

CHILD HEALTH PROGRAMME

5.1 INTRODUCTION

The Child Health programme under the National Health Mission (NHM) comprehensively integrates interventions that improve child survival and addresses factors contributing to infant and under-five mortality. It is now well recognised that child survival cannot be addressed in isolation as it is intricately linked to the health of the mother, which is further determined by her health and development as an adolescent. Therefore, the concept of Continuum of Care, that emphasises care during critical life stages in order to improve child survival, has been adopted under the national programme. Another dimension of this approach is to ensure that essential services are made available at home, through community outreach and through health facilities at various levels (primary, first referral units and tertiary health care facilities). The newborn and child health are now the two key pillars of the Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) strategic approach, 2013.

5.2 TRENDS OF CHILD HEALTH INDICATORS

5.2.1 Infant Mortality Rate (IMR)

Infant Mortality Rate (IMR) refers to the number of deaths of children in the age 0-1 year per thousand live births. The all India IMR in 2013 was 40. The percentage annual compound rate of decline during 2005-2012 has been higher (4.5%) as compared to the decline of 3.1% observed during 2000-2005 and decline is further accelerated (4.8%) in 2013. IMR

Year	IMR			Average annual Compound Rate of change (%) over previous period		
	Total	Rural	Urban	Total	Rural	Urban
2000	68	74	44	-	-	-
2005	58	64	40	-3.1	-2.9	-1.9
2012	42	46	28	-4.5	-4.6	-5.0
2013	40	40	27	-4.8	-13.0	-3.6

for the year 2013 was 40 in rural and 27 in urban India (about 48% higher in rural as compared to urban India). There is a constant gender differential of three points in IMR at national level over last five years.

5.2.2 Under-five Mortality Rate (U5MR)

Under-five mortality is defined as the probability of dying before the fifth birthday. As per the Sample Registration System 2013, the under five-mortality rate is 49 per thousand live births.

Encouraging progress has been in the country made in terms of reducing child mortality rates. In 1990, when the global U5M rate was 90 per 1000 live births, India carried a much higher burden of child mortality at 126 per 1000 live births. In 2013, India's under five child mortality (49/1000 Live births) is much closer to the global average of 48.

5.2.3 Cause of Under-5 Mortality

As per WHO 2012 estimates, the causes of Child Mortality in the age group 0-5 years in India are Neonatal causes (53%), Pneumonia (15%),

Diarrhoeal disease (12%), Measles (3%), Injuries (3%) and others (14%).

5.2.4 Neo-natal Mortality Rate (NMR)

Neo-natal Mortality Rate refers to the number of deaths of children during the period of 0-28 days per thousand live births. NMR stands 28 per 1000 live births in India in 2013. Neonatal mortality thus contributes 57% of all deaths in childhood (up to age 5 years).

Year wise Progress in Neo-natal Mortality Rate

Year	NMR (per1000 live births)	Average annual change (%) over previous year
2008	35	0
2009	34	-2.9
2010	33	-3.03
2011	31	-6.1
2012	29	-6.5
2013	28	- 3.4

Source: Sample Registration System (SRS), RGI, India

5.2.5 Causes of Neo-natal Mortality

The major causes of neonatal deaths are Infections (33%) such as Pneumonia, Septicemia and Umbilical Cord infection; Prematurity (35%) i.e. birth of newborn before 37 weeks of gestation and Asphyxia (20%) i.e. inability to breathe immediately after birth and leads to lack of oxygen.

5.3 NEWBORN AND CHILD HEALTH INTERVENTIONS

5.3.1 Facility Based Newborn Care (FBNC)

Facility Based Newborn Care (FBNC) is one of the key components under the National Health Mission to improve the status of newborn health in the country. A continuum of newborn care has been established with the launch of home based and facility based newborn care components ensuring that every newborn receives essential care right from the time of birth and first 48 hours at the health facility and then at home during the first 42 days of life. Newborns identified as sick or pre-term/low

birth weight soon after birth or during home visit are referred to special newborn care facilities for further management and long term follow up after discharge.

Newborn Care Corners (NBCCs) are established at delivery points to provide essential newborn care at birth, while Special Newborn Care Units (SNCUs) and Newborn Stabilization Units (NBSUs) provide care for sick newborns. As on September 2014, a total of 14,135 NBCCs, 1,810 NBSUs and 548 SNCUs have been made operational across the country.

5.3.2 Special Newborn Care Unit (SNCU)

Online Reporting Network is being established in 7 States with 245 SNCUs to generate real time data. About 2.5 lakhs newborns have been registered in the data base.

5.3.3 Janani Shishu Suraksha Karyakram (JSSK)

Complete elimination of out of pocket expenses with provision of free transport, drugs, diagnostics and diet to all sick newborns and infants is being ensured in the country. About 8 lakhs sick infants availed services under JSSK till September, 2014 during the year 2014-15.

1.3 lakh health care providers have been trained in essential newborn care and resuscitation under Navjaat Shishu Suraksha Karyakram (NSSK) programme that are placed at delivery points.

5.3.4 Ensuring Injection Vitamin K in all the births

All the public and private health facilities should ensure single dose of Injection Vitamin K prophylaxis at birth even at the sub- centre by ANM. The States/UTs has to ensure the supplies of Injection Vitamin K1, 1mg/ml along with the disposable syringe 1ml with needle no. 26. The state has to make necessary procurement. A detailed

operational guideline has developed and disseminated in September, 2014.

5.3.5 Up scaling of Kangaroo Mother Care (KMC) in health facility

Up to half a million newborns could be saved each year if Kangaroo Care was promoted everywhere. Each state to have a model unit for training site and all the rest of the units can start with renovation and some additions. A detailed operational guideline has developed and disseminated in September, 2014.

5.3.6 Empowering frontline health service providers

The ANMs are now empowered to give a pre-referral dose of antenatal corticosteroid (Injection Dexamethasone) to pregnant women going into pre-term labour and pre-referral dose of Injection Gentamicin and Syrup Amoxicillin to newborns for the management of sepsis in young infants (upto 2 months of age).

Govt. of India (GoI) has recommended a single course of Injection Dexamethasone (4 doses) to all the pregnant women who go in pre-term labour between 24-34 weeks. ANMs are also empowered to ensure Antenatal Pre-referral dose of Injection Corticosteroids while referring a pregnant mother in true pre-term labour between 24-34 weeks. She will complete the course in case referral is not possible or refused. A detailed operational guideline has developed and disseminated in September, 2014.

5.3.7 National Training Package for Facility Based Newborn Care has been developed with participation of national neonatal experts in the country. This package will improve the cognitive knowledge and build psychomotor skills of the medical officers and staff nurses posted in these units to provide quality newborn care. The training includes 4 day class room training and 14 day observership training in smaller batches.

5.3.8 Establishing Network of Resource (Collaborative) Centres

Currently there is only one National Collaborating Centre and 4 Regional Collaborating Centre to provide observership training for FBNC. The plan is to have 6 state perinatal resource centres in the initial phase and then upscale it to at least each state having its own Collaborative Centre for training, mentoring, supportive supervision and data collection.

5.3.9 India Newborn Action Plan (INAP)

On 18th Sept 2014, India Newborn Action Plan was launched in response to Global Newborn Action Plan. INAP lays out a vision and a plan for India to end preventable newborn deaths, accelerate progress and scale up high-impact yet cost-effective interventions. INAP has a clear vision supported by goals, strategic intervention packages, priority actions and a monitoring framework. For the first time, INAP also articulates the Government of India's specific attention on preventing still births. With clearly marked timelines for implementation, monitoring and evaluation and scaling-up of proposed interventions, it is expected that all stakeholders working towards improving newborn health in India will stridently work towards attainment of the goals of "Single Digit NMR by 2030" and "Single Digit SBR by 2030".

5.4 HOME BASED NEWBORN CARE (HBNC) SCHEME

To establish continuum of care, facility based care is linked to Home Based Newborn Care which provides opportunity for early diagnosis of danger signs, prompt referral to an appropriate health facility with provision for newborn care facility, saves lives. All the rural live births are targeted to receive home based new born care through series of home visit by ASHAs and as a result, ASHA is being paid of Rs. 250/- on completion of the visit. The sick

and low birth weight babies will need extra visits. More than 10 lakh newborns are visited by ASHAs as on September, 2014.

In addition, ASHAs are now entitled to receive incentive of Rs. 50/- for ensuring monthly follow up of low birth weight babies and newborns discharged after treatment from Specialized New Born Care Units.

5.5 CHILD DEATH REVIEW (CDR)

Child Health Division, Ministry of Health & Family Welfare has developed the Operational Guideline of Child Death Review (CDR) and disseminated on 18th September, 2014. CDR is being implemented across the country for the corrective action for implementation of Child Health Interventions as per detailed review of causes of death and reason for delay if any Neonate, Infant and Child deaths.

5.6 INFANT AND YOUNG CHILD FEEDING (IYCF)

Promotion of optimal IYCF practices and management of lactational failure/breast related conditions through Home Based New Born Care visitations, VHND, Outreach sessions for Routine Immunization (RI), RI sessions at facilities, management of newborn and childhood illnesses at community level. Provision has been made for trainings of Medical Officer, frontline workers on the subject at every level of health facility, nutritional counsellor at high case load facilities, Information, Education and Communication and Behaviour Change Communication (IEC and BCC) as well monitoring of the programme.

5.7 NUTRITIONAL REHABILITATION CENTRES (NRC)

Nutritional Rehabilitation Centers are facility based units providing medical and nutritional therapy to children with Severe Acute Malnourished (SAM)

under 5 years of age with medical complications. In addition, there is special focus on improving the skills of mothers on child care and feeding practices so that the child continues to receive adequate care at home. Expansion of NRCs has been ensured in High Need Areas such tribal blocks. A total of 875 NRCs have been established in the country as on September, 2014.

The training package for facility based care of Severe Acute Malnutrition (SAM) in Children has been developed to train staff of Nutritional Rehabilitation Centres on diagnostic and treatment protocols. The package aims to improve the clinical skills of the Medical Officers and Nursing staff of NRCs, particularly for the management of children with SAM.

In addition, ASHAs are now entitled to receive incentive of Rs. 150/- for follow up visits after child is discharged from facility or community based SAM management and till Mid-Upper Arm Circumference (MUAC) is equal to or more than 125mm.

5.8 MICRO NUTRIENT SUPPLEMENTATION

- **Iron Folic Acid (IFA) Supplementation and deworming for children (6 months to 59 months) and children (6-10 years):** Bi-weekly IFA syrup to children 6 months–5 years and weekly IFA tablets to children (6-10 years) and bi-annual deworming to children 1-10 years is part of the **National Iron Plus Initiative**, which lays emphasis on tackling high prevalence of anaemia comprehensively across age groups. The National Guideline have been released and disseminated to states for implementation by Ministry of Health & Family Welfare, in January, 2013. 15.63 lakh children have been given IFA syrup as on September, 2014.

- Vitamin A Supplementation in under-five children:** Under the National programme, 1st dose of Vitamin A (1 lakh I.U.) is being given to the child at the time of vaccination at 9 months of age and thereafter, the child is administered doses of Vitamin A (2 lakh I.U. of Vitamin A) at 6 monthly interval, so that a child receives a total of 9 doses of Vitamin A till the age of 59 months. Bi-annual rounds for Vitamin A supplementation would be conducted in all States & UTs with the co-ordination between Health & ICDS functionaries. As on September, 2014 HMIS 2014-15; 37%, 32% and 29% children received the 1st, 5th and 9th dose of Vitamin-A respectively.

5.9 REDUCTION IN MORBIDITY AND MORTALITY DUE TO ACUTE RESPIRATORY INFECTIONS (ARI) AND DIARRHOEAL DISEASES

5.9.1 Childhood Diarrhoeal Diseases

States/UTs were supervised for procurement of ORS and Zinc and its supplies at each public health facility along with the ASHA who is the village level depot holder of ORS packets and Zinc tablets. It is mandatory that Zinc and ORS is provided to all cases of childhood diarrhoea seeking care at DH/CHC/PHC/Additional PHC/Sub Centres as per the protocol which stipulates that every child treated for diarrhoea should get one/two ORS packets along with 14 tablets of Zinc as well as counselling on feeding at the start of therapy and counselled properly for continued administration.

In order to control deaths due to diarrhoea and generate awareness in the community, an Intensified Diarrhoea Control Fortnight (IDCF) was implemented from 28th July to 8th August 2014 all over the country with the ultimate aim of 'zero child deaths due to childhood diarrhoea'. Dedicated funding is provided for these activities @ Rs. 10

lakh per district. During fortnight health workers will visit the households of under five children, conduct community level awareness generation activities, distribute ORS packets to the families with children under five years of age, ORS corners were set up in health facilities and Anganwadi Centres. Health workers conducted counselling sessions on appropriate methods of Infant and Young Child feeding practices, hygiene and sanitation. As this campaign has already been implemented, around 2 crore families were reached at doorstep for delivery of ORS packet by ASHA worker for under-five children. 1.1 lakh schools participated and 1.9 lakh ORS-Zinc corners were established in health facilities. 36.08 lakh children were monitored for weight gain and sickness.

5.9.2 Acute Respiratory Infections

While acute upper respiratory tract infections are very frequent in children, pneumonia is the leading cause of under-five mortality. Early recognition and treatment of pneumonia can be lifesaving. For children with non-severe pneumonia the ARI control programme recommends oral Cotrimoxazole as the first line drug. This is supplied at the sub-centre level and is recommended as a drug for community based management of pneumonia by frontline health workers.

Amoxicillin has been recommended as the preferred drug for treatment of non-severe pneumonia at facility level by the physician. It has been estimated that about 10% of children presenting with pneumonia may require referral for hospital based management. Use of oxygen and injectable antibiotics is recommended for inpatient treatment of severe cases and the recommended antibiotics included in the essential drug list. Provisions have been made for procuring required equipments such as Nebulisers, Pulse Oxymeters and relevant antibiotics at each level. A detailed Pneumonia and ARI guidelines is also being developed to assist

States with Standard treatment protocols and operational strategies to improve preventive and treatment services.

5.9.3 Integrated Management of Neonatal and Childhood Illnesses (IMNCI)

Medical Officers and Staff Nurses would be trained in facility based IMNCI to provide care to sick children and newborns at CHCs/FRUs. Harmonisation of various training packages is being undertaken for effective coverage of training.

5.10 RASHRTIYA BAL SWASTHYA KARYAKRAM (RBSK)

Rashtriya Bal Swasthya Karyakram (RBSK):

This initiative was launched in February 2013 and which provides Child Health Screening and Early Intervention Services through early detection and management of 4 Ds i.e. Defects at birth, Diseases, Deficiencies, Development delays including disability. Mobile Health teams 11422 (excluding Kerala where 1500 JPHN are functioning), 266 District Early Intervention Centres have been approved. In 2013-14, 7.99 crore children were screened, 43.1 lakh children referred to health facilities and 10.9 lakh children availed services. In the first quarter of 2014-15 (March to June 2014), about 1.33 crore children have been screened, 8.44 lakh children have been referred to health facilities for the treatment. About 4.36 lakh children have received secondary tertiary care.

5.11 UNIVERSAL IMMUNIZATION PROGRAMME (UIP)

Immunization Programme (IP) is one of the key interventions for protection of children from life threatening conditions, which are preventable. Immunization Programme in India was introduced in 1978 as Expanded Programme of Immunization. This gained momentum in 1985 as Universal Immunization Programme (UIP) and was implemented in phased manner to cover all districts in the country by 1989-90. UIP become a part of Child Survival and Safe Motherhood Programme in 1992. Since 1997, immunization activities have been an important component of National Reproductive and Child Health Programme. Immunization is one of the key areas under National Rural Health Mission (NRHM) launched in 2005 and now it is under the umbrella of National Health Mission (NHM).

Under the Universal Immunization Programme, Government of India is providing vaccination to prevent Nine vaccine preventable diseases i.e.

- Diphtheria, Pertussis, Tetanus, Polio, Measles, severe form of Childhood Tuberculosis, Hepatitis B, Meningitis/Pneumonia due to Haemophilus Influenza B (Hib) and Japanese Encephalitis.
- In addition, vaccination to prevent Meningitis/Pneumonia due to Haemophilus Influenza B (Hib) infection is provided in selected states and vaccination against Japanese Encephalitis provided in selected endemic districts.

5.11.1 Immunization Schedule

S.No.	Vaccine	Protection	Number of doses	Vaccination Schedule
1	BCG (Bacillus Calmette Guerin)	Tuberculosis	1	At birth (upto 1 year if not given earlier)
2	OPV (Oral Polio Vaccine)	Polio	5	Birth dose for institutional deliveries within 15 days, Primary three doses at 6, 10 & 14 week and one booster dose at 16-24 month of age. Given orally
3	Hepatitis B	Hepatitis	4	Birth dose for institutional deliveries within 24 hour, Primary three doses at 6, 10 & 14 week.

S.No.	Vaccine	Protection	Number of doses	Vaccination Schedule
4	DPT (Diphtheria, Pertussis and Tetanus Toxoid)	Diphtheria, Pertussis and Tetanus	5	Three doses at 6, 10 & 14 week and two booster dose at 16-24 month and 5 years of age
5	Measles	Measles	2	9-12 months of age and 2 nd dose at 16-24 months.
6	TT (Tetanus Toxoid)	Tetanus	2	Children: 10 years and 16 years of age
			2	Pregnant woman: Two doses given (one dose, if previously vaccinated within 3 Year)
7	JE vaccination (in selected 177 JE endemic districts in 19 States)	Japanese Encephalitis (Brain disease)	2	1 st dose at 9-12 months of age & 2 nd dose at 16-24 months of age in JE endemic districts immediately after completion of campaign.
8	Hib containing Pentavalent vaccine (Hib + DPT + Hep B) Presently in eight states (Tamil Nadu, Kerala, Gujarat, Haryana, Karnataka, Goa, J & K and Puducherry)	Diphtheria, Pertussis, Tetanus, Hepatitis B and Haemophilus Influenza type B associated Pneumonia Meningitis	3	6, 10 & 14 week of age

5.11.2 Status of Universal Immunization Programme

The achievements in terms of immunization coverage is improving over the years however, there is further need for improvement especially in DPT3 & OPV3 coverage and reducing drop outs. Following table outlines achievements as per evaluated coverage.

(Figures are in %)

Source	Rapid Survey On Children (RSOC)	Coverage Evaluation Survey (CES)		District Level Household Survey (DLHS)	
	2013-14	2006	2009	DLHS 2 (2002-04)	DLHS 3 (2007-08)
Full Immunization	65.2	62.4	61.0	45.8	54.0
BCG	NA	87.4	86.9	75.0	86.7
OPV3	NA	67.5	70.4	57.7	66.0
DPT3	74.7	68.4	71.5	58.2	63.5
Measles	78.8	70.9	74.1	56.1	69.5
No Immunization	6.7	-	7.6	19.8	4.5

The recent Annual Health Survey (AHS 2012-13) conducted in 9 States documented improvement in Immunization coverage in all 9 States.

Immunization coverage in India has increased to 65.2% as per Rapid Survey On Children (RSOC)

2013-14 from 35.5% as per National Family Health Survey (NFHS) 92-93 in last 21 years.

All the States/UTs prepare their own State Programme Implementation Plan (PIP) for Immunization as part 'C' of NRHM PIP from the year 2005-06 to address specific needs.

Annual Health Survey (2012-2013)							
States	BCG	OPV 3	DPT3	Measles	FI	Polio (Birth dose)	No Immunization
Uttarakhand	93.3	85.8	85.2	85.2	79.6	76.1	4.9
Chhattisgarh	96.6	83.3	81.8	90.0	74.9	87.8	2.9
Rajasthan	91.5	80.8	79.6	83.5	74.2	80.9	5.8
Bihar	94.7	82.7	81.6	80.3	69.9	69.0	3.7
Jharkhand	94.8	80.0	80.0	82.9	69.9	77.2	3.1
Assam	93.8	78.1	77.6	80.9	64.4	79.3	3.4
Odisha	98.2	82.0	82.8	89.2	68.8	83.6	0.8
Madhya Pradesh	95.7	77.1	76.3	85.4	66.4	87.1	3.6
Uttar Pradesh	86.3	64.1	63.2	65.8	52.7	70.7	7.6

5.11.3 Year 2012: Year of Intensification of Routine Immunization

Immunization coverage in India has been variable with areas of low coverage in both urban and rural areas. In an effort to enhance the immunization profile in the country, *Government of India declared 2012 as "Year of Intensification of Routine Immunization" (IRI).*

- In the year of intensification of Routine Immunization 2012-13, more than 160 lakh doses of various antigens under UIP Programme have been administered to the beneficiaries.
- More than 10 lakh children were able to receive vaccines for the first time. These children would probably have remained unvaccinated had it not been planned to approach them strategically through Immunization weeks.

5.11.4 Special Immunization Weeks (SIWs), 2014-15: A drive to reach the unreached

As a continuation of strategy for Intensification of Routine Immunization, four SIWs in line with the World Immunization Week have been carried out in low coverage pockets and in 400,000 high risk areas as identified under polio programme to target children aged <2 years and pregnant women. The antigen wise coverage is as under:

Figure in lakhs

BCG	DPT	Measles	JE	Penta	Hep B	OPV	TT
1.85	9.4	4.81	0.91	1.29	6.35	11.10	3.03

5.11.5 Introduction of Pentavalent Vaccine (DPT + Hep-B + Hib)

India introduced Pentavalent Vaccine containing DPT, Hepatitis-B and Hib Vaccines initially in two States viz. Kerala and Tamil Nadu under Routine

Immunization programme in December 2011 and six more States i.e. Haryana, Goa, Puducherry, Jammu & Kashmir, Gujarat and Karnataka introduced Pentavalent Vaccine in year 2012-13. Under the programme, DPT and Hepatitis B were part of the immunization schedule and required 6 injections to deliver the primary doses. With the introduction of Pentavalent vaccine, a new antigen i.e. Hib has been added which protects against Haemophilus influenza type B associated Pneumonia and Meningitis and the number of injection have been reduced to 3. More than 23 million doses of Pentavalent Vaccine have been administered to children in these 8 States since inception till Aug 2014. Pentavalent Vaccine expansion is rolled out in 12 States from October 2014 (Andhra Pradesh, Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Punjab, Telangana, Rajasthan, West Bengal, Delhi and Uttarakhand).

5.11.6 Hepatitis B Vaccine

In 2010-2011, Government of India universalized Hepatitis B vaccination to all States/UTs in the country. Monovalent Hepatitis B vaccine is given as Intra-Muscular (IM) injections to the infants at 6th, 10th and 14th week along with primary series of DPT & Polio vaccines. In addition, one dose of Hepatitis B is given at birth for institutional deliveries within 24 hours of birth.

5.11.7 Measles Second Dose

Measles immunization directly contributes to the reduction of under-five child mortality and hence to the achievement of Millennium Development Goal number 4. In order to accelerate the reduction of measles related morbidity and mortality second opportunity for measles vaccination is introduced w.e.f. 2010-11 as per the recommendation made by National Technical Advisory Group on Immunization (NTAGI). The strategy was to provide another dose of measles vaccine through measles Supplementary Immunization Activity



(SIA) for 14 States where evaluated coverage for measles vaccine less than 80%, followed 6 month later integration into routine immunization programme. For the remaining 21 States, where evaluated coverage was more than 80%, measles second dose was introduced through routine immunization except States/UTs of Delhi, Puducherry, Sikkim and Goa where they introduced 2nd measles containing vaccine (mumps-measles-rubella vaccine) as second dose on their own as state initiative.

5.11.8 Measles Supplementary Immunization Activity (SIA) in 14 States

SIA carried out in 3 phases. During Phase I, 1.2 crore children were vaccinated with Measles vaccine in 45 districts in 13 States with 87.2% coverage. During Phase II, 3.6 crore children were vaccinated in 152 districts in 14 States. The Phase III of the campaign 11.8 crore children (85%) had been vaccinated in 167 districts in 5 States i.e. Madhya Pradesh, Uttar Pradesh, Gujarat, Rajasthan and Bihar.

Government of India along with the 11 SEARO countries and all partners have resolved to eliminate Measles and control Rubella in India and the South East Asian Region of WHO by the end of 2020.

5.11.9 Introduction of Japanese Encephalitis (JE) Vaccine

Japanese Encephalitis (JE) is an acute viral illness with high case fatality and long term complications. JE vaccination was started in 2006, so far 154 out of 181 JE endemic districts as identified by National Vector Borne Disease Control Programme (NVBDCP), have been covered under Japanese Encephalitis campaign with a single dose of JE Vaccine (SA 14-14-2) manufactured by Chengdu, China and JE Vaccine has been introduced in the Routine Immunization with two doses of JE vaccine (first at 9-12 months of age and second at 16-24 months of age of children). In addition there is a plan to cover remaining 27 districts next year. Till now 108 million doses of JE vaccine has been provided under various JE campaigns.



Coverage Data JE second dose (16-24 month dose) under RI

Year	Target (in lakhs)	Total children vaccinated (in lakhs)	Total coverage%
2012-13	76.83 lakh	35.17 lakh	45.78 %
2013-14	40.44 lakhs	17.75 lakh (as on Sept.2014)	43.89%

(Proportionate target and coverage from April 2014 to Aug. 2014)

5.12 PULSE POLIO IMMUNIZATION(PPI)

With the global initiative of eradication of polio in 1988 following World Health Assembly resolution in 1988, Pulse Polio Immunization programme was launched in India in 1995. Children in the age group of 0-5 years administered polio drops during National and Sub-National Immunization rounds (in high risk areas) every year. About 172 million children are immunized during each National Immunization Day (NID).



Progress

South-East Asia Region of WHO has been certified polio free. The Regional Certification Commission (RCC) on 27th March 2014 issued certificate which states that "The Commission concludes, from the evidence provided by the National Certificate Committees of the 11 Member States, that the transmission of indigenous wild Polio virus has been interrupted in all countries of the Region. India has achieved the goal of Polio eradication as no

Last Reported Polio Case		
Polio Virus Type	Date of last case	Location
P1	13 January 2011	Howrah (Panchla), WB
P2	24 October 1999	Aligarh, UP
P3	22 October 2010	Pakur (Pakur), Jharkhand

Polio case has been reported for more than 3 years after last case reported on 13th January, 2011. WHO on 24th February 2012 removed India from the list of countries with active endemic Wild Polio Virus Transmission.

There are 24 lakh Vaccinators and 1.5 lakh Supervisors involved in the successful implementation of the Pulse Polio Programme. The total number of cases and number of affected districts during past 10 years is as below:

Year	Cases of Polio	Number of Districts
2005	66	35
2006	676	114
2007	874	99
2008	559	90
2009	741	56
2010	42	17
2011	01	1
2012	00	00
2013	00	00
2014	00	00*

*As on 25th Nov. 2014

Steps taken by the Government to achieve target of Polio Eradication

- All States and Union Territories in the country have developed a Rapid Response Team (RRT)



to respond to any polio outbreak in the country. An Emergency Preparedness and Response Plan (EPRP) have also been developed by all States indicating steps to be undertaken in case of detection of a polio case.

- Special booths are established in areas bordering neighboring countries like Wagah border and Attari train station in Punjab and Munabo train stations in Barmer district of Rajasthan, to ensure that all children under 5 years of age coming from across the border are given polio drops.
- As a preventive measure to stop polio virus from coming into India, Government of India has issued guidelines for mandatory requirement of Oral Polio Vaccination (OPV) to travellers travelling between India and polio affected countries namely Afghanistan, Nigeria, Pakistan, Ethiopia, Kenya, Somalia, Syria and Cameroon. The mandatory requirement is effective for travellers from 1st March 2014.
- To reduce risk of importation, international border vaccination is being provided to all eligible children round the clock. These are provided through special booths set up at the international borders that India shares with Pakistan, Bangladesh, Bhutan, Nepal and Myanmar.
- Environmental surveillance is established in Mumbai, Delhi, Patna, Kolkata, Punjab and Gujarat which acts as surrogate indicator for polio virus transmission and is sensitive indicator for early detection of polio virus in the environment.
- An extremely high level of vigilance through surveillance across the country for any importation or circulation of polio virus and VDPV is being maintained.

- National Technical Advisory Group on Immunization (NTAGI) has recommended Injectable Polio Vaccine (IPV) introduction as an additional dose along with 3rd dose of DPT in the entire country in the last quarter of 2015 as a part of polio endgame strategy.
- In order to reach every eligible child during the pulse polio round, apart from the strategy of vaccinating children at fixed booths and house to house visit, efforts in vaccinating children in transit at railway stations, inside long distance trains, major bus stops, market places, religious congregations, major road crossings etc., throughout the country have been intensified.
- Social Mobilization activities are being intensified by involving the local influencers, community and religious leaders to improve community participation and acceptance of Polio Vaccine.
- A rolling emergency stock of OPV is being maintained to respond to any WPV or cVDPV.

Maternal and Neonatal Tetanus Elimination (MNTE): Government of India with support of national and international agencies (WHO, UNICEF, others) Maternal and Neonatal Tetanus Elimination (MNTE) validated in 26 States (2005-2014). India is committed to achieve the goal of MNTE validation in entire country by 2015.

National Cold Chain Management Information System: A web enabled National Cold Chain Management Information System (NCCMIS) developed in 2011-13 to track the status of cold chain equipment at the country level. It is aimed to capture real time data of functionality of cold chain equipment at all levels across the country. All states have uploaded the data.

IEC/BCC Strengthening

- New logo and tag-line developed and launched in April 2013.
- Radio spots and TV commercial developed
- Print proto types for banners and posters created.

Government of India is introducing four new vaccines as per recommendations of National Technical Advisory Group of Immunization (NTAGI) and the strategy of introduction is as under:

1. **Inactivated Polio Vaccine (IPV)** introduction as an additional dose along with 3rd dose of DPT in the entire country in the last quarter of 2015 as a part of polio endgame strategy and a switch from tOPV to bOPV both under routine immunization and polio campaigns in a globally synchronized manner for which the World Health Organization (WHO) will be announcing the dates tentatively by mid-2015.
2. **Rubella Vaccine** to be initiated as Measles Rubella (MR) campaign targeting 9 months to 15 years of age in a phased manner over a period of two to three years. Subsequently, the Rubella Vaccine will be introduced as MR vaccine as two doses in the place of measles containing vaccine 1 & 2 at 9-12 months and 16-24 months.
3. **Rotavirus Vaccine** to be given under UIP as a 3 dose vaccine along with DPT 1st, 2nd and 3rd dose in a phased manner in few states/districts as per vaccine availability.
4. **Adult JE Vaccine:** Japanese Encephalitis (JE) vaccination is on-going and is provided to children between 1-15 years of age in endemic districts of JE.

As per NTAGI recommendations, Government of India has decided to extend this age to adult population in the districts that have high burden of JE.