.4820.0104,8484,8461.8062.00.4630.501Urban0.6400.0122,6932,6961.8111.90.6160.664Unmet Need (Currently Married Women age 15-44)Total0.2500.0077,5417,5411.9042.80.2360.263Rural0.2780.0094,8484,8461.9203.20.2600.295Urban0.2000.0102,6932,6951.8345.20.1790.220Received Any Antenatal Check up (last live/still birth of past 3 years)Total0.7430.0123,0693,0202.1511.60.7210.766Rural0.6450.0152,0882,0832.0942.40.6150.675Urban0.9620.0079819371.3070.70.9480.976	Total	0.538	0.008	7,541	7,542	1.834	1.4	0.523	0.553
Orban 0.640 0.012 2,693 2,696 1.811 1.9 0.616 0.664 Unmet Need (Currently Married Women age 15-44) Total 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.278 0.009 4,848 4,846 1.920 3.2 0.260 0.295 Urban 0.200 0.010 2,693 2,695 1.834 5.2 0.179 0.220 Received Any Antenatal Check up (last live/still birth of past 3 years) Total 0.743 0.012 3,069 3,020 2.151 1.6 0.721 0.766 Rural 0.645 0.015 2,088 2,083 2.094 2.4 0.615 0.675 Urban 0.962 0.007 981 937 1.307 0.7 0.948 0.976	Rural	0.482	0.010	4,848	4,846	1.806	2.0	0.463	0.501
Unmet Need (Currently Married Women age 15-44) Total 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.278 0.009 4,848 4,846 1.920 3.2 0.260 0.295 Urban 0.200 0.010 2,693 2,695 1.834 5.2 0.179 0.220 Received Any Antenatal Check up (last live/still birth of past 3 years) Total 0.743 0.012 3,069 3,020 2.151 1.6 0.721 0.766 Rural 0.645 0.015 2,088 2,083 2.094 2.4 0.615 0.675 Urban 0.962 0.007 981 937 1.307 0.7 0.948 0.976	Urban	0.640	0.012	2,693	2,696	1.811	1.9	0.616	0.664
Total 0.250 0.007 7,541 7,541 1.904 2.8 0.236 0.263 Rural 0.278 0.009 4,848 4,846 1.920 3.2 0.260 0.295 Urban 0.200 0.010 2,693 2,695 1.834 5.2 0.179 0.220 Received Any Antenatal Check up (last live/still birth of past 3 years) Total 0.743 0.012 3,069 3,020 2.151 1.6 0.721 0.766 Rural 0.645 0.015 2,088 2,083 2.094 2.4 0.615 0.675 Urban 0.962 0.007 981 937 1.307 0.7 0.948 0.976	Unmet Need (Currently I	Married Wome	n age 15-44)						
Rural0.2780.0094,8484,8461.9203.20.2600.295Urban0.2000.0102,6932,6951.8345.20.1790.220Received Any Antenatal Check up (last live/still birth of past 3 years)Total0.7430.0123,0693,0202.1511.60.7210.766Rural0.6450.0152,0882,0832.0942.40.6150.675Urban0.9620.0079819371.3070.70.9480.976	Total	0.250	0.007	7,541	7,541	1.904	2.8	0.236	0.263
Urban0.2000.0102,6932,6951.8345.20.1790.220Received Any Antenatal Check up (last live/still birth of past 3 years)Total0.7430.0123,0693,0202.1511.60.7210.766Rural0.6450.0152,0882,0832.0942.40.6150.675Urban0.9620.0079819371.3070.70.9480.976	Rural	0.278	0.009	4,848	4,846	1.920	3.2	0.260	0.295
Received Any Antenatal Check up (last live/still birth of past 3 years) Total 0.743 0.012 3,069 3,020 2.151 1.6 0.721 0.766 Rural 0.645 0.015 2,088 2,083 2.094 2.4 0.615 0.675 Urban 0.962 0.007 981 937 1.307 0.7 0.948 0.976	Urban	0.200	0.010	2,693	2,695	1.834	5.2	0.179	0.220
Total0.7430.0123,0693,0202.1511.60.7210.766Rural0.6450.0152,0882,0832.0942.40.6150.675Urban0.9620.0079819371.3070.70.9480.976	Received Any Antenatal	Check up (las	t live/still birth	of past 3 years	5)				
Rural0.6450.0152,0882,0832.0942.40.6150.675Urban0.9620.0079819371.3070.70.9480.976	Total	0.743	0.012	3,069	3,020	2.151	1.6	0.721	0.766
Urban 0.962 0.007 981 937 1.307 0.7 0.948 0.976	Rural	0.645	0.015	2,088	2,083	2.094	2.4	0.615	0.675
	Urban	0.962	0.007	981	937	1.307	0.7	0.948	0.976
Received 3+ Antenatal Check up (last live/still birth of past 3 years)	Received 3+ Antenatal C	heck up (last	live/still birth o	of past 3 years)					
Total 0.563 0.012 3,069 3,021 1.874 2.2 0.539 0.588	Total	0.563	0.012	3,069	3,021	1.874	2.2	0.539	0.588
Rural 0.450 0.015 2,088 2,084 1.831 3.3 0.421 0.479	Rural	0.450	0.015	2,088	2,084	1.831	3.3	0.421	0.479
Urban 0.815 0.015 981 937 1.376 1.8 0.786 0.844	Urban	0.815	0.015	981	937	1.376	1.8	0.786	0.844
Institutional Delivery (last live/still birth of past 3 years)	Institutional Delivery (las	st live/still birt	h of past 3 yea	irs)					
Total 0.526 0.012 3,069 3,021 1.851 2.4 0.502 0.551	Total	0.526	0.012	3,069	3,021	1.851	2.4	0.502	0.551
Rural 0.359 0.014 2,088 2,083 1,786 3,9 0.331 0.387	Rural	0.359	0.014	2,088	2,083	1.786	3.9	0.331	0.387
Urban 0.898 0.011 981 938 1.352 1.3 0.875 0.920	Urban	0.898	0.011	981	938	1.352	1.3	0.875	0.920
Safe Delivery (last live/still birth of past 3 years)	Safe Delivery (last live/s	till birth of pas	at 3 years)						
Total 0.606 0.012 3,069 3,021 1,905 2,0 0.582 0.630	Total	0.606	0.012	3,069	3,021	1.905	2.0	0.582	0.630
Rural 0.462 0.015 2,088 2,084 1,849 3,2 0.433 0.491	Rural	0.462	0.015	2,088	2,084	1.849	3.2	0.433	0.491
Urban 0.924 0.010 981 937 1.361 1.1 0.904 0.944	Urban	0.924	0.010	981	937	1.361	1.1	0.904	0.944
Received BCG Vaccination (last and last but one living children, age 12-23 months)	Received BCG Vaccinati	ion (last and la	ist but one livi	ng children, ag	e 12-23 month	s)			
Total 0.782 0.020 974 968 2.322 2.6 0.742 0.821	Total	0 782	0.020	974	968	2 322	2.6	0 742	0.821
Rural 0.716 0.026 668 699 2.236 3.6 0.664 0.767	Rural	0.716	0.026	668	699	2 236	3.6	0.664	0.767
Urban 0.953 0.012 306 269 0.960 1.2 0.930 0.976	Urban	0.953	0.020	306	269	0.960	1.2	0.930	0.976
Received Measles (last and last but one living children, age 12-23 months)	Received Measles (last a	and last but on	e livina childr	en. age 12-23 m	nonths)	0.000		0.000	0.010
Total 0.595 0.022 974 968 2.006 3.7 0.551 0.639	Total	0 595	0.022	07/	968	2 006	37	0 551	0.630
Rural 0.509 0.022 974 900 2.000 5.7 0.557 0.659	Rural	0.595	0.022	668	600	1 904	5.2	0.351	0.000
Urban 0.817 0.028 306 269 1.618 3.4 0.762 0.872	Urban	0.303	0.027	306	260	1 618	3.4	0.762	0.302
Birth order 3+ (birth in last three years)	Birth order 3+ (birth in Is	est three years	0.020	300	200	1.010	0.4	0.702	0.072
$T_{atal} = 0.015 0.012 0.012 0.001 0.007 0.020 0.000 0$			0.010	2 452	2 001	4 0 0 7	0.0	0.202	0.420
Total 0.415 0.012 3,153 3,081 1.807 2.9 0.392 0.439	Dural	0.415	0.012	3,153	3,081	1.807	2.9	0.392	0.439
Truidi 0.443 0.015 2,170 2,134 1,831 3.3 0.415 0.472	Kulai Urban	0.443	0.015	2,170	∠,134 047	1.831	3.3	0.415	0.472
0.552 0.020 905 947 1.733 5.8 0.512 0.592	UIDAII	0.552	0.020	900	341	1.733	5.8	0.312	0.392

Sampling errors, Mizoram, 2002-04											
	Estimate	Sampling	Number	of cases	Relative	95% Cor	nf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE				
Contraceptive Prevalence Rate (Currently Married Women age 15-44)											
Aizawal	0.672	0.016	946	946	2.4	0.641	0.703				
Champhai	0.489	0.018	1,001	1,001	3.7	0.454	0.525				
Kolasib	0.701	0.017	805	840	2.4	0.667	0.735				
Lawangtlai	0.359	0.023	821	821	6.4	0.314	0.403				
Lungli	0.421	0.020	1,028	1,028	4.8	0.382	0.459				
Mamit	0.507	0.018	991	991	3.6	0.473	0.542				
Saiha	0.479	0.019	1002	998	4.0	0.442	0.516				
Serchhip	0.558	0.018	947	947	3.2	0.522	0.594				

Sampling errors, Mizoram, 2	2002-04						
	Estimate	Sampling	Number	of cases	Relative	95% Cor	nf. Interval
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE
Unmet Need (Currently Ma	arried Wome	n age 15-44)					
Aizawal	0.188	0.013	946	946	6.9	0.162	0.214
Champhai	0.289	0.017	1,001	1,001	5.9	0.255	0.322
Kolasib	0.110	0.011	805	840	10.0	0.088	0.132
Lawangtlai	0.290	0.025	821	821	8.6	0.241	0.338
L.u. eli	0.000	0.040	1 000	4 000	5.0	0.000	0.007
Lungii	0.360	0.019	1,028	1,028	5.3	0.323	0.397
Mamit	0.235	0.015	991	991	6.4	0.206	0.265
Saiha	0.275	0.018	1002	998	6.6	0.239	0.310
Serchhip	0.232	0.015	947	947	6.5	0.202	0.262

Sampling errors, Mizoram, 2002-04											
	Estimate	Sampling	Number	of cases	Relative	95% Cor	nf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE				
Received Any Antenatal	Check up (las	t live/still birth	n of past 3 years	5)							
Aizawal	0.939	0.016	339	335	1.7	0.908	0.971				
Champhai	0.700	0.023	470	484	3.3	0.655	0.746				
Kolasib	0.857	0.025	239	237	2.9	0.808	0.906				
Lawangtlai	0.285	0.034	309	308	11.9	0.219	0.351				
Lungli	0.675	0.032	437	465	4.7	0.612	0.738				
Mamit	0.801	0.022	427	429	2.7	0.757	0.844				
Saiha	0.824	0.023	495	490	2.8	0.779	0.870				
Serchhip	0.927	0.014	353	352	1.5	0.899	0.954				

Sampling errors, Mizoram, 2002-04											
	Estimate	Sampling	Number	of cases	Relative	95% Cor	nf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE				
Received 3+ Antenatal Ch	neck up (last l	ive/still birth o	of past 3 years)								
Aizawal	0.853	0.021	339	334	2.5	0.811	0.895				
Champhai	0.386	0.026	470	485	6.7	0.335	0.437				
Kolasib	0.668	0.032	239	236	4.8	0.605	0.731				
Lawangtlai	0.130	0.018	309	308	13.8	0.095	0.166				
Lungli	0.500	0.031	437	466	6.2	0.440	0.561				
Mamit	0.610	0.026	427	429	4.3	0.559	0.662				
Saiha	0.581	0.027	495	490	4.6	0.529	0.634				
Serchhip	0.708	0.027	353	352	3.8	0.655	0.760				

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Conf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Institutional Delivery (last live/still birth of past 3 years)										
Aizawal	0.798	0.024	339	335	3.0	0.751	0.844			
Champhai	0.440	0.026	470	484	5.9	0.389	0.491			
Kolasib	0.857	0.025	239	235	2.9	0.808	0.906			
Lawangtlai	0.221	0.033	309	308	14.9	0.157	0.285			
Lunali	0 567	0.032	437	465	5.6	0 504	0.629			
Mamit	0.499	0.002	427	430	5.4	0 447	0.552			
Saiha	0.278	0.023	495	489	8.3	0.232	0.324			
Serchhip	0.493	0.031	353	352	6.3	0.433	0.553			

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Conf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Safe Delivery (last live/still birth of past 3 years)										
Aizawal	0.842	0.022	339	334	2.6	0.798	0.885			
Champhai	0.496	0.027	470	484	5.4	0.444	0.548			
Kolasib	0.861	0.025	239	236	2.9	0.812	0.910			
Lawangtlai	0.318	0.038	309	308	11.9	0.244	0.392			
Lungli	0.629	0.032	437	466	5.1	0.567	0.692			
Mamit	0.562	0.027	427	429	4.8	0.510	0.615			
Saiha	0.490	0.027	495	490	5.5	0.438	0.543			
Serchhip	0.671	0.027	353	352	4.0	0.618	0.725			

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Cor	nf. Interval			
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Received BCG Vaccination (last and last but one living children, age 12-23 months)										
Aizawl	0.981	0.019	92	92	2.0	0.943	1.018			
Champhai	0.763	0.040	154	164	5.2	0.685	0.842			
Kolasib	0.916	0.031	81	77	3.3	0.856	0.975			
Lawngtlai	0.264	0.050	90	95	18.8	0.166	0.362			
Lundoi	0.706	0.052	100	4.4.4	7.4	0.602	0.800			
Lungiei	0.706	0.053	122	141	7.4	0.603	0.809			
Mamit	0.810	0.041	117	120	5.0	0.730	0.890			
Saina	0.892	0.033	162	163	3.7	0.827	0.957			
Serchhip	0.963	0.018	106	109	1.8	0.928	0.997			

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Conf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Received Measles (last and last but one living children, age 12-23 months)										
Aizawl	0.794	0.045	92	92	5.7	0.706	0.883			
Champhai	0.530	0.046	154	164	8.7	0.439	0.621			
Kolasib	0.773	0.048	81	77	6.3	0.678	0.868			
Lawngtlai	0.171	0.038	90	95	22.2	0.097	0.246			
l unalei	0.477	0.054	122	141	11.3	0.372	0.583			
Mamit	0.567	0.049	117	120	8.7	0.470	0.665			
Saiha	0.814	0.037	162	163	4.6	0.741	0.887			
Serchhip	0.832	0.036	106	109	4.3	0.762	0.902			

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Conf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Birth order 3+ (birth in last three years)										
Aizawal	0.339	0.027	348	340	8.0	0.287	0.392			
Champhai	0.459	0.026	494	509	5.7	0.408	0.509			
Kolasib	0.385	0.033	245	236	8.6	0.320	0.450			
Lawangtlai	0.395	0.041	297	291	10.4	0.314	0.476			
Lungli	0.427	0.031	417	455	7.3	0.366	0.489			
Mamit	0.432	0.026	454	445	6.0	0.381	0.482			
Saiha	0.507	0.026	532	542	5.1	0.456	0.558			
Serchhip	0.443	0.030	366	366	6.8	0.385	0.502			

APPENDIX B

DLHS-RCH STAFF, MIZORAM

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APPENDIX -C

QUESTIONNAIRES HOUSEHOLD WOMEN HUSBAND VILLAGE

To be attached in the final Report

Appendix - A Sampling Error Estimation

The accuracy of programme indicators such as contraceptive prevalence rate, unmet need and institutional delivery, antenatal coverage etc. estimated from DLHS-RCH can be assessed in terms of stability of the estimated indicators as measured by the standard errors. Standard errors reflect only the appropriateness and suitability of sampling design adopted for RCH survey. However, the accuracy of estimated programme indicator are also affected to a great extent by non-sampling errors arising from lack of proper operationalisation and non-response cases, and is inherent in large scale surveys. The estimation producers of District Level Reproductive & Child Health survey takes into consideration design appropriateness and non-response rates. DLHS-RCH estimator of a programme indicators is design as

$$\mathbf{r} = \frac{\sum_{h} \sum_{j} \sum_{i} \mathcal{W}_{hji} \mathcal{Y}_{hji}}{\sum_{h} \sum_{j} \sum_{i} \mathcal{W}_{hji} \mathcal{X}_{hji}} = \frac{\mathcal{Y}}{\mathcal{X}} \qquad (1)$$

where the cell (h, j, i) stands for ith observational unit in jth primary sampling unit (PSU) in hth stratum, basically rural-urban areas of a district are taken as strata. W_{hij} is the sampling weight of (h, j, i)th cell inflated by response rates. The variables y and x denote the main and the auxiliary characteristics required for computation of proportion or ratios.

The equation for estimation of variance of programme indicator (${\bf r}$) is obtained after Taylor series linearisation as

var (r) =
$$\frac{1}{x^2}$$
 [var (y) + r² var (x) - 2 r cov (y, x)](2)

$$\operatorname{var}(\mathbf{y}) = \sum_{h} \frac{n_{h}}{n_{h} - 1} \left[\sum_{j} \sum_{i} (w_{hji} y_{hij})^{2} - \frac{\left(\sum_{j} \sum_{i} w_{hji} y_{hji}\right)^{2}}{n_{h}} \right] \dots (3)$$

$$\operatorname{cov}(\mathbf{y},\mathbf{x}) = \sum_{h} \frac{n_{h}}{n_{h}-1} \left[\sum_{j} \sum_{i} w_{hji}^{2} y_{hji} x_{hji} - \frac{(\sum_{j} \sum_{i} w_{hji} y_{hji})(\sum_{j} \sum_{i} w_{hji} x_{hji})}{n_{h}} \right] \dots (4)$$

and $n_{\rm h}$ is the number of sampled PSUs representing rural or urban areas of a district/state.

Variable	Estimate	Base Population
CPR (Any Method)	Proportion	Currently married women age 15-44 years
Unmet Need	Proportion	Currently married women age 15-44 years
Any ANC	Proportion	Last live/still births in the past three years
ANC3+	Proportion	Last live/still births in the past three years
Institutional Delivery	Proportion	Last live/still births in the past three years
Safe Delivery	Proportion	Last live/still births in the past three years
BCG	Proportion	Children age 12-23 months
Measles	Proportion	Children age 12-23months
BO3+	Proportion	Currently married women age 15-44 years with births in past three years

List of Selected Programme Variables for Sampling Errors, RCH 2002-04

Sampling errors, Mizoram,	2002-04							
			Number	of cases			95% Cont	. Interval
Variables	Estimate	Sampling	Upwoighted	Wajahtad	Design	Relative	R-1.96	R+1.96
		ellor (SE)			Ellect	EII0I (%)	3E	35
	Rate (Currer		omen age 15-44	+)				
l otal	0.538	0.008	7,541	7,542	1.834	1.4	0.523	0.553
Rurai	0.482	0.010	4,848	4,846	1.806	2.0	0.463	0.501
Urban	0.640	0.012	2,693	2,696	1.811	1.9	0.616	0.664
Unmet Need (Currently M	arried Wome	n age 15-44)						
Total	0.250	0.007	7,541	7,541	1.904	2.8	0.236	0.263
Rural	0.278	0.009	4,848	4,846	1.920	3.2	0.260	0.295
Urban	0.200	0.010	2,693	2,695	1.834	5.2	0.179	0.220
Received Any Antenatal C	Check up (las	t live/still birth	of past 3 years	5)				
Total	0.743	0.012	3,069	3,020	2.151	1.6	0.721	0.766
Rural	0.645	0.015	2,088	2,083	2.094	2.4	0.615	0.675
Urban	0.962	0.007	981	937	1.307	0.7	0.948	0.976
Received 3+ Antenatal Ch	eck up (last l	ive/still birth o	of past 3 years)					
Total	0.563	0.012	3,069	3,021	1.874	2.2	0.539	0.588
Rural	0.450	0.015	2,088	2,084	1.831	3.3	0.421	0.479
Urban	0.815	0.015	981	937	1.376	1.8	0.786	0.844
Institutional Delivery (last	live/still birt	n of past 3 yea	irs)					
Total	0.526	0.012	3,069	3,021	1.851	2.4	0.502	0.551
Rural	0.359	0.014	2,088	2,083	1.786	3.9	0.331	0.387
Urban	0.898	0.011	981	938	1.352	1.3	0.875	0.920
Safe Delivery (last live/sti	II birth of pas	t 3 years)						
Total	0.606	0.012	3,069	3,021	1.905	2.0	0.582	0.630
Rural	0.462	0.015	2,088	2,084	1.849	3.2	0.433	0.491
Urban	0.924	0.010	981	937	1.361	1.1	0.904	0.944
Received BCG Vaccinatio	n (last and la	st but one livi	ng children, ag	e 12-23 months	s)			
Total	0.782	0.020	974	968	2.322	2.6	0.742	0.821
Rural	0.716	0.026	668	699	2.236	3.6	0.664	0.767
Urban	0.953	0.012	306	269	0.960	1.2	0.930	0.976
Received Measles (last ar	nd last but on	e living childr	en, age 12-23 m	ionths)				
Total	0 595	0.022	974	968	2 006	37	0.551	0.639
Rural	0.509	0.022	668	699	1 904	5.2	0.457	0.562
Urban	0.817	0.028	306	269	1.618	3.4	0.762	0.872
Birth order 3+ (birth in las	t three vears)				0	00	0.0.2
Total	0 /15	,	3 152	3 091	1 007	2.0	0 202	0 420
Rural	0.413	0.012	3,103 2 170	3,001 2 12/	1.007	2.9	0.392	0.439
lirhan	0.440	0.013	2,170	2,134 947	1.031	3.3 5 0	0.410	0.412
Orbail	0.002	0.020	000	170	1.700	0.0	0.012	0.002

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Conf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Contraceptive Prevalence Rate (Currently Married Women age 15-44)										
Aizawal	0.672	0.016	946	946	2.4	0.641	0.703			
Champhai	0.489	0.018	1,001	1,001	3.7	0.454	0.525			
Kolasib	0.701	0.017	805	840	2.4	0.667	0.735			
Lawangtlai	0.359	0.023	821	821	6.4	0.314	0.403			
Lungli	0.421	0.020	1,028	1,028	4.8	0.382	0.459			
Mamit	0.507	0.018	991	991	3.6	0.473	0.542			
Saiha	0.479	0.019	1002	998	4.0	0.442	0.516			
Serchhip	0.558	0.018	947	947	3.2	0.522	0.594			

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Conf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Unmet Need (Currently Married Women age 15-44)										
Aizawal	0.188	0.013	946	946	6.9	0.162	0.214			
Champhai	0.289	0.017	1,001	1,001	5.9	0.255	0.322			
Kolasib	0.110	0.011	805	840	10.0	0.088	0.132			
Lawangtlai	0.290	0.025	821	821	8.6	0.241	0.338			
Lungli	0.360	0.019	1,028	1,028	5.3	0.323	0.397			
Mamit	0.235	0.015	991	991	6.4	0.206	0.265			
Saiha	0.275	0.018	1002	998	6.6	0.239	0.310			
Serchhip	0.232	0.015	947	947	6.5	0.202	0.262			

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Conf. Interval				
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Received Any Antenatal Check up (last live/still birth of past 3 years)										
Aizawal	0.939	0.016	339	335	1.7	0.908	0.971			
Champhai	0.700	0.023	470	484	3.3	0.655	0.746			
Kolasib	0.857	0.025	239	237	2.9	0.808	0.906			
Lawangtlai	0.285	0.034	309	308	11.9	0.219	0.351			
Lungli	0.675	0.032	437	465	4.7	0.612	0.738			
Mamit	0.801	0.022	427	429	2.7	0.757	0.844			
Saiha	0.824	0.023	495	490	2.8	0.779	0.870			
Serchhip	0.927	0.014	353	352	1.5	0.899	0.954			

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Coi	nf. Interval			
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Received 3+ Antenatal Check up (last live/still birth of past 3 years)										
Aizawal	0.853	0.021	339	334	2.5	0.811	0.895			
Champhai	0.386	0.026	470	485	6.7	0.335	0.437			
Kolasib	0.668	0.032	239	236	4.8	0.605	0.731			
Lawangtlai	0.130	0.018	309	308	13.8	0.095	0.166			
Lungli	0.500	0.031	437	466	6.2	0.440	0.561			
Mamit	0.610	0.026	427	429	4.3	0.559	0.662			
Saiha	0.581	0.027	495	490	4.6	0.529	0.634			
Serchhip	0.708	0.027	353	352	3.8	0.655	0.760			

Sampling errors, Mizoram, 2002-04										
	Estimate	Sampling	Number	of cases	Relative	95% Coi	nf. Interval			
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE			
Institutional Delivery (last live/still birth of past 3 years)										
Aizawal	0.798	0.024	339	335	3.0	0.751	0.844			
Champhai	0.440	0.026	470	484	5.9	0.389	0.491			
Kolasib	0.857	0.025	239	235	2.9	0.808	0.906			
Lawangtlai	0.221	0.033	309	308	14.9	0.157	0.285			
Lungli	0.567	0.032	437	465	5.6	0.504	0.629			
Mamit	0.499	0.027	427	430	5.4	0.447	0.552			
Saiha	0.278	0.023	495	489	8.3	0.232	0.324			
Serchhip	0.493	0.031	353	352	6.3	0.433	0.553			

Sampling errors, Mizoram, 2002-04							
	Estimate	Sampling	Number of cases		Relative	95% Conf. Interval	
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE
Safe Delivery (last live/still birth of past 3 years)							
Aizawal	0.842	0.022	339	334	2.6	0.798	0.885
Champhai	0.496	0.027	470	484	5.4	0.444	0.548
Kolasib	0.861	0.025	239	236	2.9	0.812	0.910
Lawangtlai	0.318	0.038	309	308	11.9	0.244	0.392
Lungli	0.629	0.032	437	466	5.1	0.567	0.692
Mamit	0.562	0.027	427	429	4.8	0.510	0.615
Saiha	0.490	0.027	495	490	5.5	0.438	0.543
Serchhip	0.671	0.027	353	352	4.0	0.618	0.725

Sampling errors, Mizoram, 2002-04							
	Estimate	Sampling	Number of cases		Relative	95% Conf. Interval	
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE
Received BCG Vaccination (last and last but one living children, age 12-23 months)							
Aizawl	0.981	0.019	92	92	2.0	0.943	1.018
Champhai	0.763	0.040	154	164	5.2	0.685	0.842
Kolasib	0.916	0.031	81	77	3.3	0.856	0.975
Lawngtlai	0.264	0.050	90	95	18.8	0.166	0.362
Lungloi	0.706	0.052	100	4.4.4	7 4	0.602	0.800
Lungiei	0.706	0.053	122	141	7.4	0.603	0.809
Mamit	0.810	0.041	117	120	5.0	0.730	0.890
Saiha	0.892	0.033	162	163	3.7	0.827	0.957
Serchhip	0.963	0.018	106	109	1.8	0.928	0.997

Sampling errors, Mizoram, 2002-04							
	Estimate	Sampling	Number of cases		Relative	95% Conf. Interval	
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE
Received Measles (last and last but one living children, age 12-23 months)							
Aizawl	0.794	0.045	92	92	5.7	0.706	0.883
Champhai	0.530	0.046	154	164	8.7	0.439	0.621
Kolasib	0.773	0.048	81	77	6.3	0.678	0.868
Lawngtlai	0.171	0.038	90	95	22.2	0.097	0.246
Lundei	0 477	0.054	122	141	11 3	0 372	0 583
Mamit	0.567	0.004	117	120	87	0.470	0.665
Saiha	0.814	0.037	162	163	4.6	0.741	0.887
Serchhip	0.832	0.036	106	109	4.3	0.762	0.902

Sampling errors, Mizoram, 2002-04							
	Estimate	Sampling	Number of cases		Relative	95% Conf. Interval	
District	(R)	error (SE)	Unweighted	Weighted	Error (%)	R-1.96 SE	R+1.96 SE
Birth order 3+ (birth in last three years)							
Aizawal	0.339	0.027	348	340	8.0	0.287	0.392
Champhai	0.459	0.026	494	509	5.7	0.408	0.509
Kolasib	0.385	0.033	245	236	8.6	0.320	0.450
Lawangtlai	0.395	0.041	297	291	10.4	0.314	0.476
Lungli	0.427	0.031	417	455	7.3	0.366	0.489
Mamit	0.432	0.026	454	445	6.0	0.381	0.482
Saiha	0.507	0.026	532	542	5.1	0.456	0.558
Serchhip	0.443	0.030	366	366	6.8	0.385	0.502

APPENDIX B

DLHS-RCH STAFF, MIZORAM

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APPENDIX -C

QUESTIONNAIRES HOUSEHOLD WOMEN HUSBAND VILLAGE

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