



सत्यमेव जयते
Government of India
Ministry of Health & Family Welfare

2009 Coverage Evaluation Survey



Introductory Note

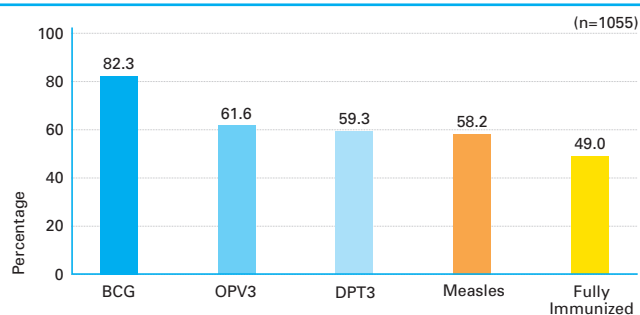
The Coverage Evaluation Survey 2009 (CES-2009), a nationwide survey covering all States and Union Territories of India, was conducted during November 2009 to January 2010. The survey was commissioned by United Nations Children's Fund (UNICEF) with the funding from IKEA Social Initiative. ORG Centre for Social Research was entrusted to carry out the survey.

MOHFW, Government of India constituted a Technical Advisory Committee (TAC) to provide oversight and coordinate various activities related to CES-2009 including sampling, survey methodology, questionnaires, quality guidance, tabulation plan, data analysis, final tabulation and data presentation. The data collection was monitored independently by National Institute of Health and Family Welfare, New Delhi in collaboration with Population Research Centers.

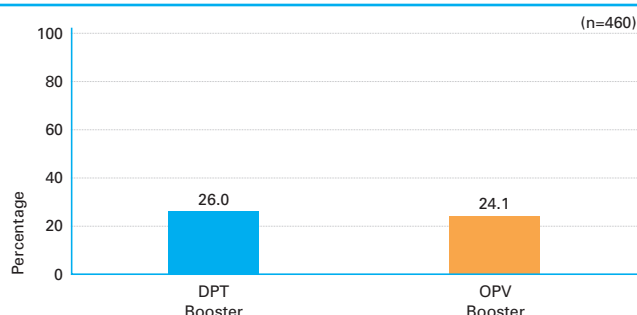
Bilingual questionnaires in local language and in English were used. The data was collected from 45,058 households, 22,604 mothers of children of age 12-23 months and 22,984 women who delivered during the last 12 months across India.

CHILD IMMUNIZATION

Immunization among 12-23 months Children (%)

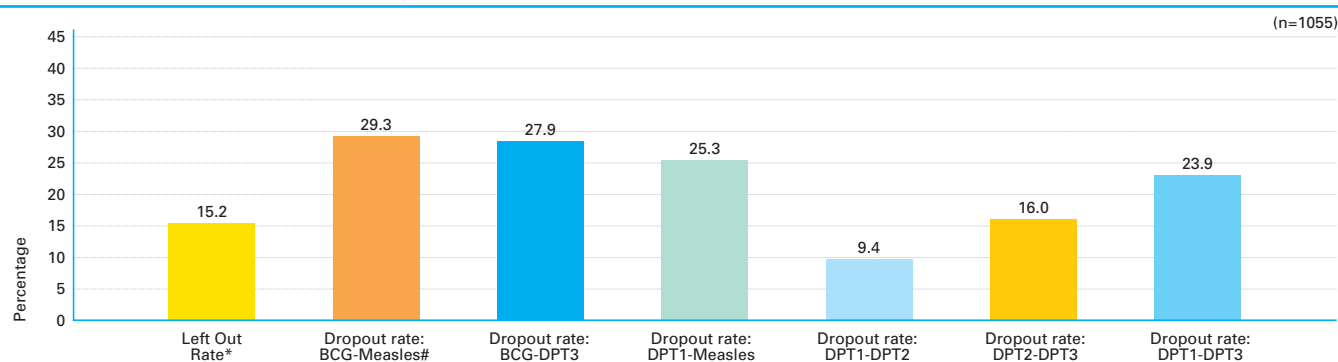


Booster Immunization among 18-23 months old children



Fully Immunized – Children (12-23 months age) receiving one dose BCG, 3 doses of DPT/OPV each and 1 measles vaccine.

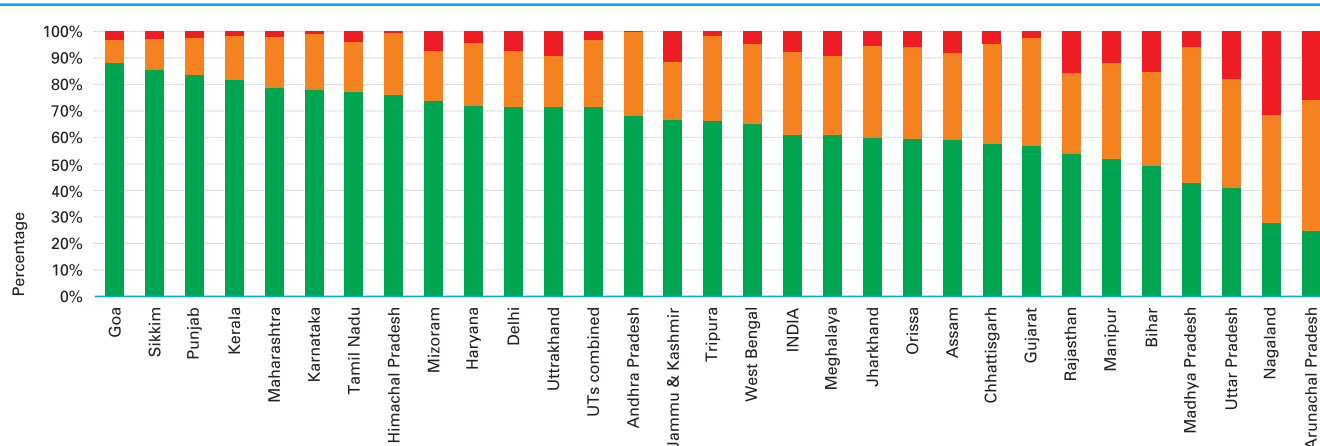
Child Immunization – Left-out and Drop-out Rates



* Children 12-23 months age not receiving any vaccination

Example calculation of drop-out rate: BCG coverage minus measles coverage divided by BCG coverage.

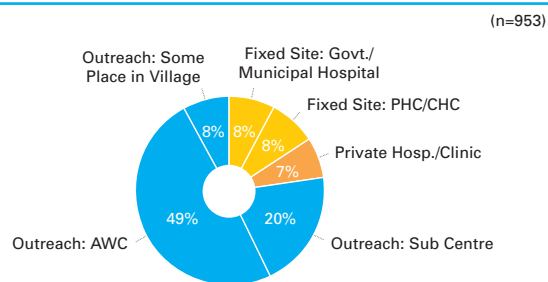
Immunization Status Among 12-23 months Children by States



■ Full Immunization ■ Partial Immunization ■ No Immunization

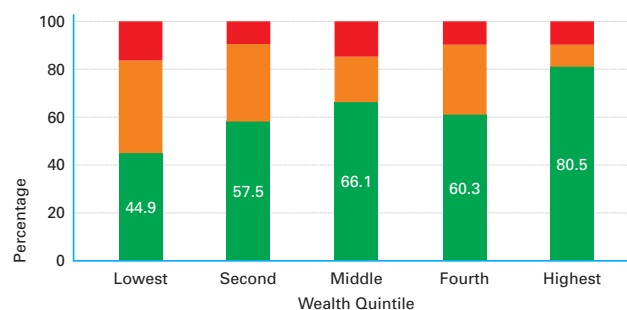
Indicator	Rural	Urban	Total
Number of Children (12-23 months) (n)	628	427	1055
Immunization Card (issued and seen) (%)	42.1	51.6	43.1
Distance travelled to reach vaccination site (in km) (%)			
<1	75.6	38.8	71.8
1 to 3	15.7	47.2	19.0
3 to 5	3.1	6.6	3.5
5+	5.6	7.4	5.8
Mean distance (in km)	1.0	1.8	1.1
Time taken to reach vaccination site (in Minutes) (%)			
<20	83.5	66.0	81.7
20-30	7.9	19.0	9.0
30+	8.6	15.0	9.3
Mean Time taken (in minutes)	15.0	22.7	15.8

Location where child received most vaccination



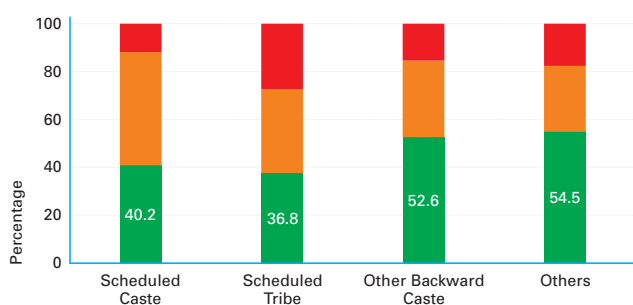
■ Outreach ■ Fixed site ■ Private

Immunization Status by Wealth Quintile



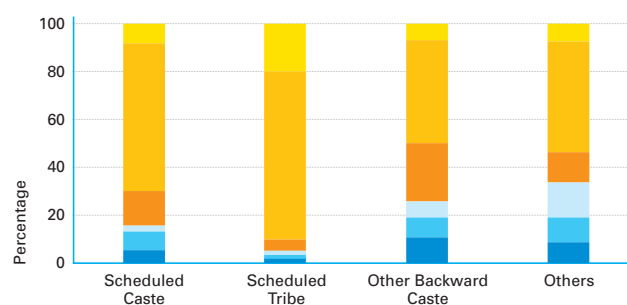
■ Full Immunization ■ Partial Immunization ■ No Immunization

Immunization Status by Caste



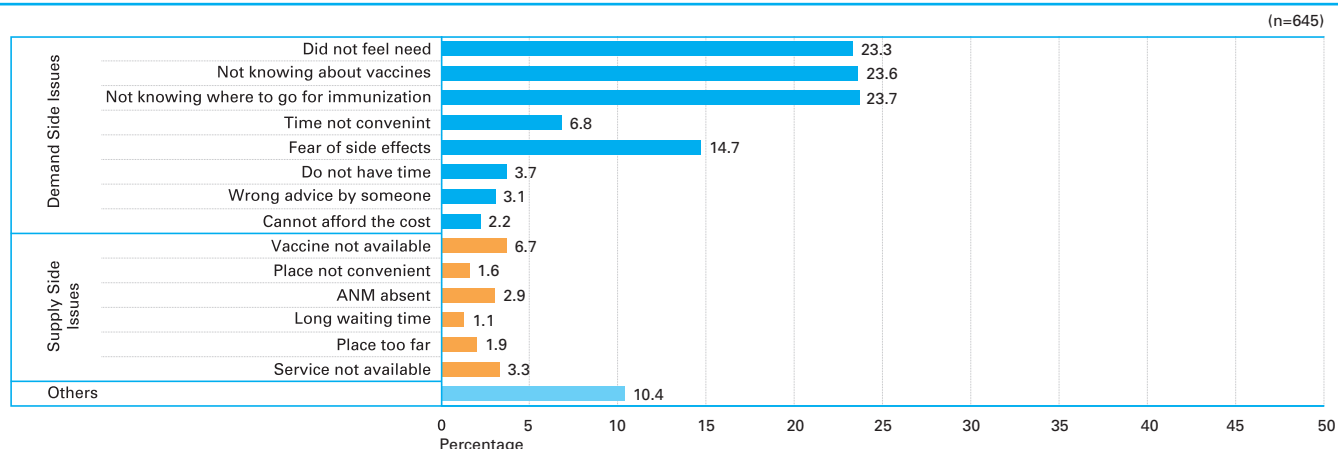
■ Full Immunization ■ Partial Immunization ■ No Immunization

Place of Immunization by Caste



■ Outreach: Some Place in Village ■ Outreach: AWC ■ Outreach: Sub Centre
■ Private Hosp./Clinic ■ Fixed Site: PHC/CHC ■ Fixed site: Govt./Municipal Hospital

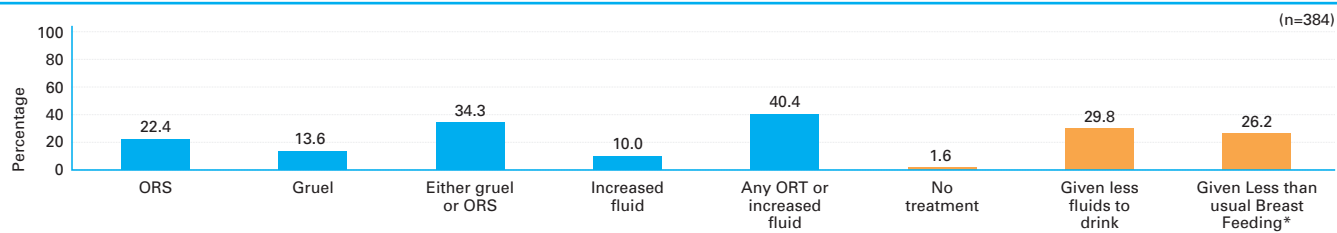
Reasons for partial or no immunization (multiple responses)



CHILD HEALTH (0-2 YEARS)

Indicator	Rural	Urban	Total
Number of children of 0-2 years of age (n)	1265	848	2113
Acute Respiratory Infection (ARI) in previous 2 weeks (%)	22.6	24.4	22.8
Proportion seeking ARI treatment at (multiple response) (%)			
Govt. Health Facility/Provider	6.5	5.0	6.4
Pvt. Health Facility/Provider	75.3	88.3	76.7
Any health facility	81.6	92.4	82.9
Proportion not seeking any healthcare for ARI	18.4	7.6	17.1
Acute Diarrhea in previous 2 weeks (%)	17.6	19.4	17.8
Proportion seeking Diarrhea treatment at (multiple response) (%)			
Govt. Health Facility/Provider	3.5	6.3	3.9
Pvt. Health Facility/Provider	60.4	58.6	60.2
Any health facility	63.7	64.9	63.8
Others	2.2	0.5	2.0
Proportion not seeking any healthcare for Acute Diarrhea	36.3	35.1	36.2

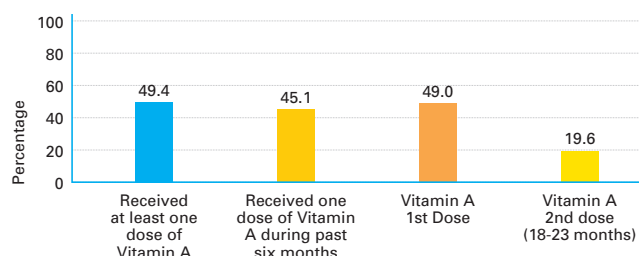
Treatment of Childhood Diarrhea (0-2 years)



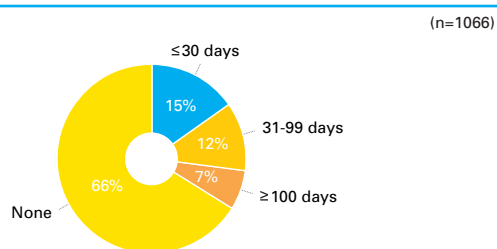
* Among children who were currently breastfed.

MICRONUTRIENT

Vitamin A Supplementation in Children 12-23 months

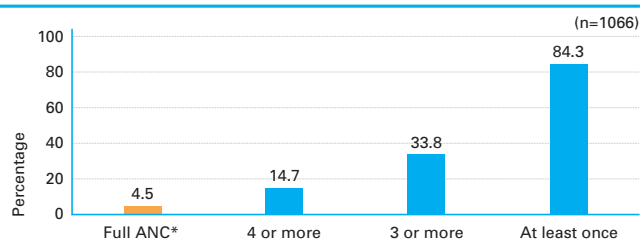


Consumption of Iron Folic Acid during Pregnancy (in Days)



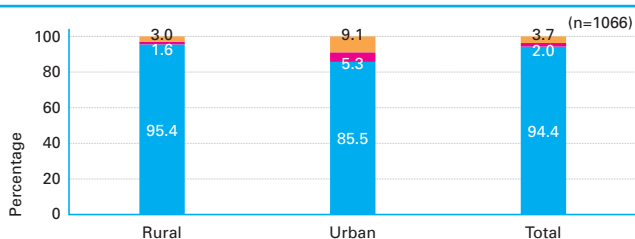
MATERNAL HEALTH

Antenatal Care: Number of times care received



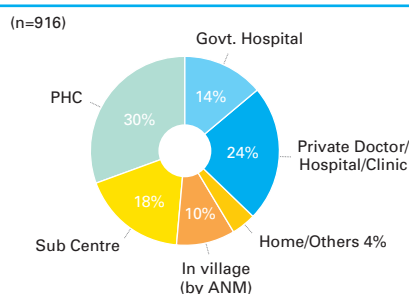
*Pregnant women who had at least 3 ANC checkups, 1 TT injection and ≥100 IFA tablets/syrup consumed.

Nature of Last Delivery

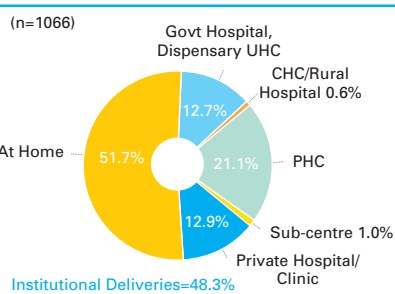


Legend: Caesarean section (orange), Assisted delivery (pink), Normal (blue)

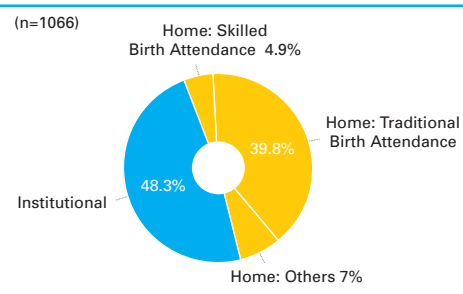
Place of ANC: Women who received any ANC



Place of Delivery

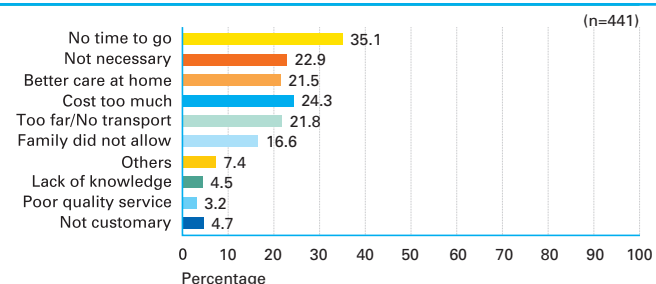


Skilled Birth Attendance: Home vs Institutional Deliveries

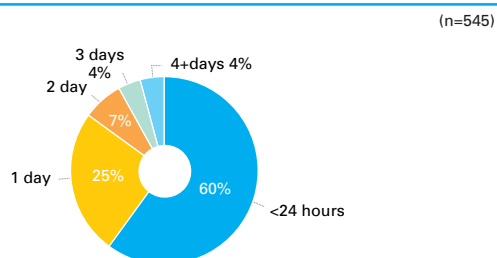


Skilled birth attendance: Deliveries conducted by Doctor, ANM, Nurse, LHV

Reasons for not Delivering at Institution (Multiple Responses)



Duration of Stay at Health Facility (Normal or assisted delivery)



MATERNAL CARE (WOMEN DELIVERING IN PREVIOUS 12 MONTHS)

Indicator	Rural	Urban	Total
Women delivering in previous 12 months (n)	642	424	1066
Pregnancy registration			
Percent registered during last pregnancy	91.3	97.9	92.0
Government doctor	14.6	22.8	15.5
ANM	11.3	8.4	11.0
Anganwadi worker	28.6	11.1	26.8
ASHA	3.8	0.8	3.5
Private doctor	32.4	54.2	34.7
Others	0.5	0.5	0.5
Stage of Pregnancy at the time of first ANC (%)			
No antenatal check up	16.8	6.7	15.7
First trimester	31.4	48.0	33.2
Second trimester	41.8	33.5	40.9
Third trimester	9.7	10.7	9.8
Don't Remember	0.3	1.1	0.3
No. of days IFA tablets/syrup consumed during pregnancy (%)			
< = 30	15.5	15.0	15.5
31-99	11.6	17.8	12.3
> = 100	5.5	17.0	6.7
None	67.3	50.2	65.5
TT Injection 2+	85.8	87.2	85.9
Full ANC*	3.3	14.6	4.5
Distance travelled to get ANC services (in Kms) (%)			
<1	37.9	38.4	38.0
1-2	18.3	42.2	20.9
3-4	19.2	8.8	18.1
5+	24.5	10.6	23.0
Mean distance (in Kms)	3.0	1.7	2.9
Time taken to reach the place for getting ANC Services (in minutes)			
<10	17.0	15.3	16.8
10-20	33.5	49.4	35.2
20-30	24.0	23.4	24.0
30-60	17.2	9.1	16.3
60+	7.4	2.7	6.9
Don't Remember	0.9	0.2	0.8
Mean time taken (in minutes)	30.7	22.1	29.7

*Pregnant women who had at least 3 ANC checkups, 1 TT injection and ≥100 IFA tablets/syrup consumed

DELIVERY CARE (WOMEN DELIVERING IN PREVIOUS 12 MONTHS)

Indicator	Rural	Urban	Total
Number of women delivering in previous 12 months (n)	642	424	1066
Institutional Delivery (%)			
Public Facility	46.1	67.4	48.3
Private Facility	35.6	34.9	35.5
Skilled Birth Attendance (institutional + home deliveries)	50.8	73.5	53.2
For all Institutional Deliveries			
Distance of health facility (in Km)			
< = 1	15.2	29.1	17.2
2-5	37.6	37.0	37.5
6-10	23.3	10.8	21.5
11-20	6.3	1.2	5.5
20-30	2.5	1.2	2.3
30+	2.1	0.3	1.8
Don't Know/Can't say	13.0	20.5	14.0
Mean Distance from House (in Km)	8.2	3.9	6.2
Time taken to reach the facility (in minutes)			
< = 30	55.9	82.5	59.8
31-60	31.3	14.4	28.8
61-90	4.7	0.5	4.1
>90	8.1	2.7	7.3
Mean time taken (in minutes) to reach the facility	47.5	27.1	37.2

INSTITUTIONAL DELIVERY AND JSY SCHEME*

Indicator	Bihar	Low Performing States	India
Number of women who delivered in the previous 12 months (n)	1066	8355	22984
Proportion aware of JSY scheme* (%)	74.0	58.9	60.0
Proportion received any assistance under JSY during delivery* (%)	24.5	40.0	32.5
Number of women who delivered in institution in previous 12 months (Government + private) (n)	625	5748	17705
Proportion women reported that ASHA accompanied her to health facility for institutional delivery** (%)	54.1	39.9	21.4
Proportion women reports ASHA stayed at health facility** (%)	51.9	35.6	18.1
Number of women who delivered in Government institution in previous 12 months (n)	375	4076	11715
Proportion of women who delivered in Government institution and received assistance under JSY*** (%)	66.6	81.1	59.3
Proportion women reported that ASHA accompanied her to Government facility for institutional delivery*** (%)	74.2	54.3	30.4
Proportion women reports ASHA stayed at health facility*** (%)	69.9	49.1	26.7
Number of women who delivered in institution in previous 12 months (Government + private) (n)	625	5748	17705
Women who delivered in institution by Bed facility** (%)			
Separate bed	87.8	84.6	85.8
Shared bed	9.4	9.7	10.3
No bed	2.8	5.8	3.9

* Base = all women who delivered in the previous 12 months (all government & private institutional and home deliveries);

** Base = all women who delivered in institution (both Government and Private);

*** Base = all women who delivered in Government institution;

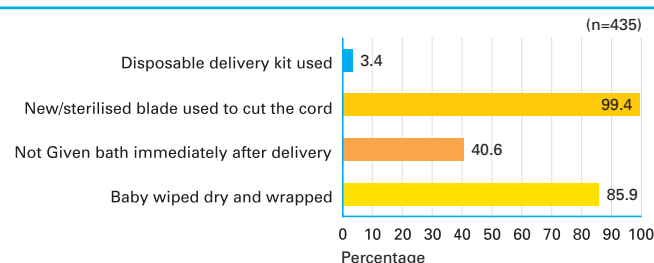
(Note: Segregation of states into low/high performing is as per JSY scheme)

Janani Suraksha Yojana Scheme

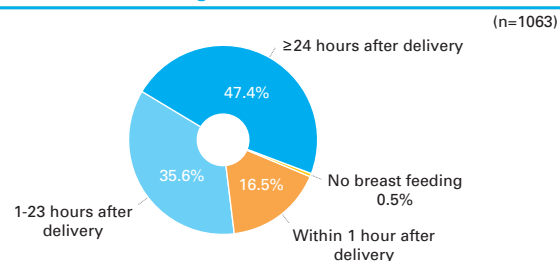
NEWBORN CARE

Indicators	Rural	Urban	Total
Number of newborns in the previous 12 months (n)	640	423	1063
Proportion of newborns checked up <24 hours after birth	61.8	70.7	62.9
Number of checkups done within 10 days after birth (%)			
None	38.2	29.3	37.1
1	12.9	17.7	13.4
2	29.1	21.9	28.3
3+	19.9	31.1	21.1

Newborn Care at Birth (for home deliveries)



Initiation of Breast Feeding (Home + Institutional live births)



BREAST FEEDING PRACTICES DURING FIRST 6 MONTHS ACCORDING TO AGE OF LIVING CHILD

Age in months	Number of living Children (n)	Never Breast fed	Exclusive breast feeding till 6 months of age	Not Exclusive Breast Feeding			
				Breast Feeding + Water	Breast Feeding + Other milk	Breast Feeding + Other supplements	Breast Feeding + Other Food
<2	140	0.0	68.5	7.6	21.3	0.0	2.5
2-3	220	0.0	69.3	8.7	20.9	0.6	0.5
4-5	137	0.0	45.3	12.5	33.4	7.1	1.7
6-8	217	0.9	32.0	22.6	36.0	7.7	0.8
9-11	344	0.5	25.6	26.4	38.8	5.7	3.0
18-23	460	3.9	29.4	28.9	31.5	5.3	1.1
<4	360	0.0	69.0	8.3	21.0	0.4	1.3
<6	497	0.0	61.5	9.6	25.0	2.5	1.4
6-9	310	0.6	31.8	23.2	33.8	9.7	0.9

(All figures in percentage)

SURVEY PROFILE

Sample Size			
Respondents	Rural	Urban	Total
Number of children, total and by age	1265	848	2113
0-5 months	301	196	497
6-11 months	336	225	561
12-17 months	362	233	595
18-23 months	266	194	460
12-23 months	628	427	1055
Number of women who delivered in previous 12 months	642	424	1066
Number of Households	1246	835	2081

Characteristics of Sampled Population			
Characteristics	Rural	Urban	Total
Sampled population by Caste (%)			
Scheduled Caste	29.9	16.4	28.5
Scheduled Tribe	1.9	0.7	1.8
Other Backward Classes	57.8	53.8	57.4
Others	10.3	29.1	12.3
Sampled population by Religious Groups (%)			
Hinduism	83.6	67.7	81.9
Islam	16.4	32.3	18.0
Sikhism	0.0	0.0	0.0
Christianity	0.0	0.0	0.0
Other religious groups	0.1	0.0	0.0
Main source of drinking water			
Improved source	97.0	99.1	97.2
Type of Toilet Facility			
Flush or Pour Flush Toilet	18.2	56.9	22.3
Pit Latrine	2.2	4.2	2.4
No facility/Bush/Field	79.6	38.9	75.3
Type of house			
Kachcha	44.9	19.2	42.2
Semi-Pucca	38.2	29.5	37.3
Pucca	16.9	51.3	20.5
Household with bank account	25.6	47.2	27.9
Household with BPL* card	50.7	35.6	49.1

* BPL = Below Poverty Line

SAMPLING DESIGN

The data for the CES 2009 was collected from mothers or care takers of child aged 12-23 months for child care services and from women who delivered during 12 months preceding the survey. Sample for each state was estimated to give results at 5% margin of error and 95% confidence interval. It was decided to have deep stratification that will make the samples more efficient and sampling biases get reduced considerably. Further, more sample was covered from bigger states. In each state, rural-urban sample was allocated in 60 to 40 ratios.

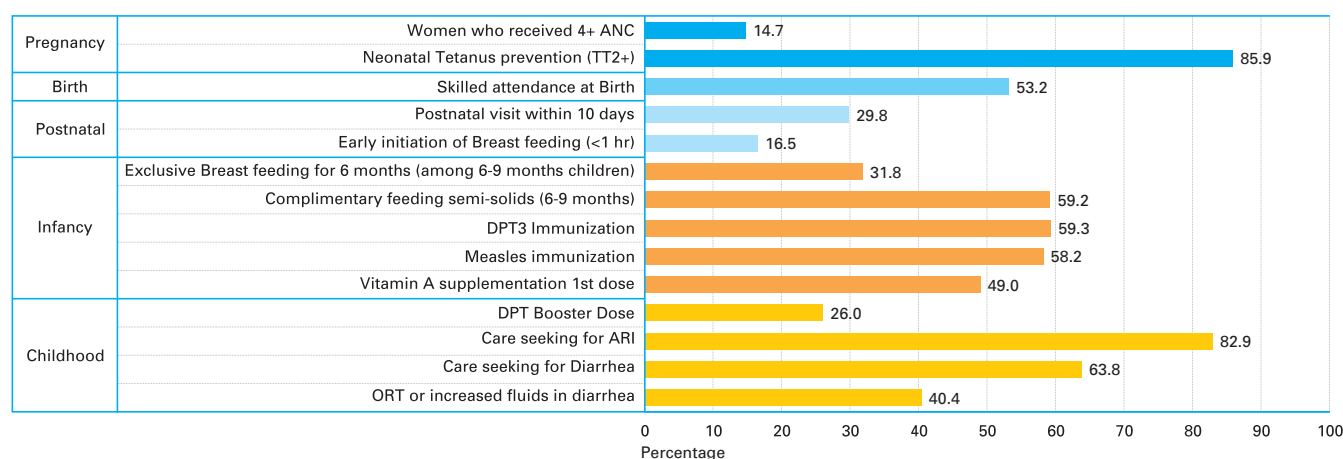
Sampling in Rural Areas: For selecting the sample in rural areas in a state, a two stage sampling procedure was followed i.e., selection of villages at the first stage followed by the selection of households. Further, in first stage, districts were grouped into regions considering geographical contiguity as per procedure followed in NFHS-3. The state rural sample was allocated to regions in proportion to their respective rural population sizes. All the villages in each geographical region were further stratified into three strata viz., villages with <50 households, villages with 51-200 households and villages with more than 200 households. The number of PSUs in each region was allocated to each stratum in proportion to the total rural population in the region. In each region,

the required number of villages was selected using PPS systematic random sampling procedure using '% SC/ST population' or '% female literacy', both as per 2001 Census, as implicit variables.

Sampling in Urban Areas: In each state all the towns were stratified in to five strata viz., metros, towns with more than 10 lakh population, towns with 5 lakh to 10 lakh population, towns with 1 lakh to 5 lakh population and towns with less than 1 lakh population. Total state urban sample was allocated to different strata in proportion to the urban population and in each stratum wards were selected using PPS systematic random sampling procedure. From each ward, one census enumeration block (CEB) was selected randomly.

Selection of Households: In each selected village/CEB complete listing of the households was done to identify households with children 12-23 months, households with mothers who delivered during last 12 months. In each village/CEB, 10 households with child age 12-23 months and 10 mothers who delivered in the last 12 months were selected using systematic random sampling procedure and from selected households all eligible mothers/care givers were interviewed.

COVERAGE ALONG THE CONTINUUM OF CARE



SELECTED KEY INDICATORS BY STATE

States/UT	At least 1 ANC	≥3 ANC	Full ANC (Women who received 3 ANC checkups, one TT injection and consumed 100 + IFA tablets)	Institutional Delivery	Skilled Birth Attendance (Delivery by Doctor, ANM/Nurse/LHV)	DPT3 Vaccine	Measles Vaccine	Full Immunization (Children (12-23 months) receiving 1 dose BCG, 3 doses of DPT/OPV each and 1 measles vaccine)	DPT Booster Dose (Children aged 18-23 months who received DPT booster dose)	Vitamin A 1st Dose	Early Initiation of Breast Feeding (<1hr)	ORT or Increased Fluids for Diarrhea (Among children <2 year of age who had diarrhea in preceding 2 weeks)	Care Seeking for ARI in any health Facility (Among children <2 year of age who had ARI in preceding 2 weeks)
Andhra Pradesh	99.5	97.0	46.2	94.3	95.6	89.9	90.4	68.0	58.3	84.4	27.2	54.9	88.2
Arunachal Pradesh	69.8	50.4	16.3	69.9	71.9	45.0	48.2	24.8	35.9	40.0	55.6	84.6	64.5
Assam	89.6	66.4	21.3	64.4	65.5	67.5	80.1	59.1	27.7	69.3	46.1	60.0	79.2
Bihar	84.3	33.8	4.5	48.3	53.2	59.3	58.2	49.0	26.0	49.0	16.5	40.4	82.9
Chhattisgarh	98.7	71.4	19.9	44.9	56.4	66.5	73.1	57.3	37.4	62.1	44.4	68.3	85.0
Delhi	95.9	83.4	41.6	83.6	84.6	79.5	83.3	71.5	56.1	65.2	28.5	75.2	90.7
Goa	99.2	97.7	53.4	99.8	99.8	92.4	91.5	87.9	89.1	87.8	66.3	81.8	97.0
Gujarat	94.8	83.2	45.7	78.1	85.2	68.0	78.0	56.6	43.7	66.9	50.0	63.0	84.4
Haryana	89.4	68.6	42.9	63.3	69.3	75.0	79.9	71.7	27.9	55.9	51.0	79.8	92.2
Himachal Pradesh	91.3	67.4	39.2	50.3	53.7	93.4	96.2	75.8	73.2	87.8	38.8	57.4	92.6
Jammu & Kashmir	93.8	87.0	43.5	80.9	82.9	77.0	77.2	66.6	42.0	59.0	20.4	79.8	83.7
Jharkhand	87.6	57.5	10.9	40.1	47.3	68.7	67.5	59.7	22.4	63.3	15.6	39.4	70.9
Karnataka	97.5	91.3	40.2	86.4	88.4	88.2	89.9	78.0	68.4	85.5	38.2	74.0	90.7
Kerala	97.4	90.8	77.9	99.9	99.9	88.7	86.2	81.5	62.4	66.8	66.0	74.2	94.2
Madhya Pradesh	92.3	60.0	11.1	81.0	82.9	50.6	61.9	42.9	29.8	45.1	31.2	45.9	75.8
Maharashtra	97.3	82.6	27.0	81.9	85.5	85.8	91.2	78.6	60.6	82.6	51.3	58.1	93.1
Manipur	93.7	85.0	28.4	80.0	82.7	62.7	60.3	51.9	39.9	47.9	75.1	82.9	77.8
Meghalaya	95.1	71.0	28.1	63.7	65.2	69.3	74.1	60.8	16.4	58.1	67.7	88.4	94.3
Mizoram	91.9	79.0	21.7	83.0	85.1	77.8	81.1	73.7	67.1	74.4	56.5	60.8	87.6
Nagaland	53.7	29.4	3.5	30.4	43.8	45.9	52.2	27.8	13.6	28.2	49.4	57.5	50.6
Orissa	98.0	77.0	37.5	75.5	79.1	70.5	71.9	59.5	15.9	69.7	63.7	69.0	79.4
Punjab	95.3	73.4	29.4	60.3	66.7	91.4	87.3	83.6	53.8	73.1	16.4	53.3	94.7
Rajasthan	86.8	55.2	14.6	70.4	75.8	60.1	65.6	53.8	25.1	59.9	27.7	48.9	89.9
Sikkim	91.9	87.3	27.7	68.9	69.9	85.3	87.8	85.3	63.7	90.1	55.7	63.5	91.2
Tamil Nadu	98.5	92.6	44.1	98.4	98.6	78.6	88.4	77.3	78.9	52.6	39.1	66.3	88.8
Tripura	90.9	83.1	21.5	82.6	83.1	70.6	68.8	66.0	50.7	68.0	7.1	76.4	95.5
Uttar Pradesh	71.6	38.2	12.4	62.1	64.2	58.1	52.8	40.9	17.0	48.9	15.6	29.2	72.3
Uttarakhand	74.6	54.8	17.0	53.5	58.7	78.1	75.8	71.5	37.1	60.8	24.9	17.6	83.2
West Bengal	99.0	83.2	17.4	69.5	72.6	72.8	77.2	64.9	46.7	73.4	29.2	49.9	77.8
UTs combined	90.2	82.8	41.0	88.1	90.7	82.0	83.3	71.3	72.3	67.8	42.9	65.4	95.8
INDIA	89.6	68.7	26.5	72.9	76.2	71.5	74.1	61.0	41.4	64.0	33.5	53.6	82.6

(All figures in percentage)

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