



**Ministry of Health and Family Welfare  
Government of India**

**District Level Household and Facility Survey  
under Reproductive and Child Health Project (DLHS-3)**

**District Fact Sheet**

**2007-08**



**Bihar  
Muzaffarpur**



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**About DLHS - 3:**

The District Level Household Survey (DLHS) was initiated in 1997 with a view to assess the utilization of services provided by government health care facilities and people's perception about the quality of services. The District Level Household Survey (DLHS -3) is the third in the series of district surveys, preceded by DLHS-1 in 1998-99 and DLHS-2 in 2002-04. As in DLHS-3, the International Institute for Population Sciences (IIPS) was the nodal agency to conduct DLHS-1 and DLHS-2. DLHS-3, like other two earlier rounds, is designed to provide estimates on important indicators on maternal and child health, family planning and other reproductive health services. In addition, DLHS-3 provides information on important interventions of National Rural Health Mission (NRHM). Unlike other two rounds in which only currently married women age 15-44 years were interviewed, DLHS -3 interviewed ever-married women (age 15-49) and never married women (age 15-24).

The sample size among the districts in the country varies according to their performance in terms of Ante-Natal Care (ANC), institutional delivery, immunization, etc. and it was fixed based on information related to such indicators from DLHS-2. For low performing districts, 1500 Households (HHs), for medium performing districts, 1200 HHs and for good performing districts, 1000 HHs were fixed as sample size. In case of Muzaffarpur, sample size was 1200 households with 10% additional HHs to take care of non-response/refusal, etc.

The survey used two-stage stratified random sampling in rural and three-stage stratified sampling in urban areas of each district. The information from 2001 Census was used as sampling frame for selecting primary sampling units (PSUs). In rural areas, all the villages in the district were stratified into different strata based on population /HH size, percentage of SC/ST population, female literacy (7+), etc. The required number of villages from each strata was selected with probability proportional to size (PPS). In selected primary sampling units (villages), household listing was done and required numbers of households were selected using systematic random sampling.

For larger villages (more than 300 HHs) segmentation was carried out. In case of 300 to 600 HHs, two segments of equal size were made and one was selected using PPS. For PSUs having more than 600 HHs, segments of 150 HHs were created depending on the size and then two segments were selected using PPS. In case of urban areas, number of wards were selected using PPS at first stage. In a selected ward, one enumeration block from 2001 census was selected again using PPS. Procedure for segmentation, household selection, etc, was same as in the case of rural PSUs.

The uniform bilingual questionnaires, both in English and in local language, were used in DLHS-3 viz., Household, Ever Married Women (age 15-49), Unmarried Women (age 15-24), Village and Health facility questionnaires.

In the household questionnaire, information on all members of the household and the socio-economic characteristics of the household, assets possessed, number of marriages to usual members of the household since January 2004 and deaths in the household since January 2004 etc. was collected. In case of female deaths, attempts were made to assess maternal death. The household questionnaire also collected information on respondent's knowledge (seen/read/ heard) about messages related to various government health programmes being spread through media and other sources.

The ever married women's questionnaire consisted of sections on women's characteristics, maternal care, immunization and child care, contraception and fertility preferences, reproductive health including knowledge about HIV/AIDS.

The unmarried women's questionnaire contained information on her characteristics, family life education and age at marriage, reproductive health-knowledge and awareness about contraception, HIV / AIDS, etc.

The village questionnaire contained information on availability of health, education and other facilities in the village and whether the health facilities are accessible throughout the year.

For the first time, population-linked facility survey has been conducted in DLHS-3. In a district, all Community Health Centres (CHCs) and District Hospital (DH) were covered. Further, all Sub-centres (SC) and Primary Health Centres (PHC) which were expected to serve the population of the selected PSU were also covered. There were separate questionnaires for SC, PHC, CHC and DH. They broadly include questions on infrastructure, human resources, supply of drugs & instruments, and performance.

#### **Note:**

**DLHS-2:** information is based on data collected from currently married women 15-44 years.

**DLHS-3:** information is based on data collected from ever married women 15-49 years.

**DLHS-2:** In total percentage is adjusted for indicators considering over sampling of urban PSUs in DLHS-2. This adjustment is done in those districts where urban percentage is less than 30.

**DLHS-2:** includes tap (inside residence/yard/plot), tap (shared/public), hand pump/borewell, well-covered.

**DLHS-3:** includes pipe into dwelling, piped to yard/plot, public tap/standpipe.

#### **Unmet need for spacing**

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.

#### **Unmet need for limiting**

Unmet need for limiting includes the proportion of 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.

#### **Unmet need**

Unmet need refers to unmet need for limiting and spacing.

#### **Correct knowledge of HIV/AIDS**

The women who heard about HIV/AIDS and have correct knowledge about transmission of HIV/AIDS and knowledge of prevention from HIV/AIDS.

<b>District Indicators, Muzaffarpur, (2001 Census)</b>
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Indicators	Census 2001
Population (in thousands)	3744
Decadal Growth Rate (1991-01)	26.7
Sex Ratio*	928
Percent Urban population	9.3
Percent SC population	15.7
Percent ST population	0.04
Female Literacy Rate (7 years and above)	35.2
Male Literacy Rate (7 years and above)	60.2

<b>Sample outcome, DLHS -3, 2007-08</b>
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Category	No. covered	Response Rate
Households	1195	88.5
Ever Married Women (15-49 years)	1027	88.0
Unmarried Women (15-24 years)	164	83.2
Sub Centres (SC)	24	100.0
Primary Health Centres (P H C)	10	100.0
Community Health Centres (C H C)	2	100.0
District Hospital (D H)	1	100.0

<b>Population and Household Characteristics, 2007-08</b>
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Background Characteristics	DLHS - 3		DLHS - 2	
	Total	Rural	Total	Rural
Percent total literate Population (Age 7 +)	60.0	57.8	-	-
Percent literate Male Population (Age 7 +)	69.9	68.0	-	-
Percent literate Female Population (Age 7 +)	50.2	47.9	-	-
Percent girls (age 6-11) attending Schools	97.6	97.4	-	-
Percent boys (age 6-11) attending Schools	99.3	99.2	-	-
Have Electricity connection (%)	25.8	20.7	13.9	6.7
Have Access to toilet facility (%)	20.5	15.8	21.9	15.7
Use piped drinking water (%)	0.7	0.1	25.8	24.8
Use LPG for cooking (%)	6.7	3.1	6.6	2.1
Live in a pucca house (%)	18.0	15.2	14.6	10.1
Own a house (%)	98.1	98.4	-	-
Have a BPL card (%)	25.5	25.9	-	-
Own Agriculture Land (%)	45.5	47.3	-	-
Have a television (%)	14.2	10.1	17.3	12.4
Have a mobile phone (%)	19.4	16.6	-	-
Have a Motorized Vehicle (%)	7.9	6.3	8.4	6.4
<b>Standard of Living Index</b>				
Low (%)	81.4	86.2	75.4	81.1
Medium (%)	9.6	8.4	16.9	15.1
High (%)	9.0	5.4	7.7	3.8

* Number of Females per 1000 Males
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<b>Bihar</b>	<b>DLHS-3</b>		<b>District : Muzaffarpur</b>	
<b>Indicators</b>	<b>DLHS - 3</b>		<b>DLHS - 2</b>	
	<b>Total</b>	<b>Rural</b>	<b>Total</b>	<b>Rural</b>
<b>Marriage and Fertility, (Jan 2004 to 2007-08)</b>				
Percentage of girl's marrying before completing 18 years	35.7	37.0	47.0	48.2
Percentage of Births of Order 3 and above	50.5	50.7	53.8	54.9
Sex Ratio at birth	96	97	-	-
Percentage of women age 20-24 reporting birth of order 2 & above	66.4	67.1	-	-
Percentage of births to women during age 15-19 out of total births	9.6	9.8	-	-
<b>Family planning (currently married women, age 15-49)</b>				
<b>Current Use :</b>				
Any Method (%)	33.1	32.6	28.2	26.3
Any Modern method (%)	32.2	31.8	27.7	26.0
Female Sterilization (%)	28.9	29.6	24.3	23.3
Male Sterilization (%)	0.1	0.1	0.4	0.2
IUD (%)	0.6	0.6	0.8	0.6
Pill (%)	1.1	0.7	0.8	0.6
Condom (%)	1.3	0.6	1.3	1.2
<b>Unmet Need for Family Planning:</b>				
Total unmet need (%)	36.9	36.5	40.9	42.4
For spacing (%)	10.5	10.5	15.9	16.7
For limiting (%)	26.4	26.0	25.0	25.7
<b>Maternal Health:</b>				
Mothers registered in the first trimester when they were pregnant with last live birth/still birth (%)	20.6	18.2	-	-
Mothers who had at least 3 Ante-Natal care visits during the last pregnancy (%)	20.4	19.3	16.0	13.5
Mothers who got at least one TT injection when they were pregnant with their last live birth / still birth (%)#	54.9	52.5	34.3	31.2
Institutional births (%)	23.0	21.0	16.0	14.2
Delivery at home assisted by a doctor/nurse /LHV/ANM (%)	3.3	3.2	4.5	3.3
Mothers who received post natal care within 48 hours of delivery of their last child (%)	29.9	24.3	-	-
<b>Child Immunization and Vitamin A supplementation:</b>				
Children (12-23 months) fully immunized (BCG, 3 doses each of DPT, and Polio and Measles) (%)	57.4	57.1	36.2	32.7
Children (12-23 months) who have received BCG (%)	92.4	92.6	58.8	56.4
Children (12-23 months) who have received 3 doses of Polio Vaccine (%)	71.8	71.4	45.9	43.6
Children (12-23 months) who have received 3 doses of DPT Vaccine (%)	71.9	71.5	48.4	45.5
Children (12-23 months) who have received Measles Vaccine (%)	71.6	71.9	41.6	39.1
# It is adjusted according to DLHS-3 definition				

Bihar	DLHS-3		District : Muzaffarpur		
	Indicators	DLHS - 3		DLHS - 2	
		Total	Rural	Total	Rural
<b>Child Immunization and Vitamin A supplementation: (Contd...)</b>					
Children (9-35 months) who have received at least one dose of Vitamin A (%)	50.8	52.4	-	-	
Children (above 21 months) who have received three doses of Vitamin A (%)	1.7	1.6	-	-	
<b>Treatment of childhood diseases (children under 3 years based on last two surviving children)</b>					
Children with Diarrhoea in the last two weeks who received ORS (%)	19.8	20.3	3.8	3.4	
Children with Diarrhoea in the last two weeks who were given treatment (%)	84.2	83.8	89.4	88.3	
Children with acute respiratory infection/fever in the last two weeks who were given treatment (%)	73.4	74.6	-	-	
Children had check-up within 24 hours after delivery (based on last live birth) (%)	28.1	22.9	-	-	
Children had check-up within 10 days after delivery (based on last live birth) (%)	28.1	22.6	-	-	
<b>Child feeding practices (Children under 3 years)</b>					
Children breastfed within one hour of birth (%)	15.5	16.0	-	-	
Children (age 6 months above) exclusively breastfed (%)	5.2	5.0	-	-	
Children (6-24 months) who received solid or semisolid food and still being breastfed (%)	87.2	87.8	-	-	
<b>Knowledge of HIV/AIDS and RTI/STI among Ever married Women (age 15-49)</b>					
Women heard of HIV/AIDS (%)	25.3	20.6	28.8	24.6	
Women who knew that consistent condom use can reduce the chances of getting HIV/AIDS (%)	36.8	28.7	27.8	27.3	
Women having correct knowledge of HIV/ AIDS (%)	90.5	89.7	-	-	
Women underwent test for detecting HIV/ AIDS (%)	1.6	1.8	-	-	
Women heard of RTI/STI (%)	34.1	31.9	58.5	55.1	
<b>Knowledge of HIV/AIDS among Un-married Women (age 15-24)</b>					
Women heard of HIV/AIDS (%)	46.0	38.2	-	-	
Women who knew that consistent condom use can reduce the chances of getting HIV/AIDS (%)	29.5	16.9	-	-	
Women having correct knowledge of HIV/ AIDS (%)	88.5	89.6	-	-	
Women underwent test for detecting HIV/ AIDS (%)	0.0	0.0	-	-	
Women heard of RTI/STI (%)	25.0	17.4	-	-	
<b>Women facilitated/motivated by ASHA for</b>					
Ante-natal Care (%)	1.8	2.0	-	-	
Delivery at Health Facility (%)	3.3	3.4	-	-	
Use of Family Planning Methods (%)	0.5	0.6	-	-	

## Village (N=45)

## Indicators

## Number

Villages that have implemented Janani Suraksha Yojana (JSY)	40
Villages with Health & Sanitation Committee	1
Villages with Rogi Kalyan Samiti (RKS)	12
Villages where PRI aware of untied fund by Government	1
Health facility within village-ICDS (Anganwadi)	43
If health facility is not in the village, whether accessible to the nearest health facility throughout the year-ICDS (Anganwadi)	2
Health facility within village- Sub-Centre	16
If health facility is not in the village, whether accessible to the nearest health facility throughout the year-Sub-Centre	24
Health facility within village- PHC	0
If health facility is not in the village, whether accessible to the nearest health facility throughout the year-PHC	28
Health facility within village- Block PHC	0
If health facility is not in the village, whether accessible to the nearest health facility throughout the year-Block PHC	28
Health facility within village- Govt. Dispensary	0
If health facility is not in the village, whether accessible to the nearest health facility throughout the year-Government. Dispensary	28
Health facility within village- Private Clinic	1
If health facility is not in the village, whether accessible to the nearest health facility throughout the year-Private Clinic	28
Health facility within village- AYUSH Health Facility	0
If health facility is not in the village, whether accessible to the nearest health facility throughout the year-AYUSH Health Facility	14

## Facility Survey

## Indicators

## Number

## Indicators

## Number

## Community Health Centre (CHC) N = 2

Infrastructure :		Performance :	
CHC having Personal Computer	0	In-patients admission in last one month	115
CHC having Operation Theatre	2	Referred cases for serious ailments from CHC to higher centre during last one month	52
CHC having Labour Room	2	Deliveries performed in last one month	203
CHC having Blood Storage Facility	0	Blood transfusion done in last one month	0
CHC having large deep freezer	1	Sterilization conducted in last one month	25
CHC prepared a CHC plan for the current year	2		
CHC having water supply for 24 hours	2		
CHC having Ambulance on road	2		



## Facility Survey

Indicators

Number

Indicators

Number

## Community Health Centre (CHC) (Contd...)

## Human Resource :

CHC having General Surgeon

1

## Supply :

CHC with 24 hours normal delivery services

2

CHC having Obstetrician/ Gynecologist

1

CHC with 24 hours New born care

2

M.O. received training of Non-Scalpel Vasectomy (NSV) during last five years.

0

CHC recognized as Integrated Counseling and Testing Centre (ICTC)

0

M.O. received training for Prevention, Care and Support for HIV/AIDS during last five years.

1

M.O. received training of basic Emergency Obstetric Care during last five years.

0

M.O. received training of Integrated Management of Neonatal and Childhood illness during last five years.

0

## Primary Health Centre (PHC) N= 10

## Infrastructure :

PHC having Residential Quarter for Medical Officer

7

## Performance :

Haemoglobin tests (TLC/DLC) conducted during last one month

0

PHC having separate Labour Room

5

Blood smear examinations for malaria parasite conducted during last one month

59

PHC having Personal Computer

0

In-patient admissions during last one month

1,858

PHC having Normal Delivery Kit

7

Referral cases for serious ailments from PHC to higher centres during last one month

516

PHC having Large Deep Freezer

3

Deliveries performed during last one month

674

PHC having regular water supply

10

Beneficiaries of JSY during last one month

444

PHC having Neonatal Warmer (Incubator)

0

Women provided with post-natal care services during last one month

424

PHC having Operation Theater with Boyles Apparatus

2

New born care provided during last one month

620

PHC having Operation Theater with anaesthetic medicine

3

Infants and children immunized during last one month

6,142

Condoms distributed during last one month

356

PHC prepared the PHC plan for current year

6

## Facility Survey

Indicators

Number

Indicators

Number

## Primary Health Centre (PHC) (Contd...)

## Human Resource :

PHC having Lady Medical Officer (LMO)

4

## Supply :

PHC that received the untied fund in previous financial year.

7

PHC having Laboratory Technician

5

PHC organized any training programme in their PHC during last year.

7

PHC having at least one MO, who received Integrated Skill Development Training for 12 days during last five years.

6

PHC having at least one MO, who received IMNCI training during last five years.

1

## Sub Centre (SC) N = 24

## Infrastructure :

Sub Centre located in government building

15

## Performance :

Number of Infants and children immunized

3,828

Sub Centre having communication facility

0

Sub Centre having separate labour room

5

ANM staying in Sub Centre village

5

Sub Centre having staff quarter for ANM

5

Sub Centre having regular water supply

19

## Human Resource :

## Supply :

Sub Centre where Male Health Worker in position

3

Sub-Centre having auto-disposable syringes

19

ANM had Integrated Skill Development Training in last 5 years

8

Sub-Centre reporting IFA tablets out of stock for more than 10 days during last one month

13

ANM ever been trained in Integrated Skill Development Training

13

Sub-Centre reporting Vitamin A out of stock for more than 10 days during last one month

13

ANM trained in integrated management of neonatal and childhood illnesses (IMNCI) in last 5 years

5

Sub-Centre reporting ORS packets out of stock for more than 10 days during last one month

17

ANM ever been trained in integrated management of neonatal and childhood illnesses (IMNCI)

8

Sub-Centre that received untied fund in previous financial year

9

ANM who attended Skilled birth attendant (SBA) training

10

## Performance at a Glance

