

CHILD HEALTH PROGRAMME

5.1 INTRODUCTION

The Child Health programme under the National Rural Health Mission (NRHM) 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 on care during critical life stages in order to improve child survival, is being followed under the national programme. Another dimension of this approach is to ensure that critical services are made available at home, through community outreach and through health facilities at various levels (primary, first referral units, 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

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 2012 was 42. The percentage annual compound rate of decline during 2005-12 has been higher (4.5%) as compared to the decline of 3.1% observed during 2000-05. IMR for the year 2012 was 46 in rural and 28 in urban India (about 64% 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.

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

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 2012, the under five-mortality rate is 52 per thousand live births.

Encouraging progress has been made in the country in terms of reducing child mortality rates. In 1990, when the global U5M rate was 88 per 1000 live births, India carried a much higher burden of child mortality at 114 per 1000 live births. In 2011, India's under five child mortality (55 /1000 Live births) is much closer to the global average of 57.

5.2.3 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 29 per 1000 live births in India in 2012. Neo-natal mortality thus contributes 56% 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

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

5.2.4 Causes of Neo-natal Mortality

35 percent of newborn deaths are caused by complications of premature birth with surviving newborns facing a lifetime of disability, including learning disabilities, visual and hearing problems. Birth complications and septicaemia contributes 23% each towards new-born mortality. These three causes together contribute 80% of total mortality in newborns.

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 Rural 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 preterm /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, while *Special Newborn Care Units (SNCUs)* and *Newborn Stabilization Units (NBSUs)* provide care for sick newborns. Till March 2014, a total of 13,653 NBCCs, 1,737 NBSUs and 507 SNCUs have been made operational across the country.

- a. **Special Newborn Care Unit (SNCUs)** is located in close proximity to the labour room with 12 or more beds, and has dedicated and adequately trained doctors, staff nurses and support staff to provide 24x7 services. It delivers Level-II newborn care to sick and small newborns besides training to medical officers and nurses in facility based newborn care.
- b. **Newborn Stabilization Unit (NBSU)** is a 4 bedded unit providing basic level of sick newborn care, established at Community Health Centers/ First Referral Units. Provision of newborn care at

these units increases the chances of survival for babies with health conditions requiring observation and stabilization soon after birth or in the period thereafter.

- c. **New Born Care Corners (NBCCs)** are operationalized within the labour rooms and operation theatres in public health facilities designated as delivery points. These units have NSSK (Navjaat Shishu Suraksha Karyakram) personnel who provide essential newborn care and resuscitation, when required, to all newborns delivered at these health facilities.
- d. **Navjaat Shishu Suraksha Karyakram (NSSK)** training was initiated in September, 2009 with the purpose of training all health care providers in essential newborn care and resuscitation when required. About 1,24,352 health care providers have been trained in NSSK in the country till March, 2014.
- e. **National Training Package for Facility Based Newborn Care:** This training package has been developed with participation of national neonatal experts, and facilitated by the National Collaborative Centre for Facility Based Newborn Care at Kalawati Saran Children's Hospital under the mandate of Ministry of Health & Family Welfare. 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.
- f. **Empowering frontline health service providers:** The ANMs are now empowered to give a pre-referral dose of antenatal corticosteroid (Injection Dexamethasone) in pregnant women going into preterm labour. The use of antenatal corticosteroids is to corticosteroids at all levels of health facilities. ANMs will also administer pre-referral dose of Injection Gentamycin to newborns for the management of sepsis in young infants (upto 2 months of age).

5.4 HOME BASED NEWBORN CARE SCHEME (HBNC)

Under National Rural Health Mission, Home Based New Born Care is being implemented since 2011 for

reduction of neonatal mortality in the first month of life in rural areas. Under this scheme, funds are allocated for training of ASHAs, supportive supervision by ASHA facilitators, incentive to ASHAs for home visits and purchase of HBNC kits. ASHAs are paid an incentive of Rs. 250 for visiting each newborn 6 times (in case of hospital delivery)/ 7 times (in case of home delivery) in the first six weeks of life as per the schedule.

The Home Based New Born Care Programme is being implemented under NRHM in all States and UTs except for Himachal Pradesh, Goa, Kerala, Chandigarh, Daman & Diu and Puducherry.

Out of 8.8 lakh ASHAs in the country, 5.6 lakhs have been trained in 6 & 7 module, which provide necessary skills to conduct home visits. Around 12 lakh babies have been visited by ASHAs (all 6/7 visits).

Linking home based newborn care to facility based care is important in order to save newborn lives. While home based care provides opportunity for early diagnosis of danger signs, prompt referral to an appropriate health facility with provision for newborn care facility, saves lives. JSSK provides for free referral transport of newborns from the community to health facility and between different levels of health facilities, drugs, diagnostics and treatment at newborn care facilities established in the public health system.

5.5 INFANT AND YOUNG CHILD FEEDING (IYCF)

The importance of breastfeeding as the preventive intervention with potentially the single largest impact on reducing child mortality has been well recognised. Considering that reducing infant mortality is one of the goals of the NRHM, promotion of Breastfeeding and optimal Infant and Young Child Feeding practices through the public health system is another important intervention area under child health.

With multiple MCH contacts with the health system, there is an opportunity to promote optimal IYCF practices. Provision of Home Based New Born Care has presented valuable opportunity for community health workers to reach out to mothers and newborns at home during the first 6 weeks of life. Village Health and Nutrition Day (VHND), Outreach sessions for Routine

Immunisation, management of newborn and childhood illnesses at community level are all entry points for IYCF information and counselling.

The Child Health Division has developed national operational guidelines, presenting options to the States to plan and implement a set of activities that are best suited locally. In this guideline various MCH contact opportunities have been clearly identified. Key actions that can be taken by health care providers at facility and community level have been clearly defined.

5.6 NUTRITIONAL REHABILITATION CENTRES (NRC)

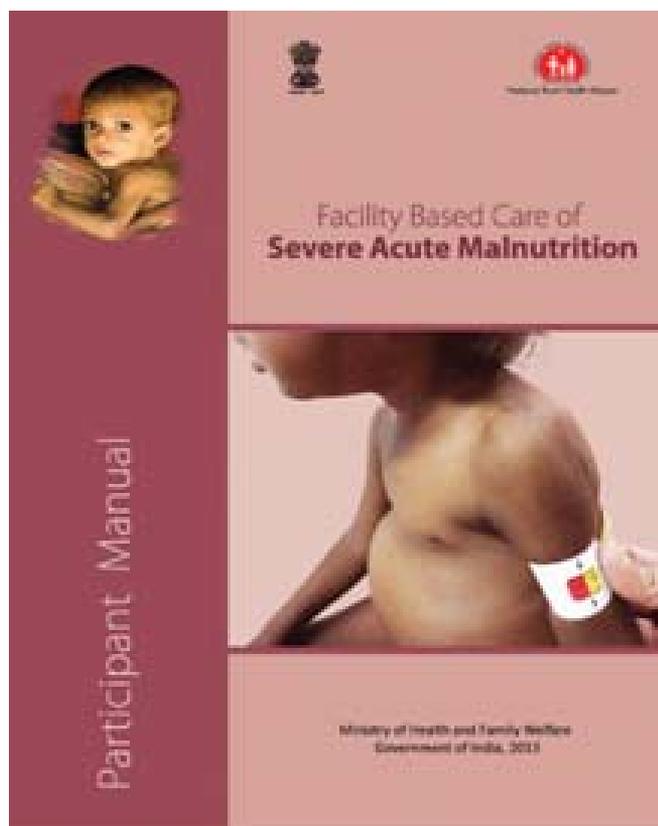
Nutritional Rehabilitation Centers are facility based units providing medical and nutritional care to Severe Acute Malnutrition (SAM) children under 5 years of age who have medical complications. In addition special focus is on improving the skills of mothers on child care and feeding practices so that child continues to receive adequate care at home.

NRCs play a crucial role in averting deaths due to under-nutrition and promoting physical and psychosocial growth of children with severe under nutrition.

Services provided at the NRCs include:

- 24 hour care and monitoring of the child,
- Treatment of medical complication,
- Therapeutic feeding,
- Sensory stimulation and emotional care,
- Counseling on appropriate feeding, care & hygiene and
- Demonstration and practice-by-doing on the preparation of energy dense food using locally available, culturally acceptable and affordable food items.

Presently 872 Nutrition Rehabilitation Centers are functional across 17 States/UTs with 9377 dedicated beds. The States are directed to prioritise High Focus Districts and the Tribal Districts identified as having high burden of malnutrition for establishment of NRCs, during approval of Annual PIP budgets. As a result, 75% of High Priority Districts in 14 States now have at least one functional NRC.



5.6.1 Training Package for Facility Based Care of Severe Acute Malnutrition: National Operational Guideline on Facility Based Management of Children with Severe Acute Malnutrition (MoHFW, 2011) recommends that various cadres of health service providers working in the Nutrition Rehabilitation Centres (NRCs) be provided relevant knowledge and skills for managing children with malnutrition.

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.

5.7 SUPPLEMENTATION WITH MICRONUTRIENTS

Iron Folic Acid: Anemia continues to be significant public health problem affecting 69.5 percent of under five children in India. Till recently a daily regime of iron

and folic acid supplementation was provided to children for a period of 100 days for prevention of iron deficiency anemia. Considering the underutilization of Iron and Folic Acid syrup in the programme, it has been decided to initiate intermittent bi-weekly provision of Iron and folic acid syrup to children through ASHA for better compliance of this intervention. This intervention is a part of the **National Iron Plus Initiative**, which lays a renewed emphasis on tackling high prevalence of anemia comprehensively across age groups. The national guidelines have been released by Ministry of Health & Family Welfare, in January, 2013. The details of the guidelines have been circulated to all States and UTs for compliance.

Vitamin A: Under the national programme, 1st dose of Vitamin A (1 lakh I.U.) is being given to the child at the time of immunization 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 are being conducted in 14 States (including EAG States and some Southern States) and one UT with the co-ordination between Health & ICDS functionaries.

From 2012-13 onwards, the procurement process has been decentralised and as a result, the States/UTs are provided budget for procurement of Vitamin A according to the number of beneficiaries (under five children).

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

a) Childhood Diarrhoeal Diseases

Diarrhoea is one of the leading causes of under-five mortality in India. The guidelines under the national programme recommend use of low osmolarity Oral Rehydration Solution (ORS), Zinc and continued feeding (energy dense feeds) in addition to breastfeeding for management of diarrhoea. Antimicrobials are recommended only for specific cases. Zinc has been approved as an adjunct to ORS for the management of diarrhoea. Children aged 2-6 months are given 10 mg

of elemental Zinc per day and children 7 months - 5 years, 20 mg per day for a total period of 14 days from the day of onset of diarrhoea.

Funds are provided to the States for procurement of ORS and Zinc and supplies maintained at each public health facility and ASHA who is the village level depot holder of ORS packets and Zinc tablets. It is to be ensured that Zinc and ORS is provided to all cases of childhood diarrhoea seeking care at DH/CHC/PHC/ Additional PHC/Sub Centres. The aim is that every child treated for diarrhoea should get 14 tablets of Zinc along with one/two ORS packets at the start of therapy and counselled properly for continued administration.

b) Acute Respiratory Infections (ARI)

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 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.

c) Facility Based-Integrated Management of Neonatal and Childhood Illnesses (F-IMNCI)

Presently, 25,412 medical officers and staff nurses have been trained in facility based IMNCI to provide care to sick children and newborns at CHCs/FRUs.

5.9 NEW INITIATIVES

5.9.1 Rashtriya Bal Swasthya Karyakram (RBSK)

This is a new initiative launched in February 2013 which includes provision for 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. An estimated 27 crore children in the age group of zero to eighteen (0-18) years are expected to be covered across the country in a phased manner. Child Health Screening and Early Intervention Services will cover 30 common health conditions for early detection and free treatment and management.

Dedicated mobile health teams placed in every block screen children from birth to till 6 years at Anganwadi centres at least twice a year and screen children enrolled in Government and Government aided schools atleast once a year. Newborn are screened for birth defects in health facilities where deliveries take place and during the home visit by ASHA.

- Health screening of children is carried out by block level mobile health teams consisting of AYUSH doctors and paramedics duly trained in the use of necessary tools for screening.
 - In 2013-14, 11,839 Mobile Health teams have been approved of which till January, 2014, 5,491 teams in 22 State/UTs have been recruited.
- Early Intervention Centres are being operationalized at District Hospitals for management of cases referred from block upwards. Linkages with secondary and tertiary level health services are provided in case higher level of management is required, including surgical interventions, free of cost.
 - 445 master trainers across State/UTs have been trained. 225 District Early Intervention Centres (DEICs) are being established.
 - By January, 2014, the number of children screened has exceeded 5.82 crore, (69.80 lakhs children from birth to 6 years and 5.13 crores children enrolled in Government and Government aided school). 1.30 lakh have received free treatment including surgeries for congenital heart disease, cleft lip and correction of club foot etc.
- Through early identification and linkages to care, support and treatment, screening will help in providing a comprehensive package of services to reduce the household expenditure of the poor and

marginalized, reduce the disease burden and build health awareness. The scheme will diminish the burden on the health system besides encouraging caregivers / parents to seek health care early for their children. This is likely to translate into economic benefits both for the country and for individual families in the long run.

5.10 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 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 seven vaccine preventable diseases i.e.:

- Diphtheria, Pertussis, Tetanus, Polio, Measles, severe form of Childhood Tuberculosis and Hepatitis B.
- In addition vaccination to prevent Hib infection is provided in selected States and vaccination to Japanese Encephalitis provided in selected districts.

5.10.1 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
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 2nd dose at 16-24 months.
6	TT (Tetanus Toxoid)	Tetanus	2 2	Children: 10 years and 16 years of age Pregnant woman: Two doses given (one dose, if previously vaccinated within 3 Year)
7	JE vaccination (in selected 113 JE endemic districts in 15 States)	Japanese Encephalitis (Brain disease)	2	1 st dose at 9-12 months of age & 2 nd dose 16-24 month of age in JE endemic districts after 6 months 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 influenzae type B associated Pneumonia meningitis	3	6, 10 & 14 week of age

5.10.2 Status of Universal Immunization Programme (UIP)

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.

Source	Coverage Evaluation Survey (CES)		District Level Household Survey (DLHS)	
	2006	2009	DLHS 2 (2002-04)	DLHS 3 (2007-08)
Full Immunization	62.4	61.0	45.9	53.5
BCG	87.4	86.9	75.0	86.7
OPV3	67.5	70.4	57.3	65.6
DPT3	68.4	71.5	58.3	63.4
Measles	70.9	74.1	56.1	69.1
No Immunization	-	7.6	19.8	4.6

(Figures are in %)

The recent Annual Health Survey (AHS 2011-12) conducted in 9 States documented improvement in immunization coverage in all States except Rajasthan which has shown decline when compared to AHS-1 and Chhattisgarh is stagnant with no change in full immunization coverage.

Odisha has shown maximum improvement by 7.3% in AHS-2. The Full Immunization was observed highest in Uttarakhand at 77.9% while lowest in Uttar Pradesh at 48.1%.

Annual Health Survey (2011-2012)

States	BCG	OPV 3	DPT3	Measles	FI	Polio (Birth dose)	No Immunization
Uttarakhand	92.9	84.8	84.1	84.5	77.9	75.8	5.3
Chhattisgarh	96.8	83.0	81.7	89.4	74.1	87.0	2.5
Rajasthan	91.1	78.1	76.1	81.5	69.2	78.6	5.4
Bihar	93.5	80.4	79.6	76.7	65.6	66.1	4.5
Jharkhand	93.6	79.9	78.0	81.9	69.1	75.2	3.6
Assam	94.3	76.6	74.8	79.3	61.4	78.5	3.4
Odisha	97.8	78.9	77.9	87.8	62.3	80.7	1.0
Madhya Pradesh	94.7	73.1	71.5	82.6	59.7	84.4	4.3
Uttar Pradesh	84.8	60.9	59.8	63.1	48.1	69.1	9.5

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.

5.10.3 Year 2012: Year of Intensification of Routine Immunization (IRI)

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.

Special Immunization Weeks (SIWs), 2013-14: A drive to reach the unreached

As a continuation of strategy for Intensification of RI, four SIWs have been carried out during the months of April, June, July and August in the year 2013-14. These SIWs are targeted to children, 2 years and pregnant mothers in nearly 4000,000 high risk areas identified through polio eradication programme. The antigen wise coverage is as under.

Figure in lakh

BCG	5.46	Penta	2.11
DPT	25.18	Hep B	17.53
Measles	10.40	OPV	28.76
JE	3.69	TT	11.61

For year 2014, these SIWs are planned in all 35 States/UTs during the months of (February, March, April, and May). More than 13.58 lakh doses of various antigens have been administered to beneficiaries (as on 23 April, 2014)

5.10.4 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 from December 2011. 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 influenzae* type B associated Pneumonia and Meningitis and the number of injection have been reduced to 3. The Pentavalent vaccine has been expanded to 6 more States i.e. Haryana, J&K, Gujarat, Karnataka, Goa and Puducherry in 2012-13. More than 168 lakh doses of Pentavalent vaccine have been administered to children in these 8 States since inception (as on Feb, 2014).

Further Expansion of Pentavalent vaccine is planned in entire State: 11 States from October 2014: Andhra Pradesh, Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Punjab, Rajasthan, West Bengal, Delhi and Uttarakhand and remaining 16 States/UTs from April 2015.

5.10.5 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.

5.10.6 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 is 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 introduced through routine immunization except States/UT 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.

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.



5.10.7 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 and covered 113 endemic districts in a phased manner targeting all children between 1 to 15 years of age with a single dose of JE vaccine (SA 14-14-2) manufactured by Chengdu, China. Currently JE endemic districts have introduced JE vaccine as two doses at 9-12 months and 16-24 months under routine immunization w.e.f. April 2013. National Vector Borne Disease Control Programme (NVBDCP) has identified another 64 new JE endemic districts and 5 districts of Bihar for re-campaign. The JE vaccination campaign is being conducted in a phased manner to cover all these

endemic districts. JE vaccination drive is being carried out in 144 districts in 16 States. In addition, there is a plan to cover another 33 districts in next year.

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

Year	Target (in lakhs)	Total children vaccinated (in lakhs)	Total coverage %
2012-13	66.56 lakhs	31.59 lakhs	58.08%
2013-14	66.92 lakhs	37.03 lakh (as on Apr-2014)	55.34 %

5.11 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

- India has not reported any case of polio due to wild polio virus since more than three years. The last polio case in the country was reported from Howrah district of West Bengal with date of onset 13th January 2011.
- WHO on 24th February 2012 removed India from the list of countries with active endemic wild polio virus transmission.
- On 27th March 2014, India along with South-East Asia Region of WHO has been certified polio free by Regional Certification Commission for polio eradication.

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

- 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 7 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 30th Mar 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) has 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 neighbouring 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.

- Government of India has made mandatory requirement of polio vaccination to all international travellers before their departure from India to polio affected countries namely: Afghanistan, Nigeria, Pakistan, Ethiopia, Kenya, Somalia and Syria. The mandatory requirement is effective for travellers from 1st March 2014.
- To reduce risk of importation from neighbouring countries, 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, Nepal and Myanmar.
- Environmental surveillance established in Mumbai, Delhi, Patna, Kolkata and Punjab. The possibility for Gujarat is being explored.
- An extremely high level of vigilance through surveillance across the country for any importation or circulation of poliovirus and VDPV is being maintained.
- A rolling emergency stock of OPV is being maintained to respond to any WPV or cVDPV.
- An expert sub-group is established to discuss issues related to tOPV to bOPV switch in routine immunization and IPV introduction in the country along with India specific timelines for these activities.
- Government of India has identified 107 High risk blocks for polio where a multi-pronged strategy is

being implemented to ensure sanitation, hygiene and clean drinking water in addition to vaccinating each and every child OPV.

- Migratory populations from UP and Bihar are being identified in the States of Punjab, Haryana, Gujarat and West Bengal and these migratory children are being covered during the SNID in UP and Bihar.
- Social Mobilization activities are being intensified by involving the local influencers, community and religious leaders to improve community participation and acceptance of polio vaccine.
- In the States of UP and Bihar every new born child is being identified and vaccinated during the polio immunization campaigns and is being tracked for subsequent rounds.
- 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.

Maternal and Neo-natal Tetanus Elimination (MNTE): Government of India with support of national and international agencies (WHO, UNICEF and others) Maternal and Neo-natal Tetanus Elimination (MNTE) validated in 18 States (2005-2013), the most recent states to have been validated are Uttarakhand, Delhi and Mizoram. In 2014, it is proposed for five more States i.e. Rajasthan, Madhya Pradesh, Tripura, Jharkhand and Odisha.

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 prototypes for banners and posters created.

