



Child Health: Rajasthan

State Institute of Health & Family Welfare,
Rajasthan



Demographic indicators

- Crude Birth Rate: 24.7 (AHS 2010-11)
- Population
 - 0-6 yr.
 - Males: 82,952,135
 - Female: 75,837,152
 - Child sex ratio: 833 (Census 2011)

Basic facts



- 1.7 million children die every year, 4730 every day, 3 every minute in India
- Total number of live births in India is estimated to be 27 million
- India contributes to nearly 20 % of the global child deaths
- Globally more than 1/3rd of under five deaths are attributable to under nutrition
- Infant Mortality Rate (IMR) – Down from 58 in 2004 (SRS data) to 50 in 2009 (SRS)

Source: State of World children , 2011 and SRS

Components of child Health

(AHS 2010–11, CES–2009)



Major issues in child health

➤ Mortality

- IMR: 59 / 1000 live births
- NNMR: 40 / 1000 live births
- PNNMR: 20 / 1000 live births
- Child Mortality rate : 79 / 1000 live births



➤ Morbidity (children 0-2 years)

- Cases of ARI : 11.1% (n=1796) (CES, 2009)
- Cases of Diarrhea : 15.1% (n=1796) (CES, 2009)
- Micronutrient deficiency: Vitamin A
- VPDs: Diphtheria, Pertussis, Tetanus, Polio, TB, Measles

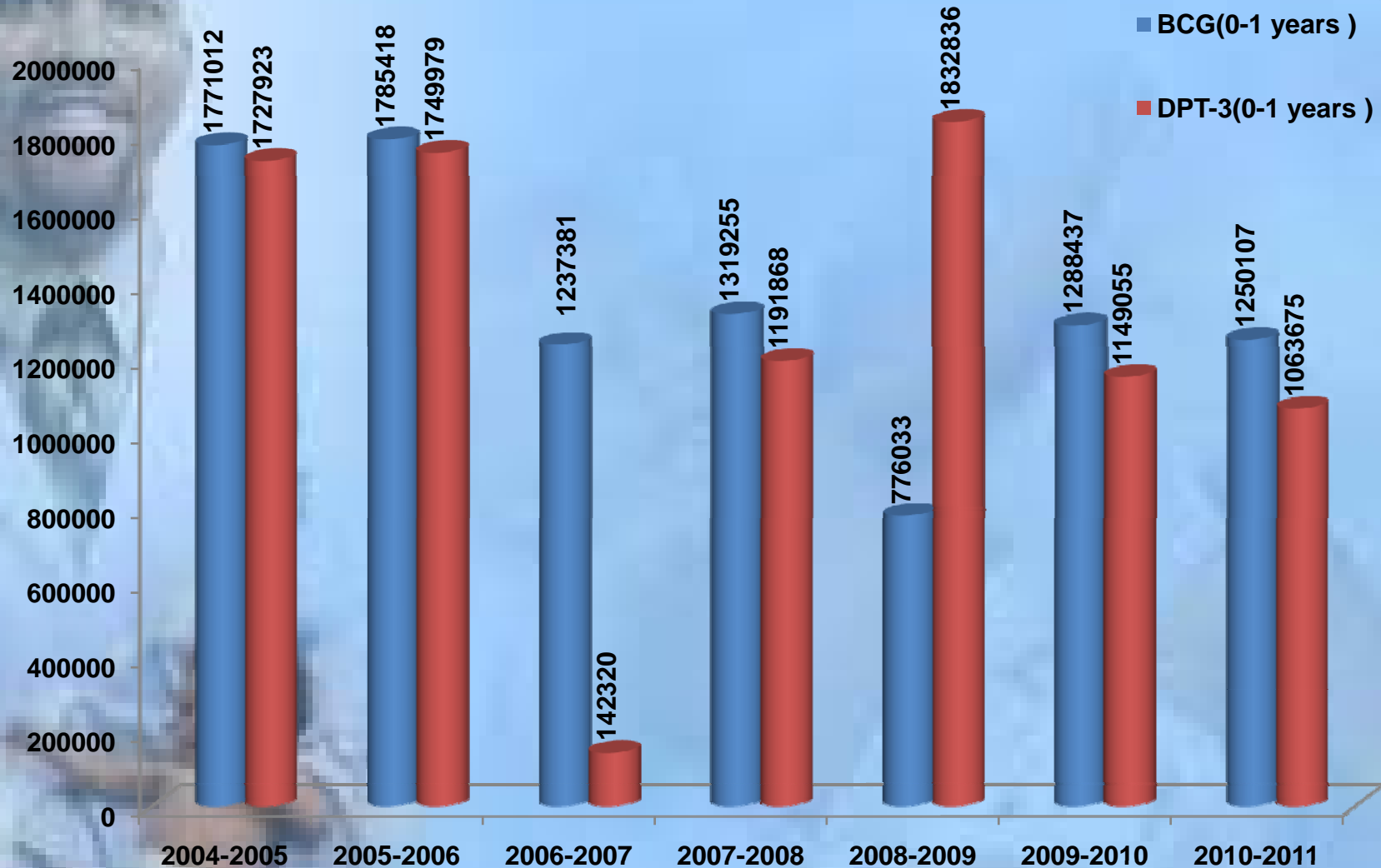
➤ Malnutrition

Immunization Coverage: Current Status

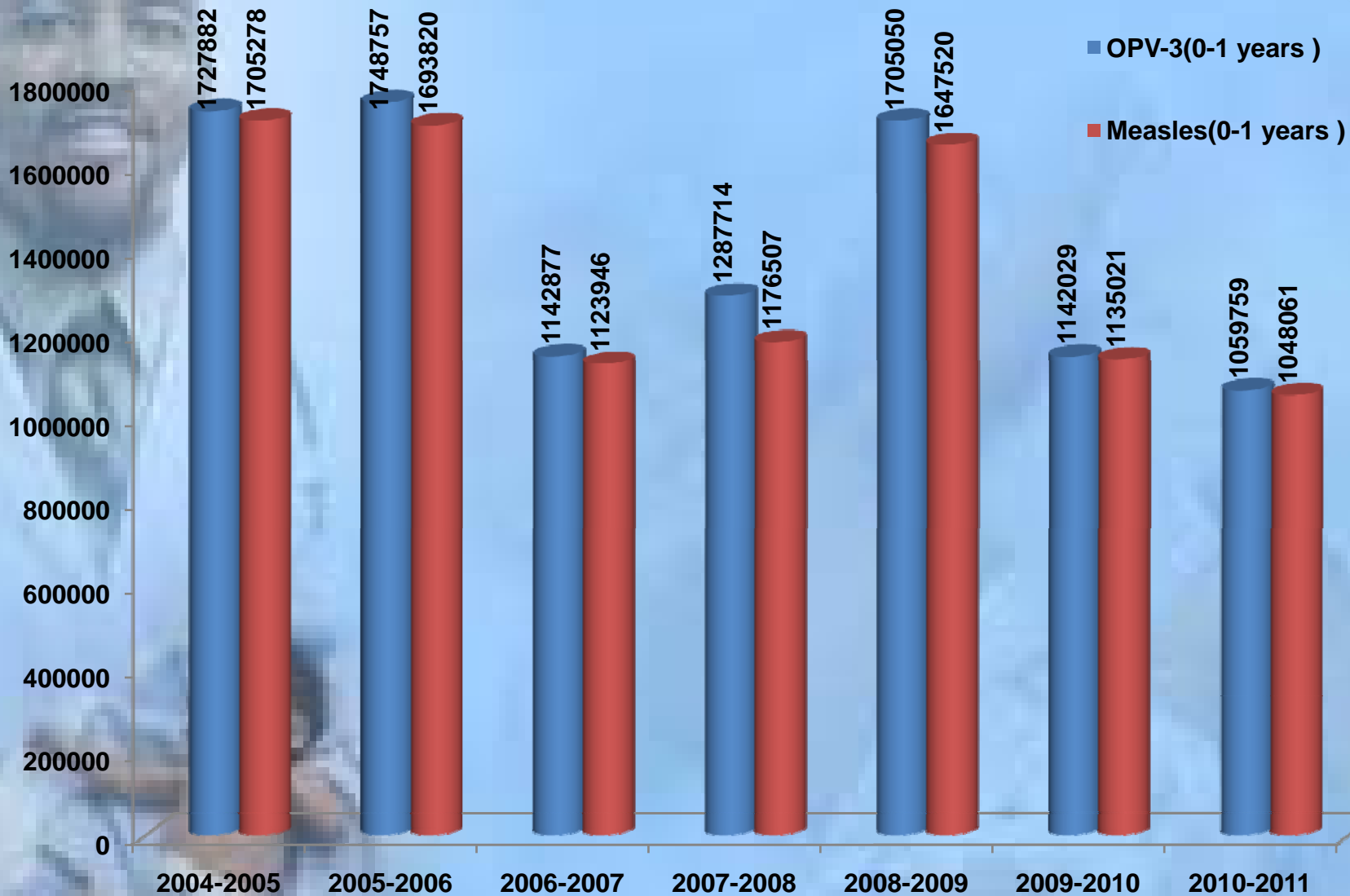


- In the period April to September 2011, 42.38% of the infants have been fully immunized.
- In 19 districts, the percentage of fully immunized is more than the State average.
- In 31 districts, the DPT 1 to DPT 3 drop out is less than 10%

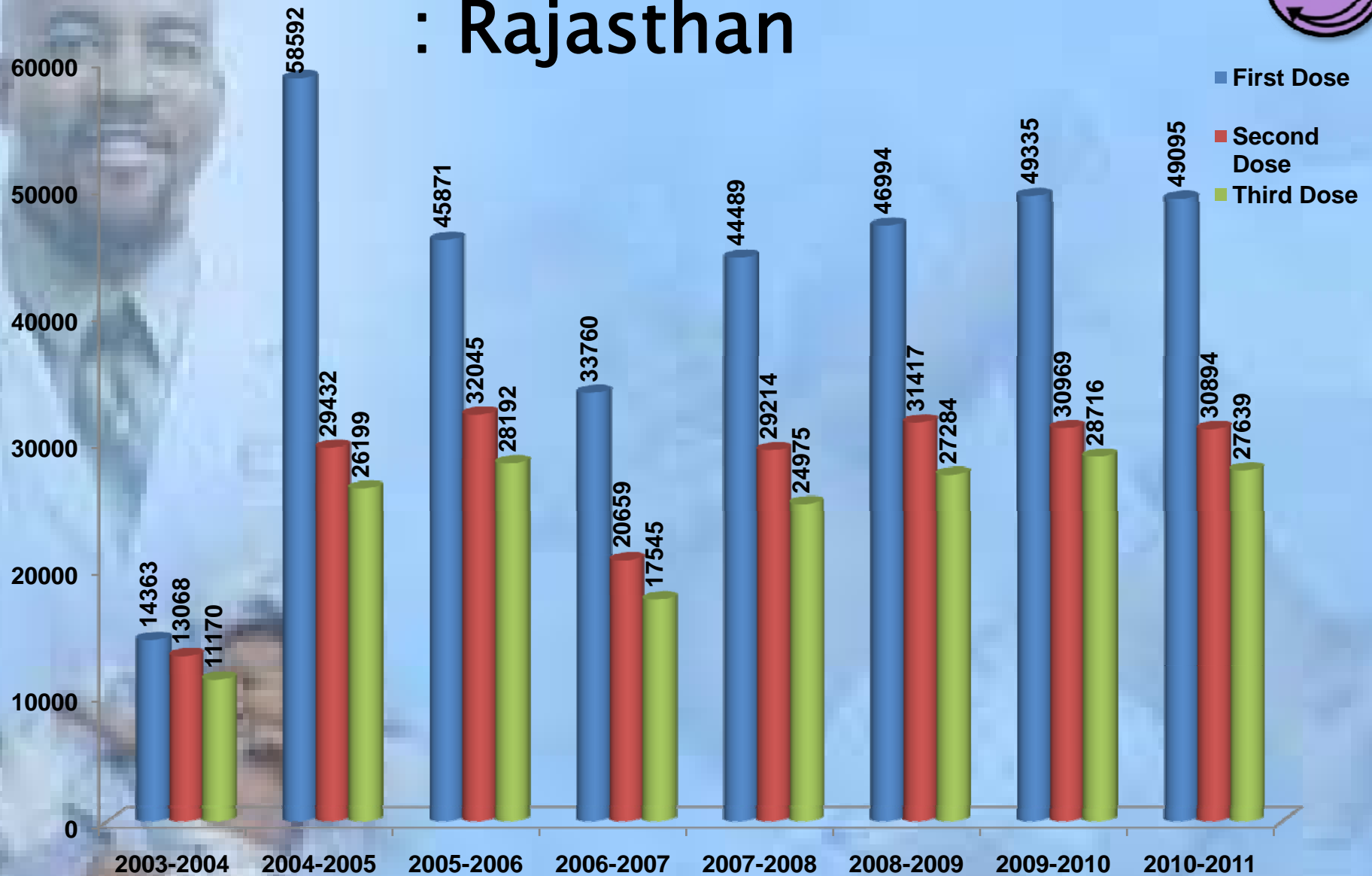
Immunization Coverage: Rajasthan



Immunization Coverage: Rajasthan



Immunization Coverage of Hepatitis : Rajasthan





New Initiatives

- Hepatitis B vaccine is being introduced in Routine Immunization program from 14th November 2011 in all districts.
- Measles Catch Up campaign Phase 2 is being planned in 5 districts viz. Bharatpur, Dausa, Dholpur, Karauli & Sawai Madhopur in December 2011.



Facilities Created for Child Health

Malnutrition Treatment Corners (MTCs)



- 38 Malnutrition Treatment Corners (MTCs) have been established with the aim of improving management of severely malnourished children at the level of District Hospitals.
- 13,200 malnourished children have been taken care so far.

Facility based New Born Care (Priyadarshini) Unit



To address neonatal deaths

- All District Hospitals and Medical Colleges
 - 36 FBNC units are functional
 - 12 bedded unit at District Hospitals, necessary equipments supplied
 - 8 contractual nursing staff, Specialized training imparted
 - 101184 infants treated and death rate is 9.61% of the total admissions.

Rajasthan is the first state to up-scale in all districts



Rajasthan is the first state to up-scale SNCU in all districts



- **Newborn Stabilization Units-** at selective CHCs
 - 4 bedded unit with radiant warmers, phototherapy and other equipments
 - 72 units functional against 100 planned
 - Hands on training imparted to staff and doctor.
 - 72 Newborn Stabilizing Units (against 100 planned for the first phase) have been made functional at CHCs offering Level-3 MCH services (FRUs).



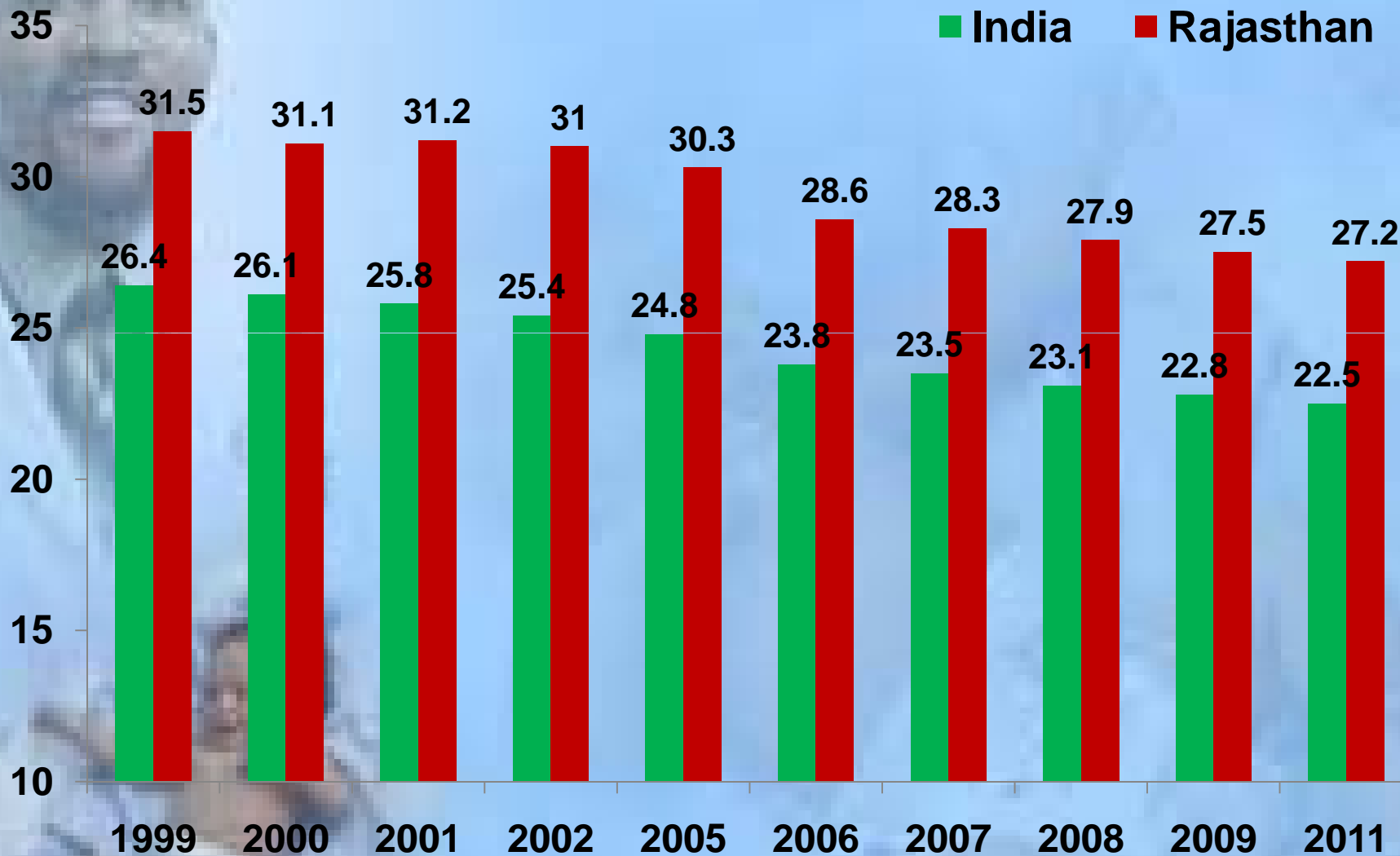
➤ **Newborn Care Corners-**

- Are to be established at all delivery points.
- To prevent from low body temperature (hypothermia), low birth weight (LBW) prematurity, birth asphyxia etc.
- 820 Newborn Corners have been made functional for providing immediate care to the newborn.



Child Health Statistics Data

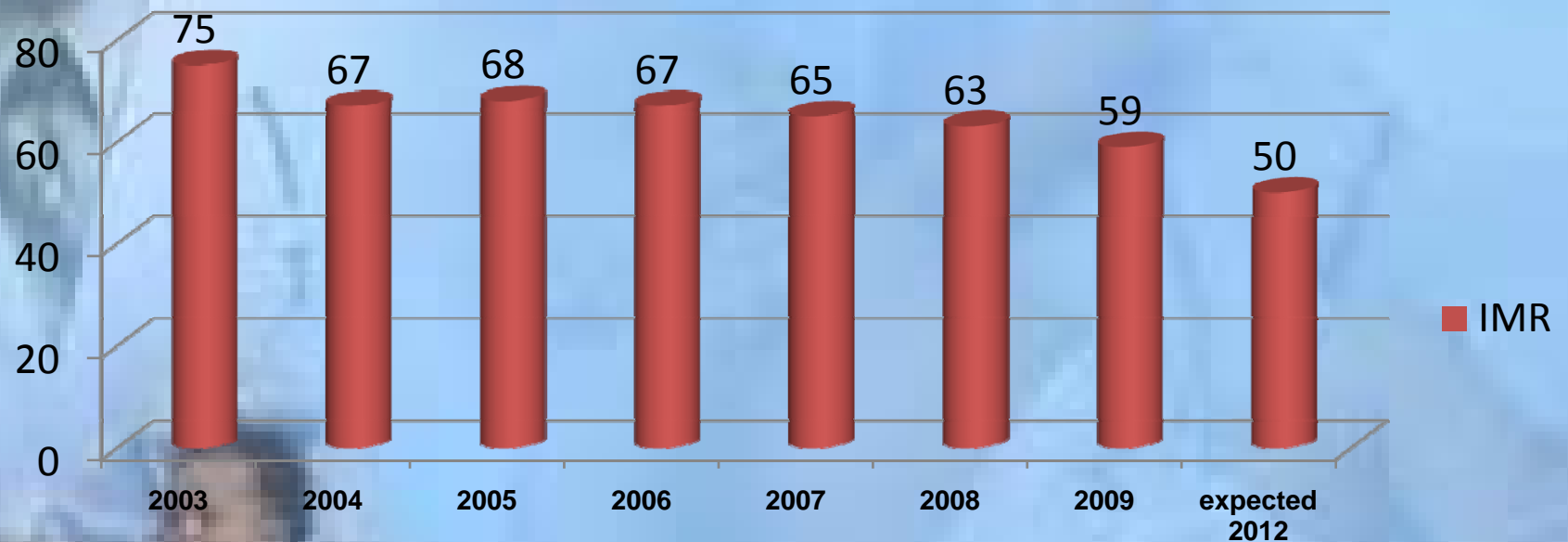
Crude Birth Rate (Rajasthan)



Source: SRS

SIHFW: an ISO 9001: 2008 certified institution

Trends in Infant mortality rate (Rajasthan)

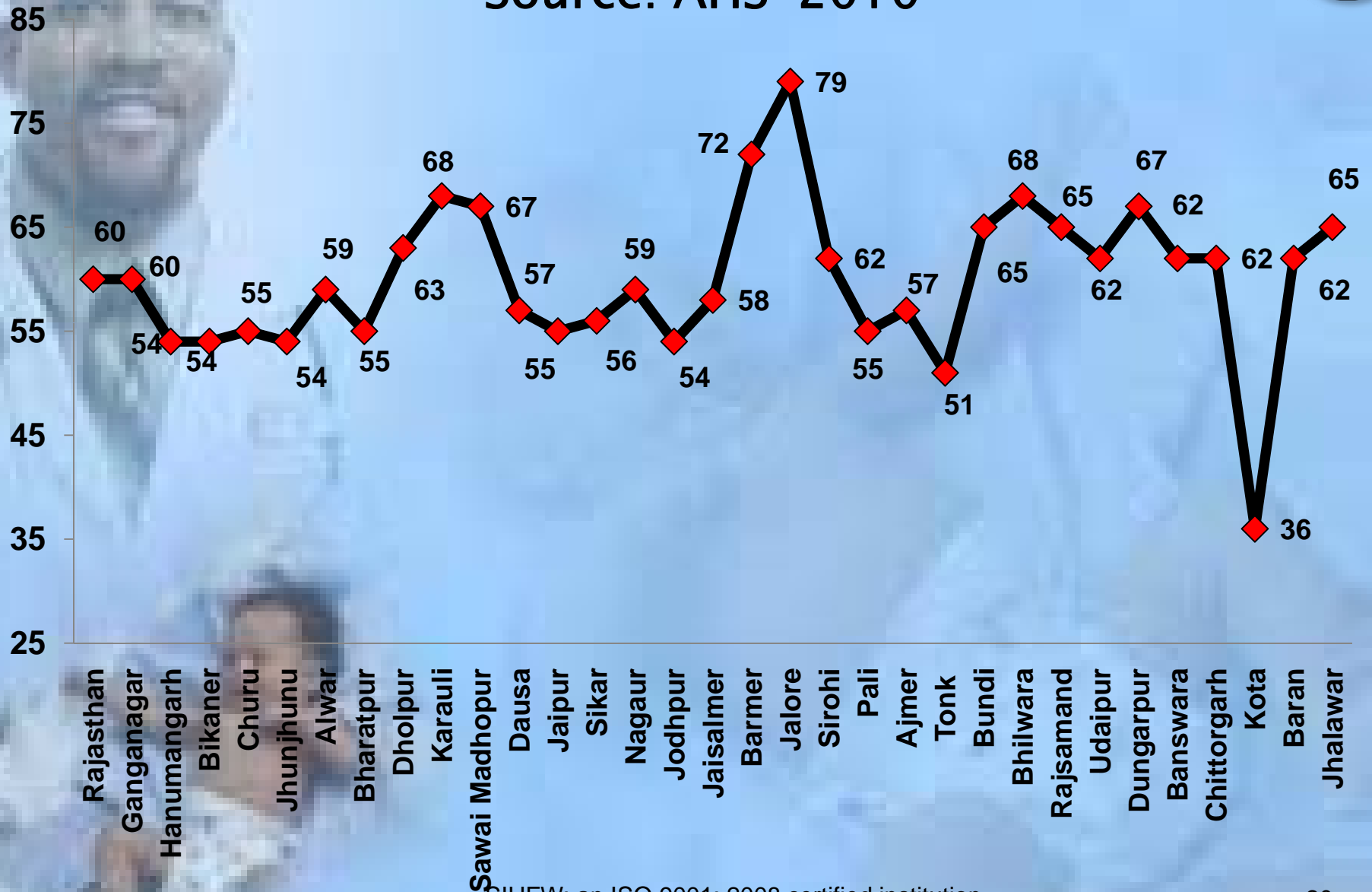


Source: SRS

SIHFW: an ISO 9001: 2008 certified institution

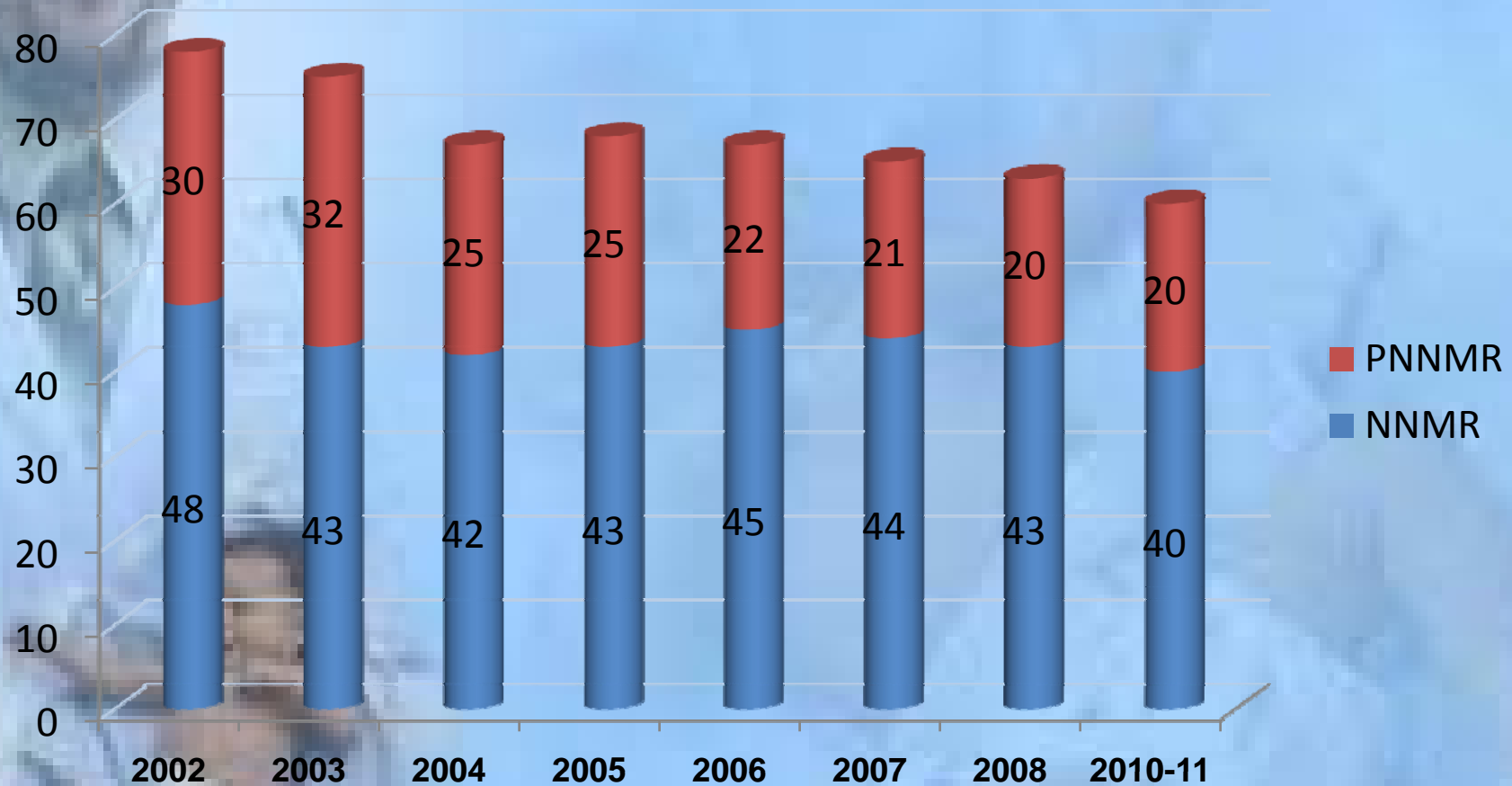
Infant mortality Rate

Source: AHS-2010



SIHFW: an ISO 9001: 2008 certified institution

Trends in NNMR and PNNMR (Rajasthan)

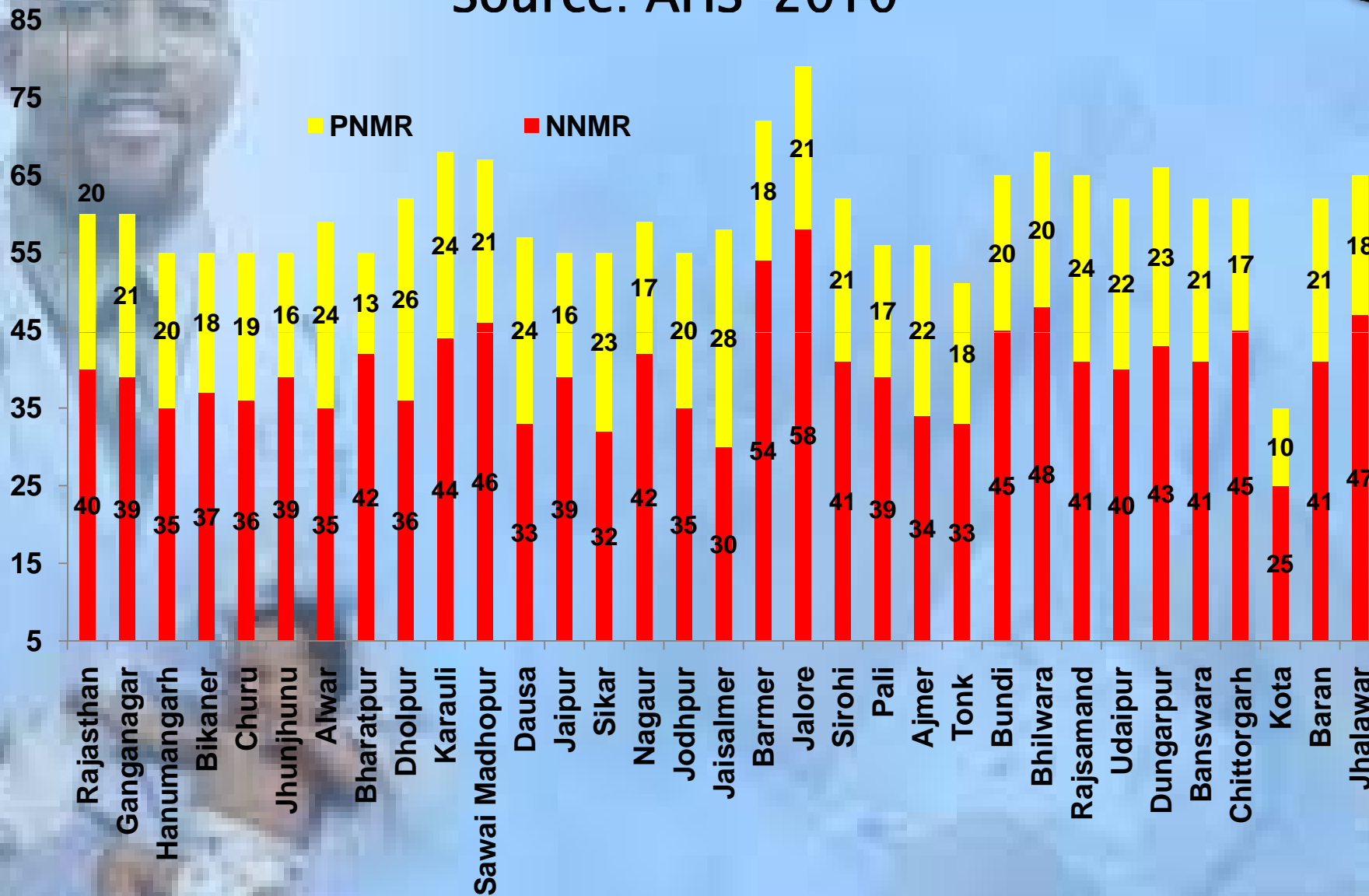


Source: MoHFW and AHS 2010-11

Post Natal & Neo-Natal Mortality Rate



Source: AHS-2010





Under 5 mortality Rate (U5MR)

- Indicates the probability of dying between birth and exactly five years of age
- Expressed per 1,000 live births
- Barometer of child well being in general and child health in particular
- Measures an 'outcome' of the development process rather than an 'input'.

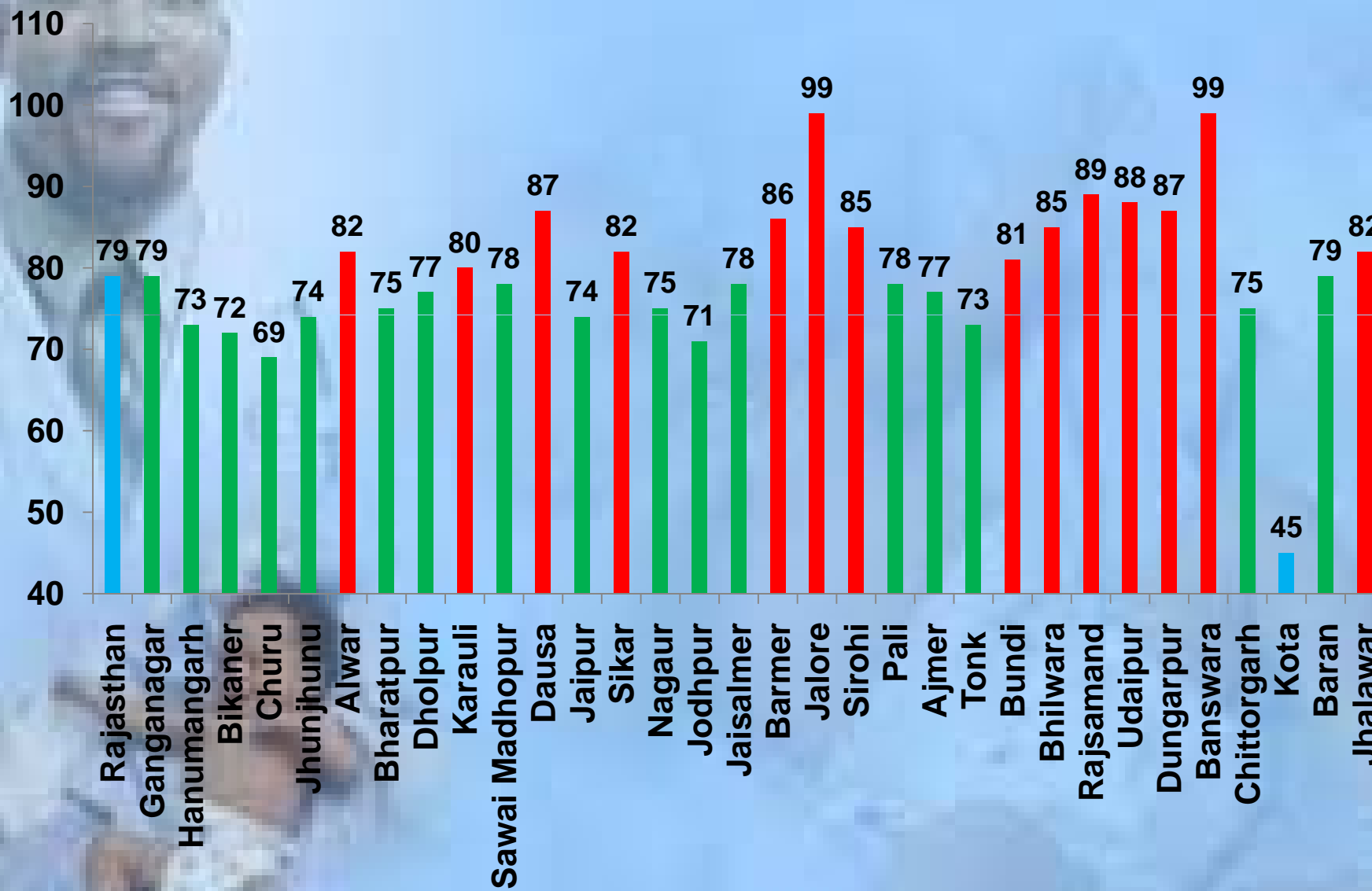
Mortality rate of children under 5 years has fallen from 89 / 1000 live births in 1990 to 60 / 1000 live births in 2009 (source: world Health statistics , 2011)



- U5MR is a result of :
 - The nutritional status and the health knowledge of mothers
 - The level of immunization and ORT
 - The availability of maternal and child health services (including prenatal care)
 - Income and food availability in the family
 - The availability of safe drinking water and basic sanitation
 - The overall safety of the child's environment

Under 5 Mortality Rate

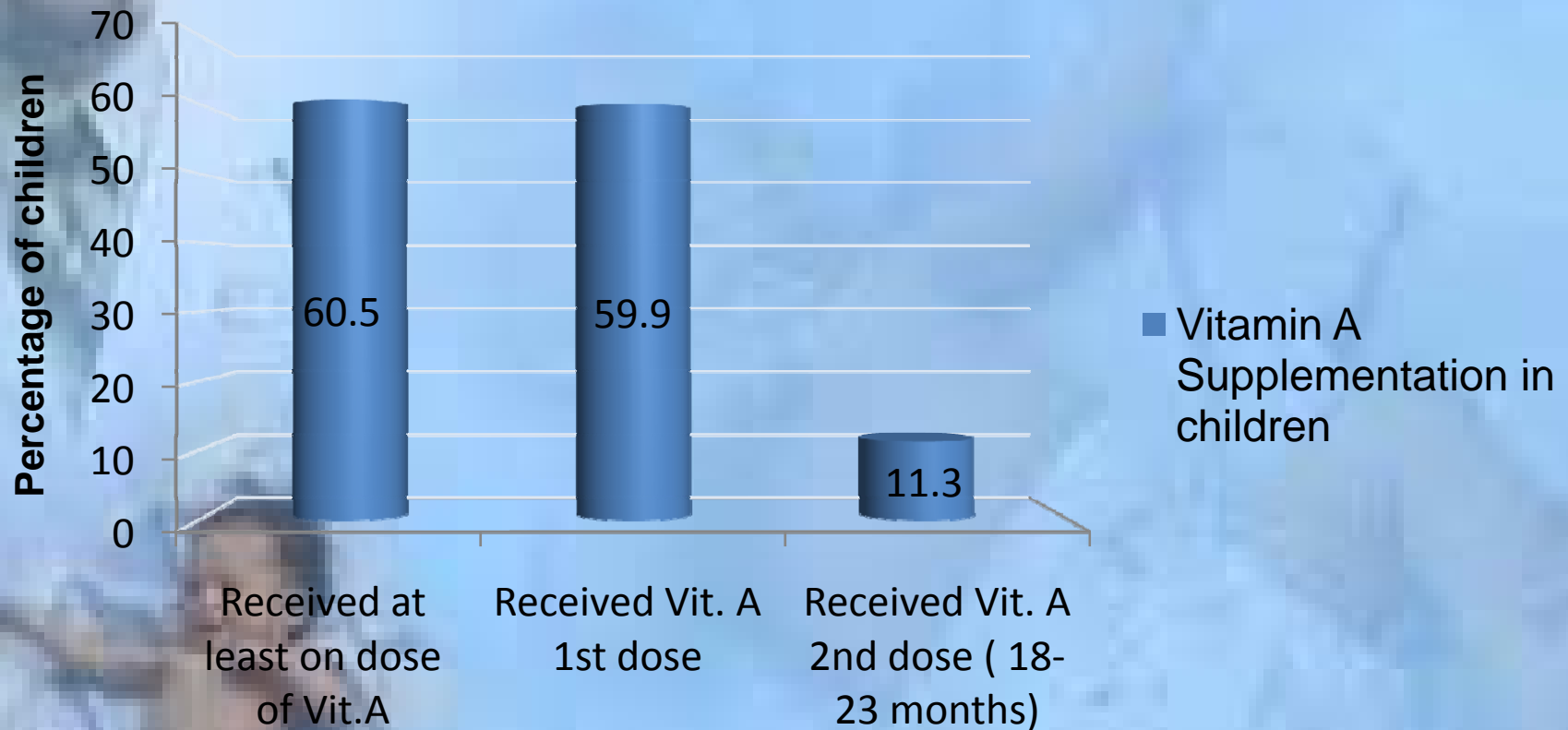
Source: AHS-2010



Micronutrients : Vitamin A (12-23 months)



Vitamin A Supplementation in children



Source: CES, 2009



Causes of Child mortality

Three major causes of child mortality :

- Infection (Sepsis, pneumonia, Diarrhea)
- Prematurity
- Birth asphyxia

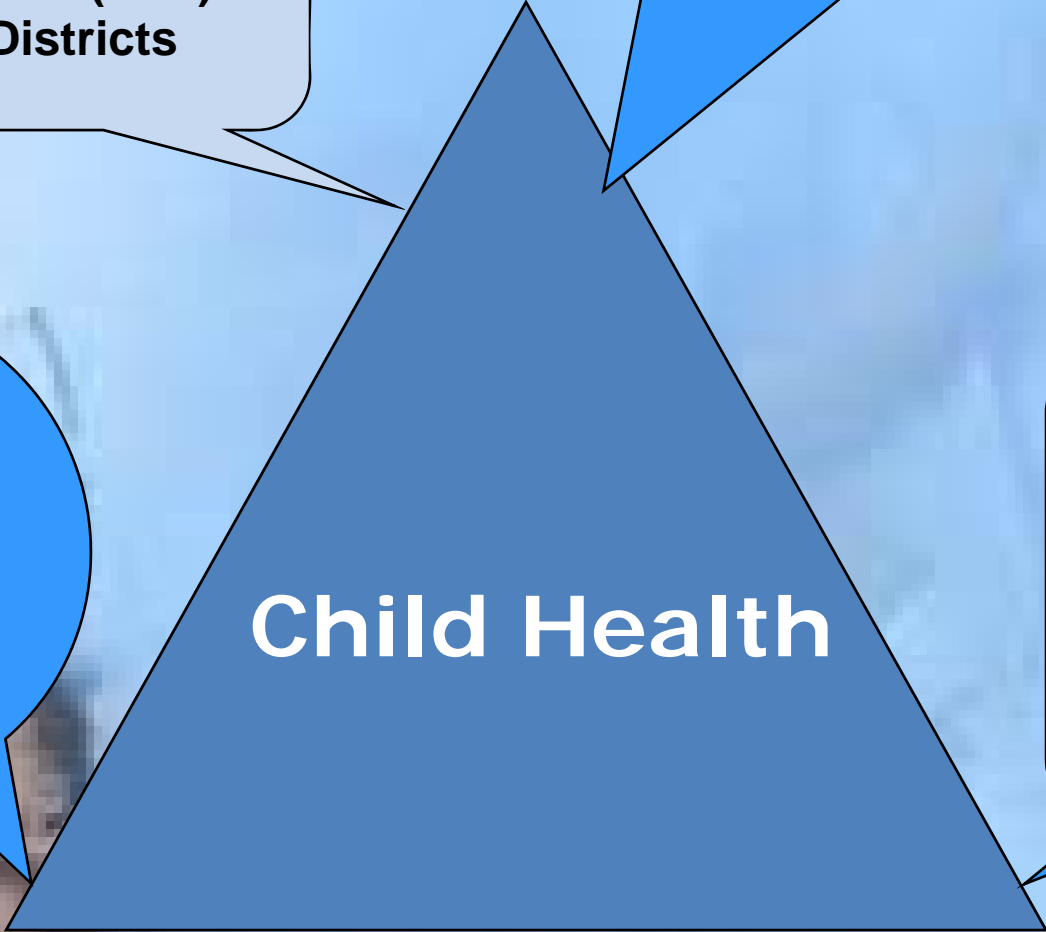


Norway India Partnership Initiatives (NIPI) in 3 Districts

**IMNCI
(28637 frontline workers trained)**

**FBNCs
(36 FBNCs are made functional)**

**MTC
(36 MTCs are made functional)**



Child Health

Child Health Programmes



- 1978- Expanded Programme of immunization (EPI)
- 1984- Universal Immunization Programme (UIP) For prevention of deaths due to 6 VPDs
- 1985- Oral Rehydration Therapy Programme for prevention of deaths due to diarrhoea
- 1990- UIP and ORT universalized in all districts
- 1990- ARI Programme taken up as a pilot in 26 districts
- 1992- CSSM
- 1997- RCH-1
- 2005- NRHM and RCH II

Objectives Child Health Program



- Reduction of IMR
- Ensure full immunization
- Ensure quality essential new born care
- Promote safe motherhood
- Preventing water borne diseases
- Promoting hygiene and sanitation practices
- Setting of yearly targets of process indicators

Strategies



- Improve quality of health services.
- Provide at least one 24 hour medical facility
- Strengthen institutional health systems
- Strengthen referral services.
- Effective dissemination of ORS
- Strengthen IMNCI
- Combat micro nutrient deficiency.
- Awareness program for home management of ARI
- Strengthen convergence between the departments



Govt initiatives in XI FYP (2007–2012)

Aims at Improving survival through:

- Reducing child and maternal mortality
- Improving child Sex ratio through Gender Responsive Health care
- Reducing Infant and Child mortality through HBPNC and IMNCI



NRHM Initiatives



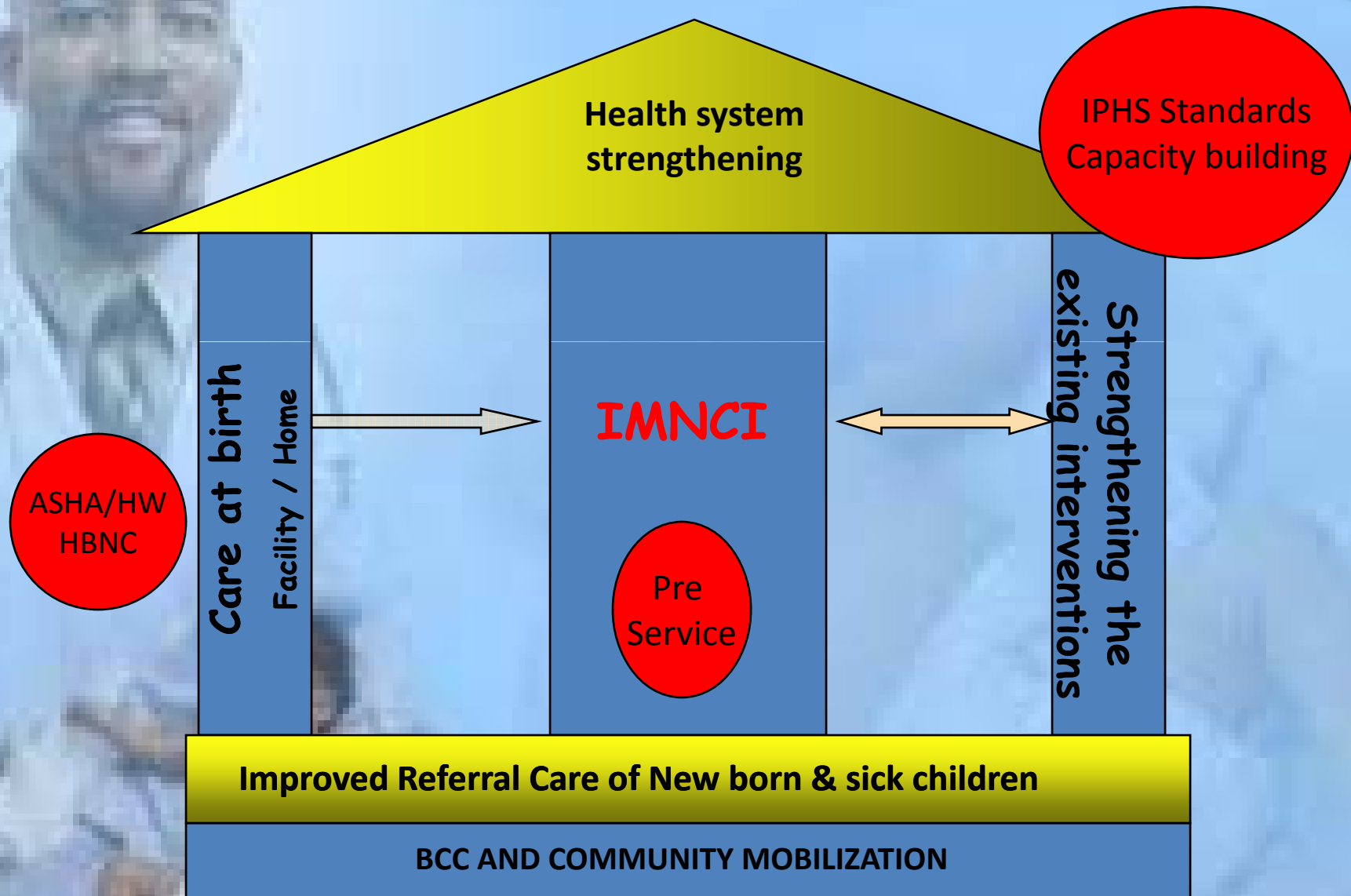
- Map facilities for giving assured maternal & child health care –
 - Level 2 – New Borne Corner
 - Level 3 – New Born Stabilization Unit / SNCU
 - Specialized FBNC Units to address early neonatal mortality
- Rajasthan is the first state to establish these units in all districts
- Strengthen inter – departmental convergence (ASHA/AWW/ANM)- to improve immunization coverage,



Mobilization for MCHN days, growth monitoring and referral linkages to Malnutrition treatment centers and Antenatal care.

- Joint planning, monitoring and review of activities
- Pregnancy and Child Tracking System
- AYUSH doctors are being imparted IMNCI and SBA trainings
- Immunization
- MCHN days
- Training on NSSK, IMNCI

RCH II: Child Health strategy





Child Survival Activities under RCH

- Care of New borne
 - Eye, Cord, Bath & Feed
 - Special care & Referral conditions
- Immunization
- Vitamin-A (9 dose prophylaxis)
- Diarrhea-ORT & ARI
 - Standard case definition & management
- Support Activities-
 - Cold chain
 - Supplies
 - Surveillance

Initiatives in the State for Child Health



Facility based interventions	<ul style="list-style-type: none">• New Born Corners• SNSU• SNCU Level II• SNCU Level III (Tertiary Care)• Establishing MTC's• WBC
Community based interventions	<ul style="list-style-type: none">• MCHN Sessions• IMNCI• Home Based Postnatal Care
New initiatives	<ul style="list-style-type: none">• Yashoda• Navjat Sishu Suraksha Karyakaram• F-IMNCI

Facility based New Born Care



- Establishing New Borne Corner, New Born Stabilization Unit / SNCU
- Specialized Facility Based newborn Care Units to address early neonatal mortality
- Rajasthan is the first state to establish these units in all districts

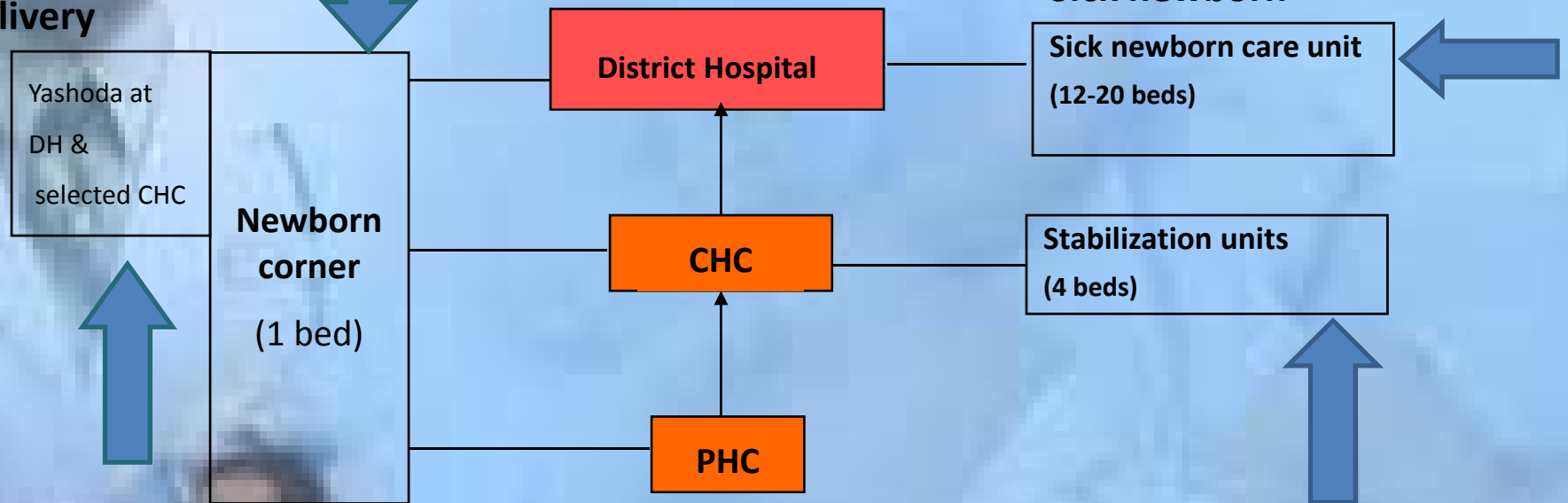
Facility Based Neonatal Care



At Delivery



Sick newborn



Facility based New Born Care Units



Objective :

To strengthen and provide quality neo natal care at various health facilities to reduce IMR in the State.

Activities:

- Implemented at all district hospitals
- Multi-skilling of Staff nurses (8 nos) and Doctors by National Neonatal Forum.
- Standard treatment protocols and operational manual followed.
- Equipments like Radiant warmer, Phototherapy Machine, Syringe infusion Pump etc. are provided.

Rajasthan is the first state to up-scale in all districts

Status

Number of newborn treated – 48839



Activity	Institution/ Level	No of Beds	Nos
SNCU	At Medical College & Dist Hospitals	12 Beds	35
NBSU	At FRU Level	4 Beds	100
Newborn Corner	At All Labour Rooms	-	412



Community based interventions for child health



Mother Child Health and Nutrition Day (MoHFW)

- Started from Oct. 2004
- Micro plan prepared for 73000 sessions per month to be held on fixed day fixed site in all the A/B/C category villages as well as hard to reach areas.
- Monitoring done by Medical Health & WCD department as well as the external monitors from UNICEF.
- MCHN session held 379152 against 410841 (92.29%)



Activities done on MCHN day

- Complete immunization of 0-1 year old child.
- 3 ANC Check up of all the pregnant ladies.
- PNC Check up.
- Identify complicated delivery cases and timely referral
- Family planning counseling and provision of spacing methods
- Identify/Counseling/treatment and referral of malnourished child.
- Birth and JSY registration.

Integrated Management of Neonatal Childhood Illnesses



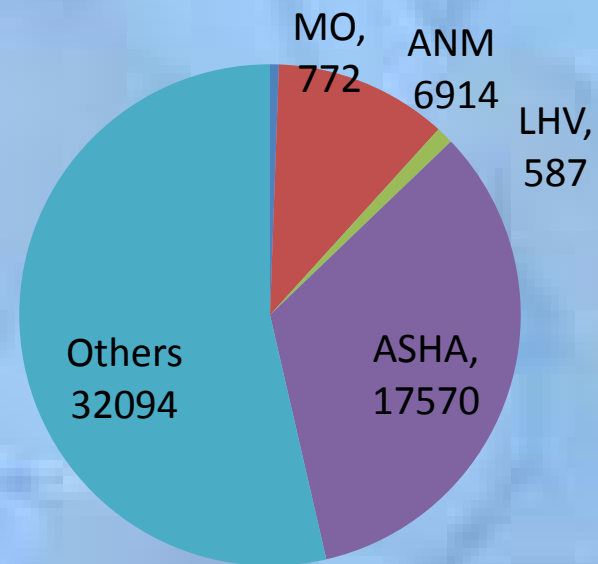
- Major strategy
- Aims at
 - Reducing death, illness, disability and promote improved growth and development in children from Birth to 5 years of age.
- Regular and appropriately timed home visits by trained frontline workers to newborns

IMNCI: Training



- Frontline workers (mainly ANMs and ASHAs)
- Training of frontline workers of DWCD and Department of Medical and Health
- Trained to perform home visits for newborns, treat / refer sick newborns and children, as needed.
- 1124 District level trainings have been completed in the State, till May 2010

IMNCI Training Status

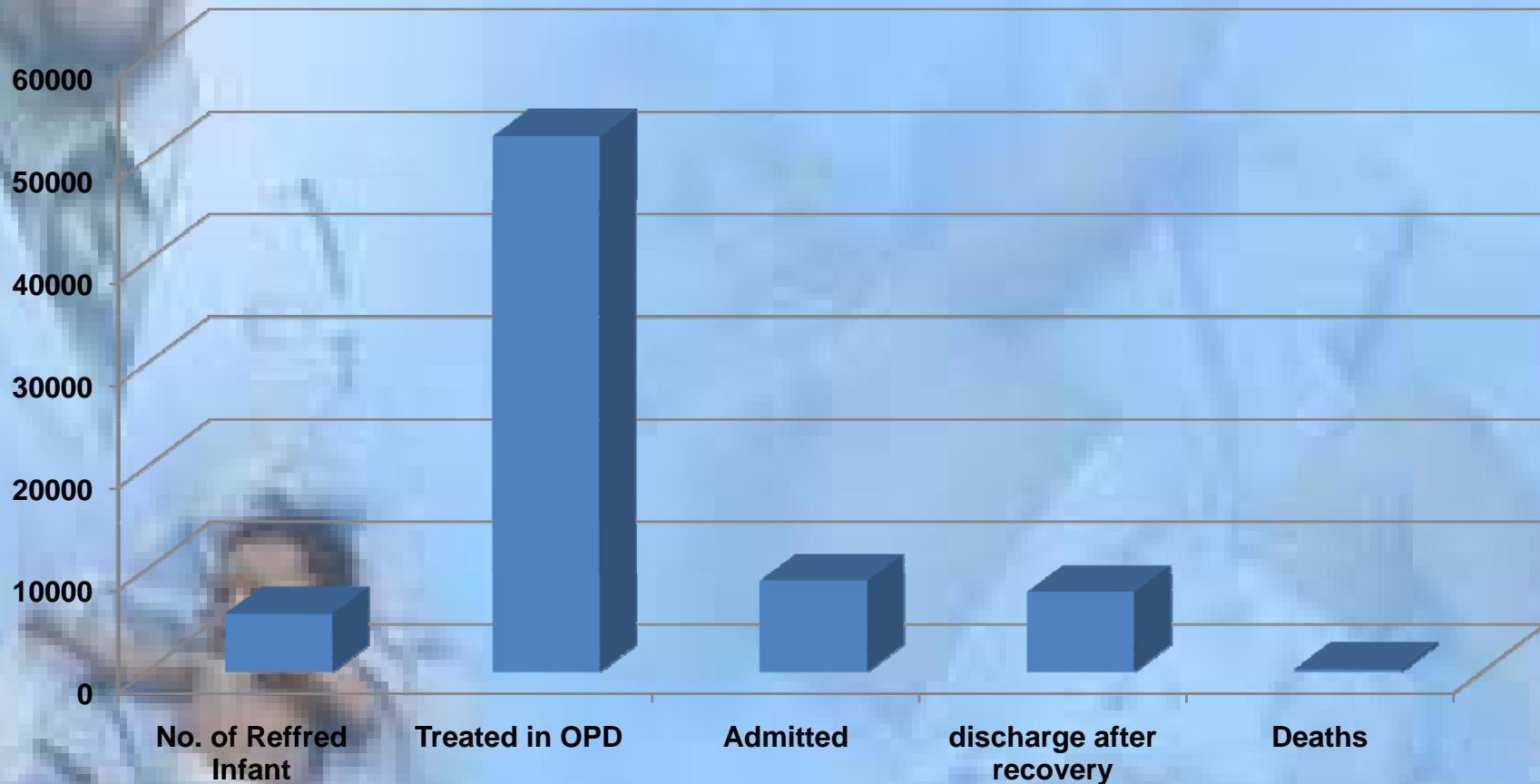


Source: MoHFW

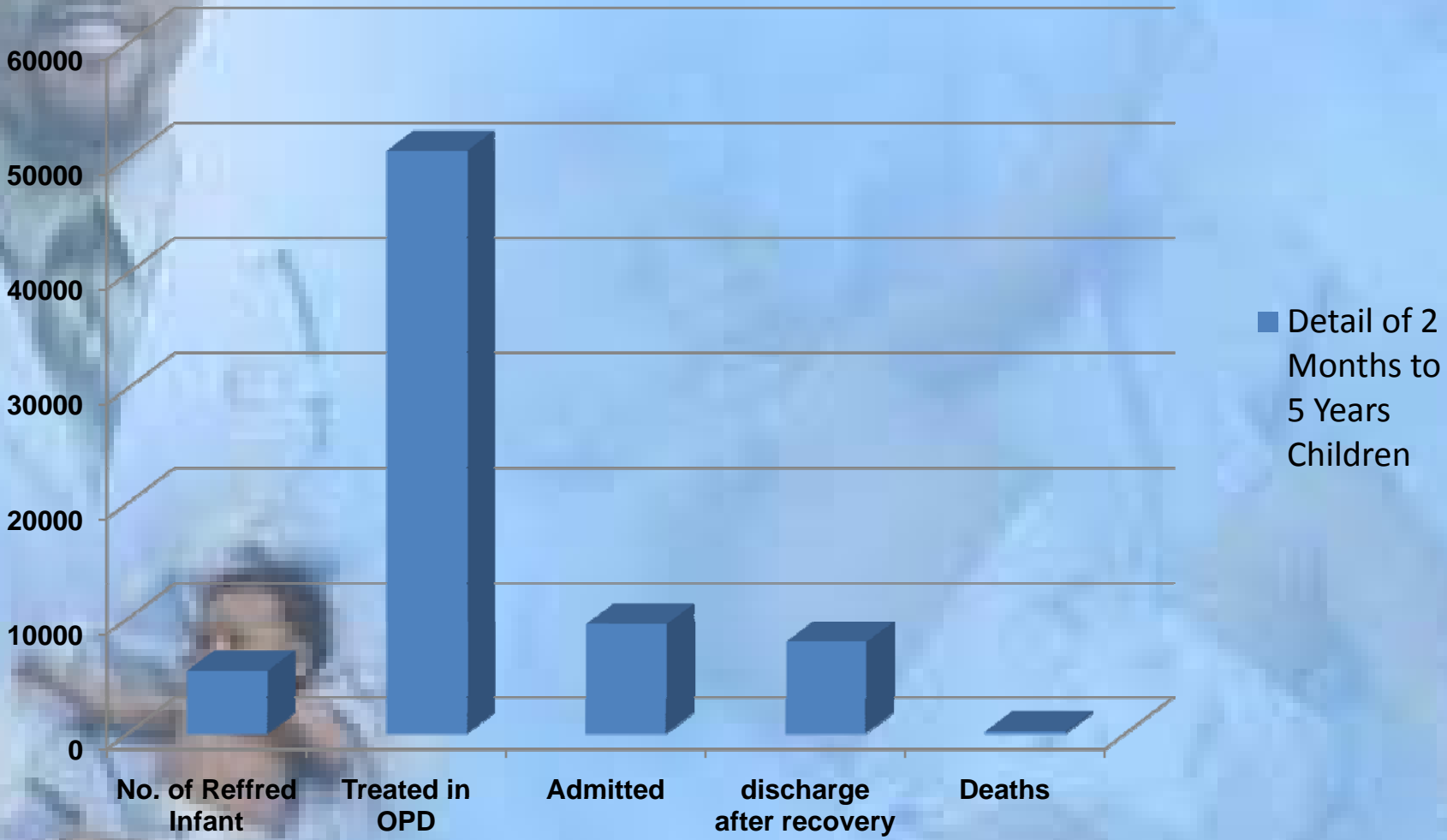
Services Given by ASHA during Home Visits (MoHFW)



Detail of 0-2 Months Infants



Detail of 2 Months to 5 Years Children





HBPNC Intervention

- Initiated in 3 NIPI districts in August 2009
 - 5191 ASHAs given 2 Day Induction Training
 - Five Day HBPNC Training given to 3600/5191 ASHAs
 - Quality control through external agency
 - Need :
 - Post Natal Care is around 71 percent
 - Initiation of Breast Feeding is around 78 percent
 - Newborn referral is still less than 1%

4880 ASHAs trained in HBPNC



HBPNC Trainings

- Training of MTs at Safdarjung –5 Days (3-7 Aug., 2010)-27 trainers
 - LHV/Nurse
 - BMCH
- Training of Block level Trainers at SIHFW - Five Days (August-March , 2011) 346
 - Block CMO
 - One MO from CHC
- Training of ASHAs(Five days) -Around 220 batches
 - Alwar -102
 - Bharatpur-68
 - Dausa-50

SIHFW, Jaipur Monitored 32 % HBPNC trainings of ASHAs till date

HBPNC: Status (Apr-Dec 2010)



- 5300 ASHAs Performing HBPNC
- 5/6 Home visits during post natal period
- One home visit during 7-8th month of pregnancy
- 5 day HBPNC training in process.

Sample from 3 Districts

S.No	Indicator	Number	Percentage
1.	Total Deliveries	56,477	-
	(i) Institutional	46,115	82%
	(ii) Home	10,362	18%
2.	HBPNC given	46,691	83%

Continued



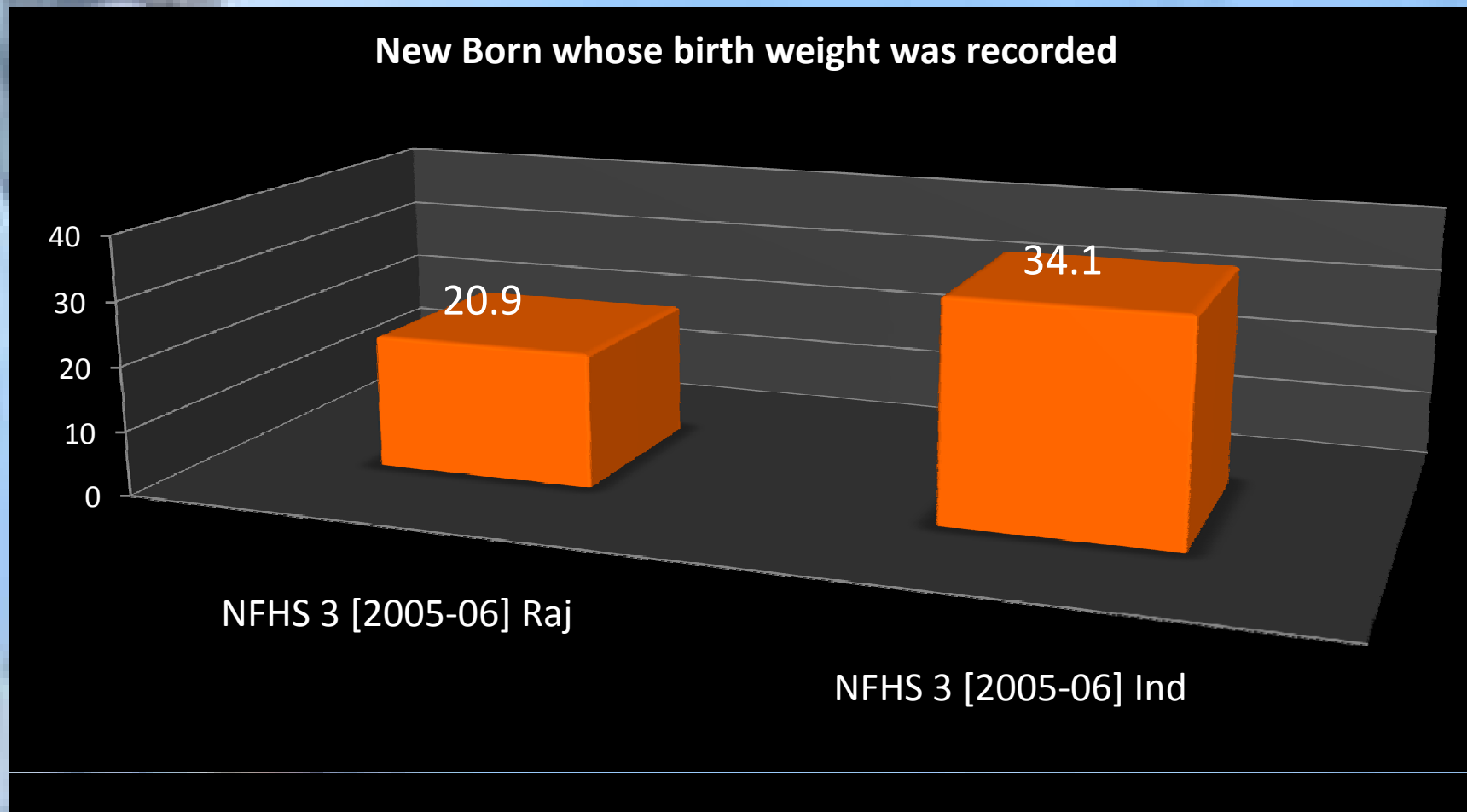
3.	Babies <2500 gm	18,276	39%
4.	Breast feeding within 1 hour	40,552	87%
5.	New born exclusively breast fed	36,930	79%
6.	New born given OPV & BCG	38,383	82%
7.	New born identified with danger sign	209	<1 %
8.	Mothers identified with danger sign	271	< 1 %
9.	Newborns referred to institution	250	< 1%
10.	Mothers referred to institutions	163	<1 %
11.	Neonatal deaths	595	1%

Source: MoHFW

Status of Recording of Birth Weight



(Source :NFHS 3)



YASHODA



- A trained facility based volunteer
- Paid, performance linked incentive @ Rs 100/- per mother and neonate.
- Link between hospital Staff, the mother and family.
- Assist the nurse with cord care, cleaning & weighing of the baby, initiate immediate breast feeding, counsel for exclusive breast feeding and basic new born care practices.
- Ensure zero dose immunization and BCG vaccination & counsel about family planning.

Yashoda -555 in 28 DH



Improvement in indicators

Based on data from three districts visible improvement in:

- Weighing (97%)
- Early Initiation of Breast Feeding (82%)
- Zero Dose Polio & BCG vaccination (97%)
- 48 hrs stay of mothers (97)

Source: MoHFW

Navjaat Shishu Suraksha Karyakram



- Programme on Basic Newborn Care and Resuscitation
- National launch on 15 Sept. 2009 by GoI
- Address important interventions of care at birth:
 - ✓ Prevention of Hypothermia
 - ✓ Prevention of Infection
 - ✓ Early initiation of Breast feeding and
 - ✓ Basic Newborn Resuscitation.

NSSK-2440 staff trained in resuscitation & basic care



Interventions under NSSK

Causes of neonatal deaths

Severe infections

Pre-term birth

Birth asphyxia

Neonatal tetanus

INTERVENTIONS

i) Infection prevention – strict hand washing and practice of asepsis,

ii) Prevention of hypothermia – ensure warm chain – KMC/ wrap baby in warm clothes

iii) early initiation of breast feeding

Resuscitation

TT immunization during pregnancy

Janani Shishu Suraksha Karyakram (JSSK)



Entitlements for Sick Newborn till 30 days after birth:

- Free and zero expense treatment
- Free drug & consumables
- Free Diagnostics
- Free provision of blood
- Free transport from home to health institutions
- Free transport between facilities in case of referral
- Drop back from institutions to home
- Exemption from all kinds of User Charges



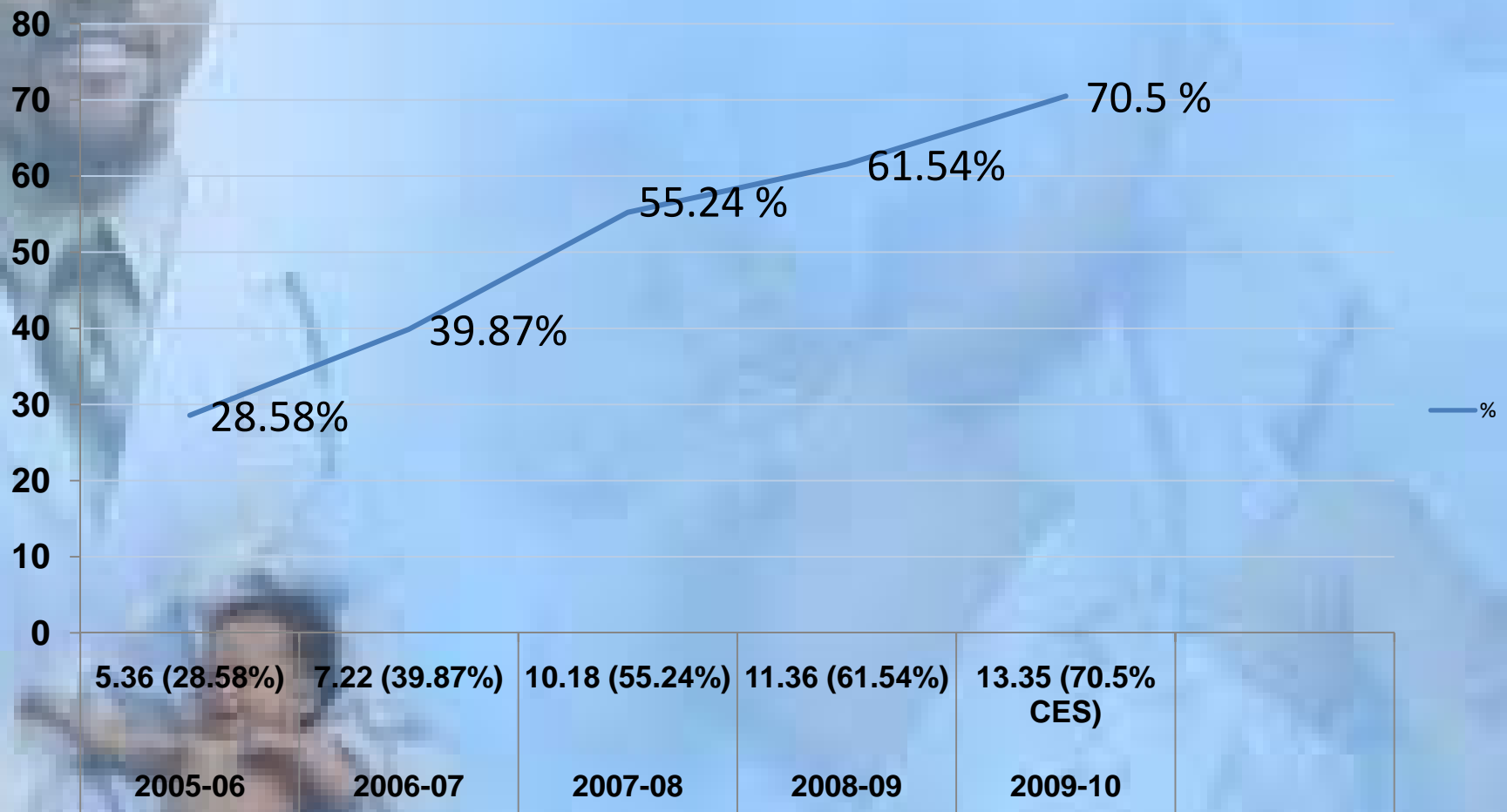
Other Interventions

Institutional Deliveries



- Institutional delivery raised up to 70.5% (UNICEF coverage evaluation.....)
- JSY- Safe motherhood intervention started by NRHM
- Launched by the GoI in April 2005, the scheme was put into operation in Rajasthan in Sept. 2005.
- Aims to reduce overall maternal mortality and infant mortality by way of increasing institutional deliveries
- Scheme incorporates cash assistance along with antenatal, natal and post natal care by the concerted efforts of grass root level health workers especially ASHA

Trends in Institutional deliveries (Rajasthan)



Source: MoHFW , CES, 2009



Supplementary Nutrition

- Under ICDS, Supplementary nutrition is provided
- Main beneficiaries : Children >6 years; pregnant & lactating mothers
- Service provider : AWW & AWH

Supplementary Nutrition



Beneficiary	Pre-revised		Revised w.e.f. Feb. 2009	
	Calories (KCal)	Protein (G)	Calories (KCal)	Protein (Gm)
Children (6-72 months)	300	8-10	500	12-15
Severely malnourished children (6-72 months)	600	20	800	20-25
Pregnant & Lactating	500	15-20	600	18-20

Immunization: Developments Achievements



- Prevention of vaccine preventable disease in infants and mothers
- Hepatitis vaccine in Jaipur City
- Fixed services are provided at DH, CHCs, PHCs and SC
- Unnerved and Underserved areas are covered by Catch up rounds
- Pulse Polio campaign is in all Districts holding 2 National immunization days.
- Pulse Polio campaign is in Sub-national immunization days according to case detection. (Alwar, Bharatpur and Dausa)

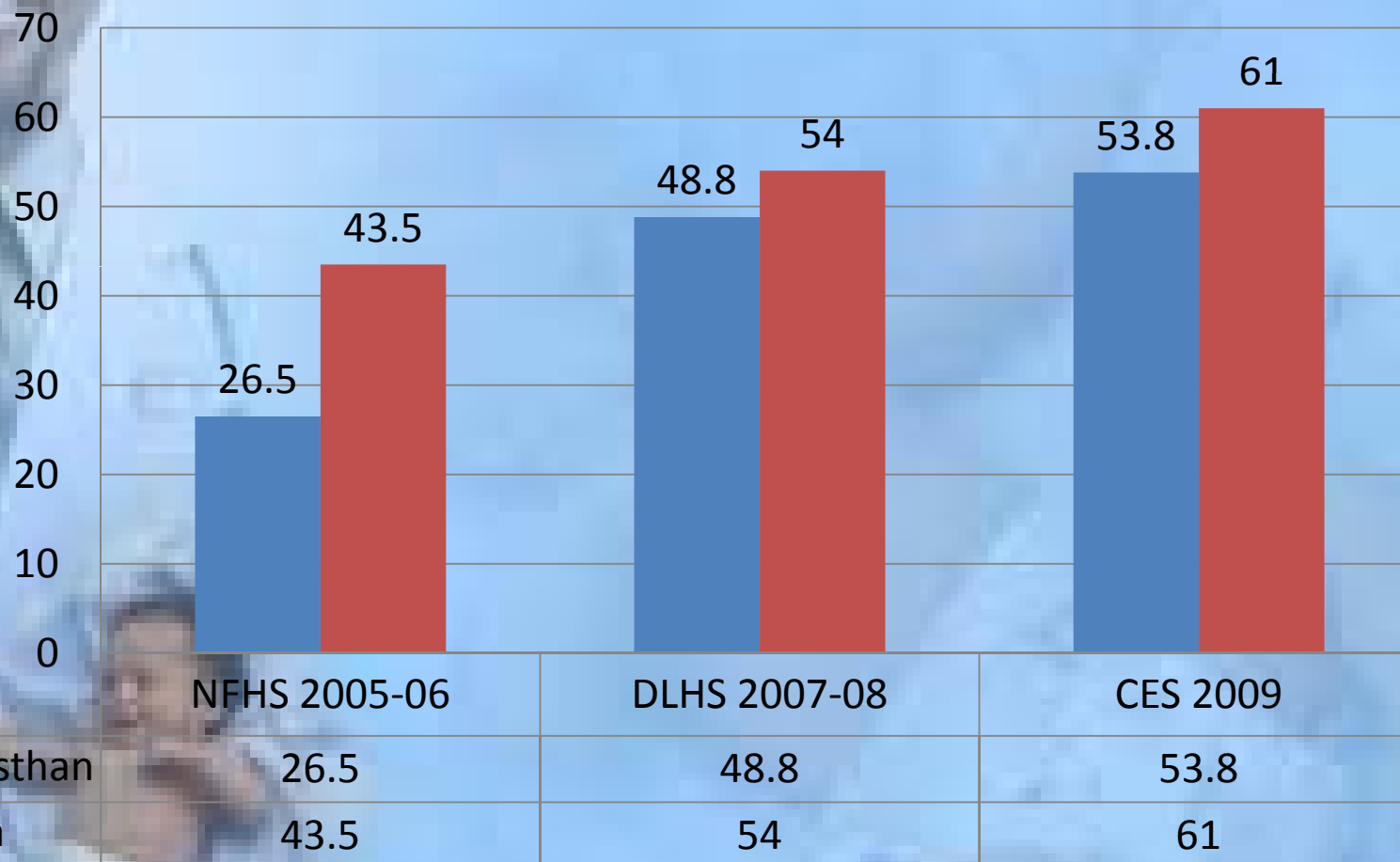
Source: MoHFW



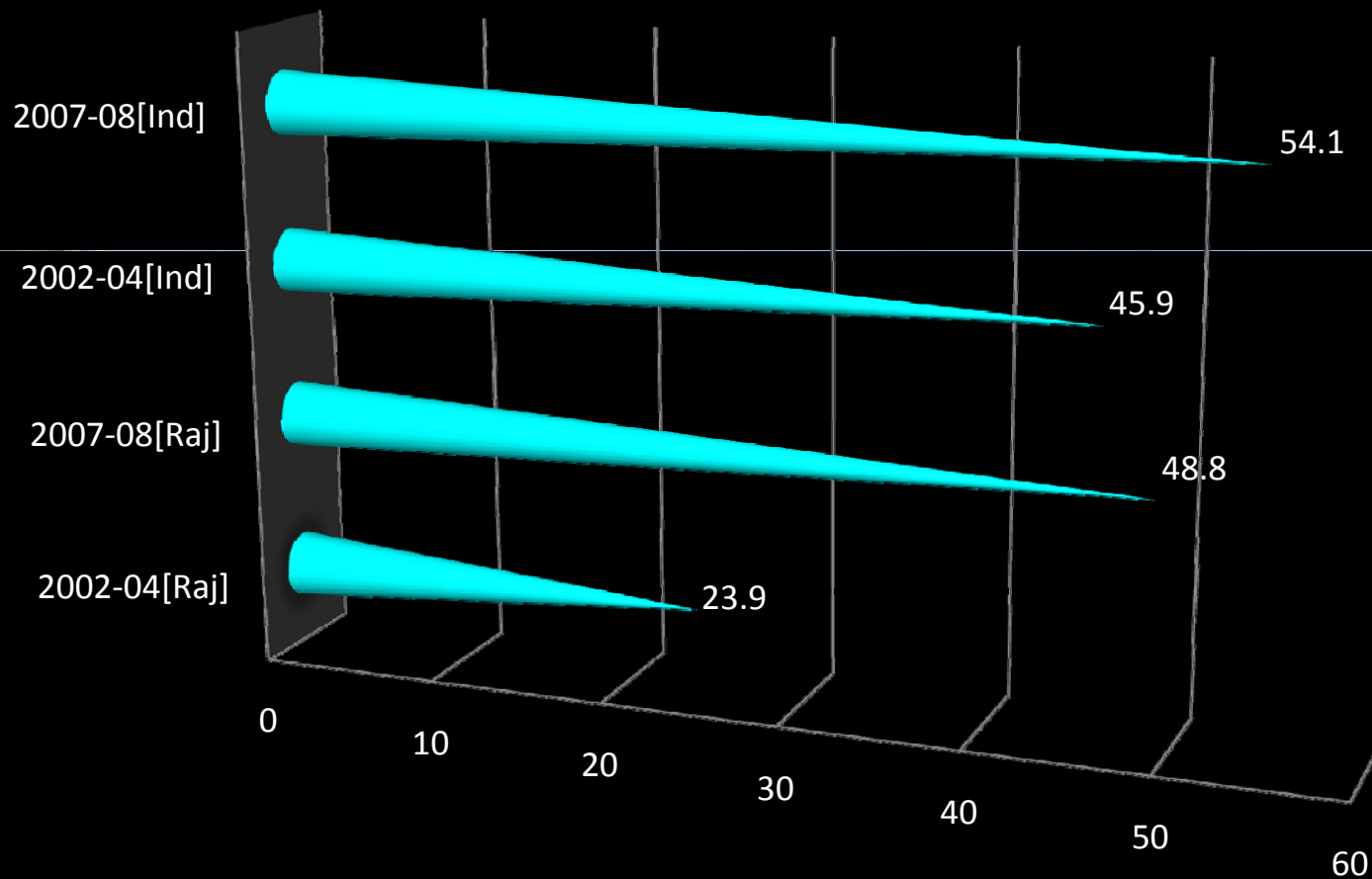
- Training for Cold Chain handlers-930
- Training of Routine immunization to the health workers- 10,000
- Training for Medical officers-on RI-640
- Outreach areas are served by Holding Maternal, Child health and Nutrition days (MCHN) at Anganwadi Centers



Full Immunization Status



Status of Full Immunization of children (12–23 months)



(Source: DLHS 2 & 3)



Newer Developments

- JSSK launched- free services to PW & Neonates
- Hepatitis B introduced in RI (Nov.14, 2011)
- 40 MTCs established
- 36 FBNC units functional
- 4880 ASHAs trained in HBPNC
- 72 New born stabilization units established
- 820 New born care corners functional



- 54000 MCHN sessions per month
- Alternate vaccine delivery
- Free Referral transport up to 30 days for sick neonates
- IMNCI launched in 9 districts.
- Mal nutrition corner at all 237 blocks.

Malnutrition Treatment Corners



- 36 MTCs set up at Medical Colleges , District Hospitals and selected CHCs under NRHM
- Sanctioned :39
- Established at all the district hospital of the state present functional status DH= 34 CHCs= 3
- Aim to
 - strengthen management of severely malnourished children at health facilities
 - reduce mortality, MTCs are being established

More than 10,000 children are admitted and treated in MTCs



- Doctors and Nursing staff -trained in malnutrition management
- 4 Additional nursing staff engaged on contract for each unit.
- Each centre has 6 beds for-
 - Management of severely malnourished children with complications
 - Counseling for correct child feeding practices
 - Malnourished Children are referred from Anganwadi centers/ Community and other Health Institutions to MTCs.

Focus areas in child Health



- Post natal care
- Neonatal care
- Immunization
- Growth monitoring
- Neonatal care
- Exclusive Breast feeding
- Vitamin A
- Diarrhea & ARI mgt.
- Supplementary feeding
- Birth spacing



Latest Researches in Child Health



Latest Research

- **President's Emergency Plan for AIDS Relief (PEPFAR) and UNAIDS**-a partnership between the PEPFAR and UNAIDS to launch a global plan for eliminating new HIV infections among children by 2015.



- The International Maternal, Pediatric, and Adolescent AIDS Clinical Trials (IMPAACT) Group is a network of research institutions, funded through an NICHD-NAIAD-National Institute of Mental Health (NIMH) partnership, conducts trials in collaboration with the Domestic and International Pediatric/Perinatal HIV Clinical Studies Network (also called the NICHD Network.). Prior NICHD-supported research showed that infants who were infected despite receiving anti-HIV drugs may have a form of HIV that is resistant to nevirapine, the most commonly used drug for treating pediatric HIV in resource-limited countries.



- The NICHD reported on one of its IMPAACT Group studies demonstrating that initial therapy with a three-drug regimen, including a protease inhibitor called lopinavir/ritonavir, was more effective than a three-drug regimen containing nevirapine for treating infants who became infected despite being exposed to nevirapine at birth
- These findings led to changes in the World Health Organization (WHO) treatment guidelines, Use of Antiretroviral Drugs for Treating Pregnant Women and Preventing HIV Infection



Initiatives in Pipeline

- F-IMNCI (IMNCI and Facility based care in the process of finalization)
- Newborn Health Care strategy on the anvil
- School Health Programme
- Pentavalent Vaccine



Innovative Schemes

- District Child Health Coordinator (Rajasthan, MP, Orissa)
- ISO certification of District Hospitals. Standard Protocols for New Born and Sick New Born at District Hospitals (Gujarat)
- New Born Care Kits (2 Baby Mattresses; 4 Baby Jackets; 3 Baby Caps; 3 pairs of Gloves; 12 Baby Diapers and 8 Baby Blankets) (AP)
- Health information help line
- Janani Shishu Suraksha Yojana -Rajasthan

Child protection in terms of Nutrition and care



- ICDS Integrated Child Development services scheme
- Supplementary Nutrition
- Anganwadi Centers
- Parent education
- Girl child protection scheme
- check on Child trafficking
- Children homes (shishu Vihar / Balvihar)
- Kishora Shakti yojana



Child protection

According to UNICEF

‘Child protection’ to refer to preventing and responding to violence, exploitation and abuse against children – including commercial sexual exploitation, trafficking, child labour and harmful traditional practices, such as child marriage.



Child protection

Objectives

- Ensuring that children are protected from all forms of exploitation, discrimination, neglect, inhuman, and violence
- Protection to children from sexual exploitation
- Preventing use of narcotic drugs, alcohol and other forms of substance



- Abolishing child labor
- Mainstreaming of child labor
- Protect children against all kinds of abuse
- Protecting children in need of special protection
- To protect the children's right to property in their parental property in case the mother remarries



Major legislations



- The Child Marriage Restraint Act, 1929.
- The Child Labour (Prohibition and Regulation) Act, 1986.
- The Juvenile Justice (Care and Protection of Children) Act, 2000.
- The Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992.
- The Pre-Conception and Pre-natal Diagnostic Technique (Prohibition of Sex Selection) Act, 1994.



- The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995.
- The Immoral Traffic (Prevention) Act, 1956.
- The Guardian and Wards Act, 1890.
- The Young Persons (Harmful Publications) Act, 1956.
- The Commissions for Protection of Child Rights Act, 2005



Challenges

- Funds under Part C of NRHM PIP 2011-12 is yet to be released by Gol.
- Fund for Medical Officer mobility support in NRHM PIP 2011-12 has not been approved by Gol.



Thank You

**For more details log on to
[www. sihfwrajasthan.com](http://www.sihfwrajasthan.com)
or
contact : Director-SIHFW
on**

sihfwraj@yahoo.co.in