Training Module

For

Medical Officers & NHM Staff

Volume - II

Compiled & Developed by:

State Institute of Health & Family Welfare, Jaipur

Supported By:

NHM - Rajasthan

Module for NHM Staff

About Module

This module is intended to provide guide and directions to the trainers to be involved in the training Medical officers of different cadres during their service to understand the planning, executing and monitoring supervision the public health program under NHM in the state of Rajasthan. This module will be the helping guide to the prospective trainers with the essential understanding of the conceptual background of the process of training in general and Training MO/SMO in particular. The fruitfulness of the use of this module, however, depends on the use of some of the 'tips' that may optimize the effectiveness of the trainers. While using this manual, the basic consideration to be kept in mind is that training is not dominantly dependent on the use of lectures, which are not only monotonous in nature but also less productive in terms of transmission of knowledge to the trainees. In fact, training can be a rewarding experience to both the trainer and the trainees if its major thrust is on the promotion of participatory learning, through the use of methods which make the training process more interesting and also ensure the training's more productive results. Accordingly, some of the methods which are recommended for use in the Trainers itself are:

- Brain storming
- Interactive talk
- Illustrative talk
- Group discussion
- Panel discussion
- Role play exercise
- Case studies
- Simulations
- Videos and films
- Hands on practices
- Field practical

(i) **Brain Storming-** The use of this method is generally made as a first step to generate initial interest and essential involvement of the trainees in the training activity. For this, the trainer asks the trainees to think of any ideas without evaluation or judgment. The quantity, not the quality, is what matters. Ideas can be discussed later for practical consideration. Sometimes 'unwanted' or seemingly ridiculous ideas lead to a more practical idea, which would otherwise not have been considered.

(ii) **Interactive Talk-** This method is marked by encouraging the trainees to be quite active and analytical in their learning approach. They are also motivated to be inquisitive and anxious to know new things by asking questions and exploring alternatives.

(iii) **Illustrative Talk-** This is a lecture method supplemented by the use of proper illustration using training materials, including audio-visual aids. Presentation of success stories and case studies is also one of the essential elements of this method.

(iv) **Group Discussion-** Use of this method is based on the principle of the trainer taking on the role of a group promoter. This method is also an effective instrument of participatory learning, whereby the trainer acts as a group adviser, a group facilitator and a group torch bearer.

(v) **Panel Discussion-** The use of this method is marked by greater involvement of trainees in promoting participatory learning. In this situation the trainer's role is limited to be that of coordinator and moderator of the discussion, in which the trainees as panelists act as catalyst agents of the learning process.

(vi) **Role Play Exercise-** This is one of the most effective training methods of participatory learning, in which the trainees are provided an opportunity to put into action the skills learnt through the training. For this, an artificial situation is created, whereby every individual trainee is assigned a role which he/she enacts to demonstrate the skills learnt through the process of training. In ToT these assigned roles may be such as the trainer, the trainee, the operator of audio-visual equipment, etc. While using this method, the role of the facilitator of training is that of a 'guide' or director' of the enacted play

(vii) **Classroom Practical-** This method is generally used to reinforce the learning experience through classroom practice. In case of ToT this method may be used as a supplement to the knowledge input given to the trainees through the lecture method, to cover a particular topic of the training session. One such example may be that of developing a tool of Training Needs Assessment (TNA) or designing a plan of action for a training programme.

(viii) **Case studies-** This method is used to understand the real situation of the field. Participants can involved himself with the situation and analise the cause and consequences of any events. In case of child health or maternal any incidents happened what are the factors involved inthis incident who is responsible and what are the roles and responsibility of any individual to avoide such incident can be understand through case studies.

(ix) Simulations- A training simulation is a virtual medium through which various types of skills can be acquired. Training simulations can be used in a wide variety of genres; however they are most commonly used in corporate situations to improve business awareness and management skills. They are also common in academic environments as an integrated part of a business or management course. Simulation is an exercise to be conducted to understand the practical aspects of the theory. During simulation participants are to be involved and played the role of particular actors who is supposed to responsible for such situation take appropriate action decisions and performe the particular skills with expected attitudes. .

(x) **Videos and films-**To understand the situation live shows can be presented through videos and films. Training films are very use in developing attitude and behavior change of particular person. Use of videos and films in training is to

- Reinforces reading and lecture material
- Aids in the development of a common base of knowledge among students
- Enhances student comprehension and discussion
- Provides greater accommodation of diverse learning styles
- Increases student motivation and enthusiasm
- Promotes teacher effectiveness

(xi) Hands on practices

Purpose of any training is to provide skill upgradation for which hands on practice most important method of trainings. This can be done only at hospital sites or skill labs.

(xii) Field practical

The overall goal of the Field practical is to get the field experience, to deepen theoretical knowledge, to bring the theory to life (apply the knowledge, concepts and skills in a real working environment). Like during RI training for MO visit of MCHN day.

TEN COMMANDMENTS for Trainers

1. Share learning with the trainees, rather than imparting knowledge to them.

2. Be creative yourself and also encourage the trainees to be creative.

3. Supplement your talk by suitable illustrations with a view to make your presentations more interesting by using different types of visuals like pictures, drawings, a flannel board, flash cards, models, samples.

4. Start the talk by inculcating in the trainees an interest in the subject matter being covered and end up by creating a curiosity to learn more about the topic in future.

5. Make maximum use of two-way communication by inviting comments and queries from the trainees and sharing your views with them.

6. Remember, the job of a trainer in ToT is not only to build a potential cadre of trainers for preparing functionaries for different development activities, but also to inspire, encourage and enthuse them to be the facilitators of a self-sustaining growth process through participatory approach.

7. Assess the impact of your role as a committed and competent trainer and do it as objectively as you can. This can be done by constant monitoring of the extent to which the trainees have been receptive, responsive and reinforced by the information input provided to them.

8. Equip yourself with knowledge of recent developments in the materials and methods of training skills. This can be done by keeping yourself in touch with the latest literature and widening your knowledge by frequent interactions with those who have earned a 'status' of a successful professional in the field of training.

9. Inculcate a sense of ideal role performance while facilitating ToT. The success of such efforts can be judged in terms of someone of your trainees following your example while himself/herself practicing the same principle as a trainer.

10. Finally, continue to think and act on developing new tools and techniques which may further enrich the exciting area of training. For this one needs not necessarily be highly educated or enormously resourceful, as some of the most valuable inventions have been made by persons and professionals of a very modest background. By doing this you will not only share an experience of excitement and achievement, but also a feeling of pride and privilege.

THE TRAINER AND HIS/HER ROLE

The Trainer and his/her Tasks

The trainer occupies a pivotal place in the whole process of training. He/she has multifarious roles to play during various phases of a training programme. The success of a trainer depends on his/her versatility in taking on a number of roles. Some of the Basic Requirements for a Successful Trainer

- A Desire to take up the Job
- Knowledge of the Subject Matter
- Basic Understanding of Human Behaviour
- Knowing the Learners, their Background and Training Needs
- Knowing Psychological Traits of the Learners
- Positive and Productive Learning Experience
- Creating Trainee Readiness to Learn
- Linking Training and Extension Activities at the Field Level
- Seeking Co-ordination from Related Agencies
- Multi-dimensional Skills

Supplementary Role of Trainers

- Initiative
- Organizational Ability
- Problem Solving Ability
- Judgments
- Self-improvement
- Reliability
- Public speaking

RMNCH+A

Maternal Health

Session- Maternal Health Practices

Session Objective- To educate the participants about importance of maternal health, practices involved **to** maintain maternal health and survival for the mother.

Contents to be covered –

- Why maternal Health is important?
- What is Maternal Death?
- Status of MMR in India and Rajasthan
- HPD, High Priority Blocks and Indicators of Maternal Health
- ANC
- Early marriage and early pregnancy
- ANC Visits
- Intra-natal Care
- Postnatal Care

Methodology- Case studies, Presentation and Discussions

Duration of session- 2 hours

Note for Trainers

- Session may be begin with discussions on some basic questions
- Participants may be asked following questions
    - ❖ What is maternal health and key indicators covered under maternal health to define it .
    - ❖ What is the status of maternal health
    - ❖ Role of NHM functionaries in maternal health

Activity -1

All the participants may be divided into three groups. Each group may be given a task to analyze a case study

Case study can be identified from participants from their area specific incidents or trainer can give the case study. Each group may have different case study.

Topic of the case study may be following

- ❖ Case of Maternal death in which women was 7 month pregnant having high risk sign of early marriage, early pregnancy, low level of HB and APH during pregnancy.
- ❖ Case to of a women having PPH after 5 days of delivery
- ❖ Case three a women suffering from various problems of RTI and history of unsafe abortion

At the end of the case study there may be three questions about situation. Why this incidents was happened. How I could be avoided. What is the role of Service provider, family members and program managers?

Activity-2

Second part of session may be covered through a presentation covering all aspects of maternal health.

At last 10 minutes may be kept for discussion on question participants may have.

Maternal Health Care

Maternal mortality is a key indicator for maternal health. Maternal mortality results from multiple reasons, which can broadly be classified as medical, socio-economic and health system-related factors.

What is a maternal death?

The death of a woman:

- while pregnant or within 42 days of termination of pregnancy
- irrespective of the duration or site of pregnancy
- from any cause related to or aggravated by the pregnancy or its management
- but not from accidental or incidental causes

Maternal Mortality Ratio

The maternal mortality ratio is the number of women who die from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births.

WHEN DO MATERNAL DEATHS OCCUR?

- 50% of the deaths within the first 24hrs following delivery
- 25% occurs during pregnancy
- 20% of maternal death occur 7days after delivery
- 5% - 2 to 6 weeks after delivery

Contributory factors for Maternal Deaths

The medical causes can be direct or indirect. The most common direct medical causes of maternal death are haemorrhage, mainly postpartum (37%), sepsis because of infection during pregnancy, labour and postpartum period (11%), unsafe abortions (8%), hypertensive disorders (5%) and obstructed labour (5%). These conditions are largely preventable and once detected, they are treatable. A significant proportion of maternal deaths are also attributed to 'indirect causes', the most common of which are anaemia and malaria.

Maternal deaths are not only due to medical causes but due a number of contributory factors

3 delay model

-Delay in seeking care

-Delay in reaching the appropriate health facility

- Delay in receiving quality care in the facility

As per the latest report of the Registrar General of India, Sample Registration System (RGI-SRS), Maternal Mortality Ratio (MMR) of India has shown a decline from 178 per 100,000 live births in the period 2010-12 to 167 per 100,000 live births in the period 2011-13.

Maternal mortality ratio in Rajasthan has also at alarming state. Though there has been some improvement in this ratio i.e. in SRS 2010-12 it was 255 and it declined to 244 in SRS 2011-13. But we still have a way forward to achieve target 100 Maternal Mortality per 100000 live births.

The government has taken several steps in achieving this target through introducing new guidelines, best practices, standards for infrastructure and service delivery and various schemes and programmes. Remainder of this chapter we will be discussing best practices, standards and various schemes and programmes.

ANTENATAL CARE

Antenatal care is the care of the women during pregnancy. The primary aim of antenatal care is to achieve at the end of a pregnancy a healthy mother and a healthy baby. Ideally this care should begin soon after conception and continue throughout pregnancy. In some countries, notification of pregnancy is required to bring the mother in the prevention care cycle as early as possible.

Objectives

The objectives of antenatal care are:

- To promote, protect and maintain the health of the mother during pregnancy.
- To detect “high risk” cases and give them special attention.
- To foresee complications and prevent them.
- To remove anxiety and dread associated with delivery.
- To reduce maternal and infant mortality and morbidity.
- To teach the mother elements of child care, nutrition, personal hygiene, and environmental sanitation.
- To sensitize the mother to the need for family planning, including advice to cases seeking medical termination of pregnancy; and
- To attend to the under-fives accompanying the mother.

The objectives can be achieved by the following:

(1) Antenatal visits

Ideally, the mother should attend the antenatal clinic once a month during the first 7 months; twice a month, during the next month; and thereafter, once a week, if everything is normal. A high proportion of mothers in India are from lower socio-economic group and many of them are working women. Attendance at the antenatal clinic may mean loss of daily wages (8). Consequently, it is difficult for them to attend the antenatal clinic so often.

Four antenatal checkups are essential for a pregnant woman:

First ANC Check up	As soon as the period is missed or within first three months of missing the period
Second ANC Check up	In 4th – 6th month of pregnancy.
Third ANC Check up	In 7th – 8th month of pregnancy.
Fourth ANC Check up	In 9th month of pregnancy.

Prenatal services (before delivery)

a) The first visit, irrespective of when it occurs, should include the following components:
- Health history
- Physical examination
- Laboratory examinations:
  - ❖ Complete urine analysis
  - ❖ Stool examination
  - ❖ complete blood count, including Hb estimation
  - ❖ Serological examination
  - ❖ Blood grouping and Rh determination
  - ❖ Chest X-ray, if needed
  - ❖ Pap test (if facilities exist)
  - ❖ G.C culture (Gonorrhea test, if needed)

b) On subsequent visits:

- ❖ Physical examination (e.g., weight gain, blood pressure)
- ❖ Laboratory test should include
  - ✓ Urine examination
  - ✓ Hemoglobin estimate

c) Iron and folic acid supplementation and medication as needed

d) Immunization against tetanus

e) Group or individual instruction on nutrition, family planning, self care, delivery and parenthood

f) Home visiting by a female health worker

g) Referral services, where necessary

प्रसवपूर्व जाँच

गर्भावस्था के दौरान पंजीकरण और प्रसवपूर्व जाँचें:

- गर्भवती महिला और गर्भस्थ शिशु के स्वास्थ्य के लिए ज़रूरी हैं
- गर्भावस्था की जटिलताओं का समय से पता लगाने और उनके प्रबंधन में मदद करती हैं
- माँ और बच्चे के लिए स्वस्थ जीवन सुनिश्चित करती हैं

प्रसवपूर्व जाँचों के लिए निर्धारित समय*

पंजीकरण और पहली ए.एन.सी.	गर्भावस्था के पहले 12 सप्ताह में
दूसरी ए.एन.सी.	14 से 26 सप्ताह के बीच में
तीसरी ए.एन.सी.	28 से 34 सप्ताह के बीच में
चौथी ए.एन.सी.	36 और प्रसव काल के बीच में

* जब भी कोई महिला जाँच के लिए आए, तब ए.एन.सी. प्रदान करें

पहली भेंट

- गर्भावस्था पहचान जाँच
- एम.सी.एच. संरक्षण कार्ड एवं ए.एन.सी. रजिस्टर भरें
- गर्भवती महिला को एम.सी.एच. संरक्षण कार्ड भरकर तथा सुरक्षित मातृत्व पुस्तिका दें
- वर्तमान या पिछली गर्भावस्था के दौरान किसी बीमारी/जटिलता के संबंध में रोगी का पिछला और वर्तमान इतिहास लें
- शारीरिक परीक्षण (वज़न, रक्तचाप, साँस की दर), पीलापन, पीलिया तथा सूजन की जाँच करें

सभी भेंटों (पहली से चौथी) में जाँच

- शारीरिक परीक्षण
- गर्भस्थ शिशु की बढ़त एवं स्थिति के लिए महिला के उदर की जाँच और शिशु की हृदय ध्वनि का परिश्रवण
- सलाहः
  - पोषण संबंधी सलाह
  - महिला को प्रसव के चिन्हों के बारे में शिक्षित करें
  - गर्भावस्था, प्रसव और प्रसव के बाद या गर्भपात के बाद खतरे के निशान पहचानना
  - संस्था में प्रसव/एस.बी.ए. की पहचान करने/जननी सुरक्षा योजना का लाभ उठाने के लिए प्रोत्साहित करें
  - प्रसव और जटिलताओं को सँभालने के लिए निकटतम कार्यरत पी.एच.सी. /एफ.आर.यू. को चिन्हित करें
  - रेफर किए केंद्र तक जाने के साधन और रक्त दाता की पहले से पहचान करें
  - जन्म के तुरंत बाद स्तनपान शुरू करने का महत्व बताएं
  - प्रसव/गर्भपात के बाद गर्भनिरोध के उपायों (जन्म में अंतर या सीमित करना) के प्रयोग के बारे में बताएं

सलाह

- प्रयोगशाला जाँच

स्वास्थ्य केंद्र में
- हीमोग्लोबिन की जाँच
- शर्करा एवं प्रोटीन के लिए मूत्र जाँच
- त्वरित मलेरिया जाँच (रोगसघन क्षेत्रों में)

प्राथमिक/सामुदायिक स्वास्थ्य केंद्र/एफ.आर.यू. में:
- रक्त समूह, Rh फैक्टर सहित
- वी.डी.आर.एल., आर.पी.आर., HBsAg और एच.आई.वी. परीक्षण
- त्वरित मलेरिया जाँच (अगर स्वास्थ्य केंद्र में अनुपलब्ध हो)
- रक्त शर्करा (रैंडम)

- लौह तत्व/फोलिक एसिड की गोलियाँ और टीटी इंजेक्शन की दो खुराकें दें

प्रसवपूर्व परीक्षण

गर्भाशय की ऊँचाई

आरंभिक तैयारी

निजता सुनिश्चित करें

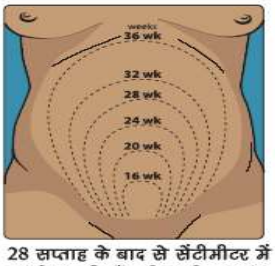
महिला को पेशाब करके आने को कहें

जांचकर्ता दाईं ओर खड़े हों

पेट ज़िफिस्टर्नम से सिंफायसिस प्यूबिस (जघनास्थि संधि) तक खुला हो

महिला के पैर सीधे हों

गर्भाशय को मध्य में करें



28 सप्ताह के बाद से सेंटीमीटर में गर्भाशय की ऊँचाई गर्भावस्था के सप्ताहों की संख्या के बराबर होती है

दाईं ओर घूमने को ठीक करें

बाईं हथेली का निचला सिरा गर्भाशय के उभार के ऊपरी सिरे पर रखें और पेन से निशान लगाएं

प्यूबिक सिंफायसिस (जघनास्थि संधि) की ऊपरी सीमा और लगाए गए निशान के बीच की दूरी मापें

ग्रिप्स (पकड़)

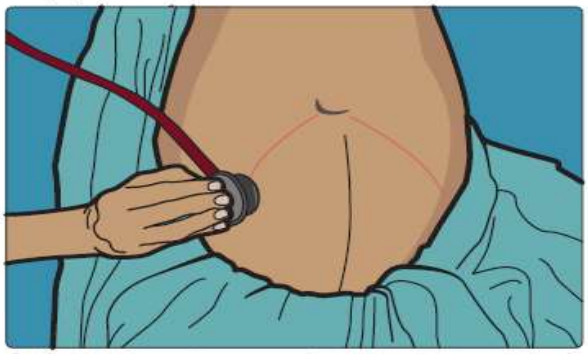
पकड़ के लिए पैर हल्के से मोड़कर व थोड़े दूर रखे जाते हैं।

फण्डल ग्रिप

लेटरल ग्रिप

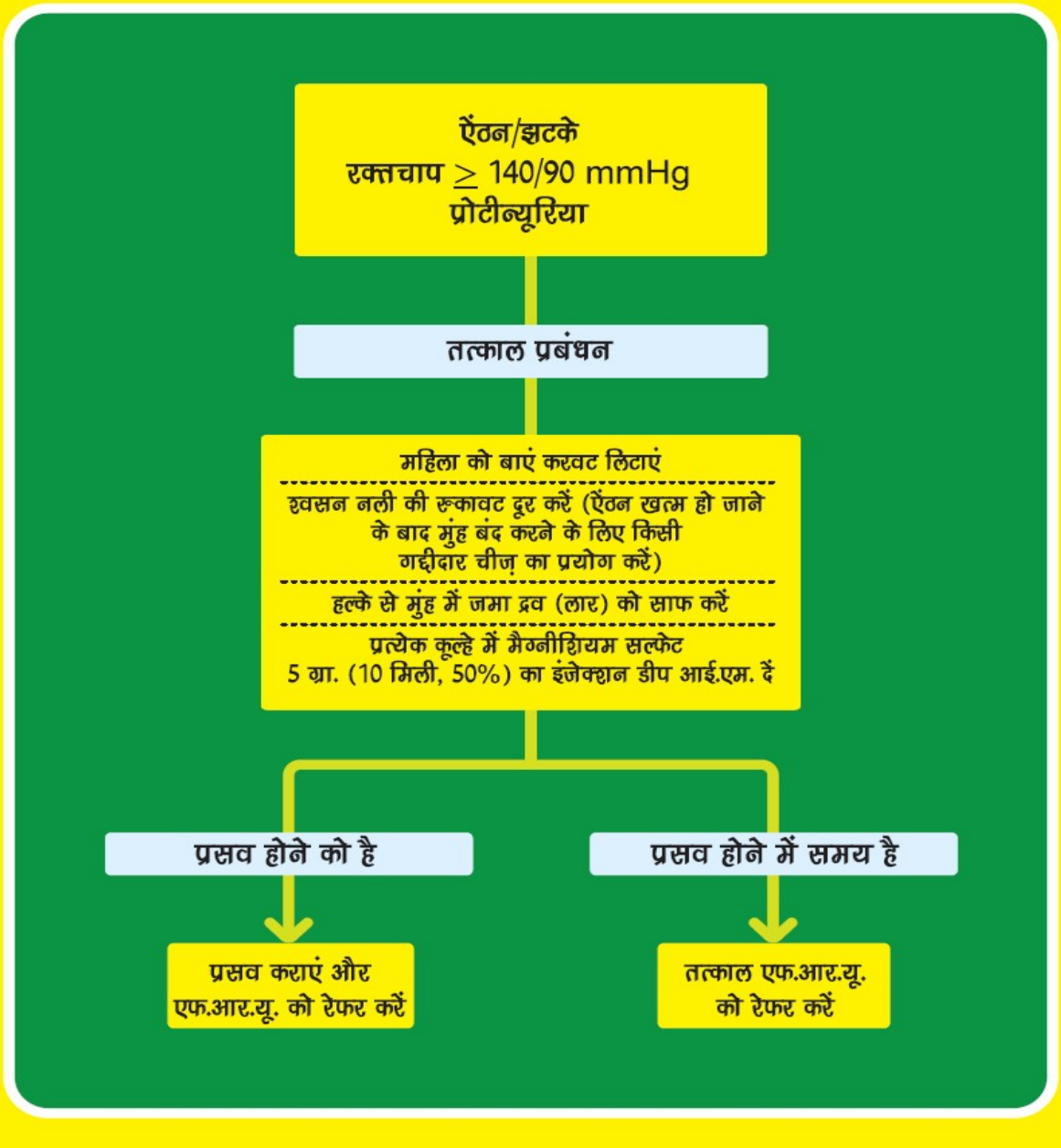
पहली पेल्विक ग्रिप

दूसरी पेल्विक ग्रिप



गर्भस्थ शिशु के हृदय की ध्वनि आम तौर पर दिखाई गई रेखाओं पर सुनी जाती है

एक्लैंप्सिया


ऐंठन/झटके
रक्तचाप ≥ 140/90 mmHg
प्रोटीन्यूरिया
तत्काल प्रबंधन
महिला को बाएं करवट लिटाएं
श्वसन नली की रूकावट दूर करें (ऐंठन खत्म हो जाने के बाद मुंह बंद करने के लिए किसी गद्दीदार चीज़ का प्रयोग करें)
हल्के से मुंह में जमा द्रव (लार) को साफ करें
प्रत्येक कूल्हे में मैग्नीशियम सल्फेट 5 ग्रा. (10 मिली, 50%) का इंजेक्शन डीप आई.एम. दें
प्रसव होने को है
प्रसव होने में समय है
प्रसव कराएं और एफ.आर.यू. को रेफर करें
तत्काल एफ.आर.यू. को रेफर करें


20 सप्ताह से पहले
योनि से रक्तस्राव
गर्भपात की आशंका
उदर में दर्द और योनि से हल्के रक्तस्राव की शिकायत
योनि से गर्भधारण के अवशेष निकलने की शिकायत नहीं
जाँच करने पर नरम गर्भाशय, गर्भावस्था की अवधि के अनुसार ही गर्भाशय की ऊँचाई, ऑस बंद है
घर पर आराम करने की सलाह दें
डॉक्टर से सलाह लें/ए.एन.सी. के लिए रेफर करें
अधूरा गर्भपात
उदर में दर्द और योनि से अत्याधिक रक्तस्राव की शिकायत
योनि से गर्भधारण के अवशेष निकलने की शिकायत
जाँच करने पर गर्भाशय का आकार गर्भावस्था की अवधि से कम है, ऑस खुला हो सकता है
अगर रक्तस्राव रूक जाए
अगर रक्तस्राव न रूके या शॉक की स्थिति हो
डॉक्टर से सलाह लें/ए.एन.सी. के लिए रेफर करें
आई.वी. लाइन लगाएं और तेजी से आई.वी. द्रव दें
एम.ओ. से सलाह लें/रेफरल पर्ची के साथ रेफर करें
पूरा गर्भपात
हल्के रक्तस्राव की शिकायत
उदर में दर्द, योनि से गर्भधारण के अवशेष निकलने के साथ हल्के रक्तस्राव की शिकायत
गर्भाशय का आकार गर्भावस्था की अवधि से कम है, ऑस बंद है
4–6 घंटे तक प्रेक्षण करें
अगर रक्तस्राव जारी रहे
अगर रक्तस्राव रूक जाए
एम.ओ. से सलाह लें/ रेफर करें
आश्वस्त करें और घर पर आराम करने की सलाह दें

DIET DURING PREGNANCY

- Pregnant lady need one extra meal a day during pregnancy.
- Take milk and dairy products like curd, buttermilk, paneer-these are rich in calcium, proteins and vitamins.
- Eat fresh/seasonal fruits and vegetables as these provide vitamins and iron. Cereals, whole grains and pulses are good sources of proteins.
- Green leafy vegetables are a rich source of iron and folic acid.
- A handful (45 grams) of nuts and at least two cups of daal provide daily requirement of proteins in vegetarians.
- For non-vegetarians, meat, egg, chicken or fish are good sources of proteins, vitamins and iron

DANGER SIGNS DURING PREGNANCY

- Generalised weakness, easy fatigability and breathlessness.
- Bleeding per vaginum.
- Excessive swelling in legs.
- Convulsions.
- Fever. Severe pain in abdomen

RISK APPROACH

The central purpose of antenatal care is to identify “high risk” cases (as early as possible) from a large group of antenatal mothers and arrange for them skilled care, while continuing to provide appropriate care for all mothers. These cases comprise the following:

- Elderly primi (30 years and over)
- Short statured primi (140 cm and below)
- Malpresentations, viz breech transverse lie, etc.
- Antepartum haemorrhage, threatened abortion
- Pre-eclampsia and eclampsia
- Anaemia
- Twins, hydramnios
- Previous still-birth, intrauterine death, manual removal of placenta
- Elderly grandmultiparas
- Prolonged pregnancy (14 days-after expected date of delivery)
- History of previous caesarean or instrumental delivery
- Pregnancy associated with general diseases, viz. cardiovascular disease, kidney disease, diabetes, tuberculosis, liver disease, etc.

The “risk approach” is a managerial tool for improved MCH care its purpose is to provide better services for all, but with special attention to those who need them most. Inherent, including is maximum utilization of all resources, including some human resources that are not conventionally involved in such care - traditional birth attendants, community health workers, women’s groups, for example. The risk strategy is expected to have far-reaching effects on the whole organization of MCH/FP services and lead to improvements in both the coverage and quality of health care, at all levels, particularly at health care level.

MAINTENACE OF RECORDS

The “Antenatal Card” is prepared at the first examination It is generally made of thick paper to facilitate filing It contains a Registration number, identifying date, previous health history, and main health events. The Record is kept at the MCH/FP Centre. A link is maintained between the antenatal Card, postnatal Card and Under-fives Card. Maintenance of records is essential for evaluation and further improvement of MCH/FP services.

Intra-partum Care (AMTSL, Complication Management)

Women in labour should have timely access to obstetric, midwifery, neonatal paediatr ic, anaesthetic, operating theatre and resuscitation services in labour and for at least several hours after birth. Further requirements include: access to intensive care specialist consultation, haematology and blood bank services (including specialist haematological consultation) and policy documents detailing methods of accessing emergency assistance.

Even among women without pregnancy complications, women in labour and their babies can rapidly develop complications where timely access to these services may be life saving. For this reason, birth centres are ideally placed within (or immediately adjacent to) an appropriately resourced 24-hour obstetric facility. Where, by virtue of remote location, such on-site services cannot be provided, women should be informed of the limitations of services available and the implications for intrapartum and postpartum care.

Antenatal transfer to a centre with more comprehensive services should be considered. In circumstances where transfer may be necessary, formal systems must be in place to ensure the safe and timely transfer of women and/or their babies who require specialist treatment. These arrangements should be collaborative and hold the safety of mother and baby as paramount. All transfers should be documented for future review. Such information is valuable for planning and resourcing improvements of those units requiring transfer capability. Amongst women selected for low obstetric risk, approximately 25% will develop peripartum complications necessitating transfer to an obstetrician led service.1

प्रसव की तीसरी अवस्था का सक्रिय प्रबंधन
(ए.एम.टी.एस.एल.)

बच्चे के जन्म के बाद, देख लें कि गर्भाशय में दूसरा बच्चा तो नहीं है और फिर इंजेक्शन ऑक्सीटॉसिन 10 यूनिट आई.एम. लगाएं।

गर्भाशय के सिकुड़ने के बाद, गर्भनाल नीचे की ओर खींचें और दूसरे हाथ से गर्भाशय को नाभि की ओर ऊपर धकेलें।

एटॉनिक पीपीएच को रोकने के लिए गर्भाशय की मालिश करें

Preparation of labour room-

- **Delivery Table Set-Up**
  - Perform hand hygiene. Apply cap, mask, and/or gown as required by institutional policy.
  - Place obstetric (OB) delivery pack on table or birth cart (or any flat work space that is above waist level).
  - Maintaining sterility, open the OB delivery pack
  - Maintaining their sterility, add any additional supplies, perineal preparation supplies, and delivery instruments per institutional policy.
  - Perform hand hygiene and apply sterile gloves; arrange instruments and supplies on table per institutional policy.
  - Cover the table with sterile drape if not using within 1 hour.
  - Remove gloves, mask, cap, and gown and discard with supplies in proper trash receptacles. Perform hand hygiene.

Radiant Warmer(RW) Set-Up

- Perform hand hygiene.
- Turn on RW and ensure accessibility and functionality of oxygen source, suction source, lighting source, and heat source.
- Place baby blankets and cap in warmer.
- Set out the infant's medications.
- Set out stethoscope and thermometer.
- Set out foot printing materials, lab request for cord blood, and newborn delivery record.
- Ensure availability of Clean gloves.
- Newborn resuscitation kit.
- Additional bulb syringe.
- Perform hand hygiene.

General Room Set Up

- Perform hand hygiene.
- Check availability of oxygen and suction sources for the mother.
- Set out oxytocin (Pitocin), syringe, needle, and any necessary IV fluids.

- Ensure availability of Stirrups and/or foot rests per institutional policy and physician preference.
- Baby scales and measuring tape.
- Identification bracelets per institutional policy.
- Forceps, vacuum extractor, and/or suture.
- Collection system and documentation/request forms for cord blood.
- Delivery record and newborn admission record per institutional policy.
- Oxytocic medications or equivalent drugs per institutional policy.
- Discard supplies in proper trash receptacles. Perform hand hygiene.
- Document the procedure in the patient's record.

Trays with Essential Equipments & Medicines in Labor Room

1. **Delivery Tray-** Gloves, Scissors, Artery forceps, Cord clamps, Sponge holding forceps, Urinary catheter, Bowl for antiseptic lotion, Gauze pieces & Cotton swabs, Speculum, Sanitary pads, Kidney tray, Sphygmomanometer, Stethoscope, Foetoscope, Digital thermometer, Partograph.
2. **Baby Tray-** Two pre warmed towels/sheets for wrapping the baby, cotton swabs, Mucus Extractor, Bag & mask, Sterilized thread for cord/cord clamp, Nasogastric tube, Injection Vitamin K 1mg (full term), 0.5mg (pre term) with Syringe & needle (baby should be received in a pre-warmed towel, do not use metallic tray).
3. **Emergency Drug Tray-** Inj. Oxytocin 5 IU -10 ampules(to be kept in cool place), Inj. Magsulf 50%, Inj. Calcium Gluconate, Inj. Dexamethasone, Inj. Ampicillin, Inj. Gentamicin, Inj. Metronidazole, Inj. Lignocaine-2%, Inj. Adrenaline, Inj. Hydrocortisone succinate, Inj. Diazepam, Inj. Pheneramine maleate, Inj. Carboprost, Inj. Fortwin, Inj. Phenergan, Ringer lactate 500 ml, Normal saline 500 ml, Inj. Betamethazone, Inj. Hydralazine, Cap. Nifedipine-5 and 10 mg, Tab Methyldopa 250 mg, IV sets with 16 gauge needle at least two, controlled suction catheter, Mouth gag, IV Cannula, Vials for sample collection (Plain and EDTA), Inj. Ceftriaxone.

4. **Medicine Tray-** Inj. Oxytocin 5 IU(acc to delivery load -to be kept in fridge), Cap Ampicillin 500mg, Tab. Metronidazole 400 mg, Tab. Paracetamol 500 mg, Tab. Ibuprofen, Tab. B - Complex, IV Fluids, Tab. Misoprostol 200mg, Inj. Gentamicin, Inj. Betamethasone, Ringer lactate 500 ml, Normal saline 500 ml, Cap. Nifedipine-5 and 10 mg, Tab Methyldopa 250 mg, magnifying glass.
5. **Episiotomy Tray-** Inj. Xylocaine 2%, 10 ml Disposable syringe with needle, Episiotomy Scissors, Kidney tray, Artery forceps, Allis forceps, Sponge holding forceps, Toothed forceps, Needle holder, needle (round body & cutting), Chromic catgut no-0, Gauze piece, cotton swabs, antiseptic lotion, thumb forceps & gloves.
6. **MVA/EVA Tray-** Gloves, Speculum, Anterior vaginal wall retractor, Posterior vaginal Wall Retractor, Sponge holding forceps, MVA Syringe and Cannulas, MTP Cannulas, Small bowl of antiseptic lotion, Sanitary pads, Cotton swabs, Disposable syringe and needle, Misoprostol tablets, Sterilized gauze/pads, Urinary catheter.
7. **PPIUCD Tray** (Only for the facilities where PPIUCD trained service provider is available)- PPIUCD Insertion forceps, Cu IUCD 380A/Cu IUCD 375 in a sterile pack.

Use of Simplified partograph

The **partograph** is a graphical presentation of the progress of labour, and of fetal and maternal condition during labour. It is the best tool to help you detect whether labour is progressing normally or abnormally, and to warn you as soon as possible if there are signs of fetal distress or if the mother's vital signs deviate from the normal range. Research studies have shown that maternal and fetal complications due to prolonged labour were less common when the progress of labour was monitored by the birth attendant using a partograph. For this reason, you should *always* use a partograph while attending a woman in labour, either at her home or in the Health Post.

The partograph is actually your record chart for the labouring mother .It has an identification section at the top where you write the name and age of the mother, her 'gravida' and 'para' status, her Health Post or hospital registration number, the date and time when you first attended her for the delivery, and the time the fetal membranes ruptured .

सरलीकृत पार्टोग्राफ

पहचान हेतु जानकारी

नामः पति का नामः आयुः पैरिटीः पंजी. सं.:

प्रवेश की तिथि और समयः गर्भाशय की थैली फटने की तिथि और समयः

क) गर्भस्थ शिशु की स्थिति

गर्भस्थ शिशु की हृदय गति

200 190 180 170 160 150 140 130 120 110 100 90 80

एम्नियोटिक द्रव

ख) प्रसव

सर्विक्स (सेमी) चिन्ह X

10 9 8 7 6 5 4

एलर्ट एक्शन

घंटे 1 2 3 4 5 6 7 8 9 10 11 12

समय

संकुचन प्रति 10 मिनट

5 4 3 2 1

ग) कार्यवाही

दी गई दवाएं और आई.वी. द्रव

घ) माँ की स्थिति

नाड़ी गति और रक्तचाप

180 170 160 150 140 130 120 110 100 90 80 70 60

तापमान (°से.)

एलर्ट लाइन पर आलेखन आरंभ करें

एलर्ट लाइन पार होने पर एफ.आर.यू. भेजें

POSTNATAL CARE

Care of the mother (and the newborn) after delivery is known as postnatal or post-partal care. Broadly this care falls into two areas: care of mother which is primarily the responsibility of the obstetrician; and care of the newborn, which is the combined responsibility of the obstetrician and paediatrician. This combined area of responsibility is also known as perinatology.

Care of the mother

The objectives of postpartal care are:

- To prevent complications of the postpartal period
- To provide care for the rapid restoration of the mother to optimum health.
- To check adequacy of breast feeding.
- To provide family planning services.
- To provide basic health education to mother / family.

Complications of the post partum period

Certain complications may arise during the postpartal period which should be recognized early and dealt with promptly. These are (1) Puerperal sepsis: This is infection of the genital tract within 3 week after delivery. This is accompanied by rise in temperature and pulse rate, foul-smelling lochia, pain and tenderness in lower abdomen, etc. Puerperal sepsis can be prevented by attention to asepsis, before and after delivery. This is particularly important in domiciliary midwifery service. (2) Thromobo-phelbitis: This is an infection of the veins of the legs, frequently associated with varicose veins. The leg may become tender, pale and swollen. (3) Secondary haemorrhage: Bleeding from vagina anytime from 6 hours after delivery to the end of the puerperium (6 weeks) is called secondary haemorrhage, and may be due to retained placenta or membranes. (4) Others: Urinary tract infection and mastitis, etc. It is extremely important to look for these complications in the postpartal period and prevent or treat them promptly. **Restoration of mother to optimum health**

The second objective of postpartal care is to provide care whereby, the women can recuperate physically and emotionally from her experience of delivery. The broad areas of this care fall into three divisions:

PHYSICAL

(1) Postnatal examinations: Soon after delivery, the health check-ups must be frequent, i.e., twice a day during the first 3 days, and subsequently once a day till the umbilical cord drops off. At each of these examinations, the FHW checks temperature, pulse and respiration, examines the breasts, checks progress of normal involution of uterus, examines lochia for any abnormality, checks urine and bowels and advises on perineal toilet including care of the stitches, if any. The immediate postnatal complications, viz puerperal sepsis, thrombophlebitis, secondary haemorrhage should be kept in mind. At the end of 6 weeks, an examination is necessary to check-up involution of uterus which should be complete by then. Further visits should be done once a month during the first

6 month, and thereafter one in 2 or 3 months till the end of one year. In rural areas only limited postnatal care is possible. Efforts should be made by the FHW to give at least 3 to 6 postnatal visits. The common conditions found on examination during the late postnatal period are sub involution of uterus, retroverted uterus, prolapse of uterus and cervicitis. Postnatal examination offers an opportunity to detect and correct these defects.

(2) Anaemia: Routine haemoglobin examination should be done during postnatal visits, and when anaemia is discovered, it should be treated. In some cases, it may be necessary to continue treatment for a year or more.

(3) Nutrition: Though a malnourished mother is able to secrete as much breast milk as a well nourished one, she does it at the cost of her own health (24, 25). The nutritional needs of the mother must be adequately met. Often the family budget is limited; the mother should be shown the means how she can eat better with less money.

(4) Postnatal exercises; Postnatal exercises are necessary to bring the stretched abdominal and pelvic muscles back to normal as quickly as possible. Gradual resumption of normal house-hold duties may be enough to restore one's figure.

PSYCHOLOGICAL: The next big area of postnatal care involves a consideration of the psychological factors peculiar to the recently delivered women. One of the psychological problems is fear which is generally borne of ignorance. Other problems are timidity and insecurity borne of ignorance. Other problems are timidity and insecurity regarding the baby. If a woman is to endure cheerfully the emotional stresses of childbirth she requires the support and companionship of her husband. Fear and insecurity may be eliminated by proper prenatal instruction. The so called postpartum psychosis is perhaps precipitated by birth; and it is rather uncommon.

SOCIAL: It has been said that the most important thing a women can do is to have a baby. This is only part truth. The really important thing is to nurture and raise the child in wholesome family atmospheres. She, with her husband, must develop her one methods.

प्रसव-पश्चात देखभाल

प्रसव-पश्चात देखभाल माँ और बच्चे की अच्छी सेहत सुनिश्चित करती है।

प्रसव-पश्चात देखभाल

पहली भेंट	प्रसव के बाद पहला दिन
दूसरी भेंट	प्रसव के बाद तीसरा दिन
तीसरी भेंट	प्रसव के बाद सातवाँ दिन
चौथी भेंट	प्रसव के 6 सप्ताह बाद

कम वज़न वाले बच्चों के लिए 14वें, 21वें और 28वें दिन पर अतिरिक्त भेंट करें

भेंट के दौरान सेवा प्रावधान

माँ

- जाँचें:
  - पीलापन, नाड़ी, रक्तचाप और तापमान
  - मूत्र संबंधी समस्याएं और योनि का फटना
  - अत्यधिक खून बहना (प्रसव पश्चात रक्तस्राव)
  - बदबूदार स्राव (पेरिपेरल सेप्सिस)
- स्तन और निप्पल की देखभाल
- स्तनपान के लिए बच्चे को स्तन से लगाने के बारे में सलाह और प्रदर्शन
- 6 महीने तक केवल स्तनपान कराने के बारे में सलाह
- माँ को आई.एफ.ए. की गोली प्रदान करना
- पौष्टिक आहार तथा सैनिटरी नैप्किन के प्रयोग के बारे में सलाह
- दम्पत्ति को गर्भनिरोधक उपाय चुनने के लिए प्रेरित और मदद करना

नवजात शिशु

- तापमान, पीलिया, नाल के ठूंठ और त्वचा पर फुंसियों की जांच करें
- साँस, छाती धँसना, ऐंठन, दस्त और उल्टी पर गौर
- मूत्र त्याग (48 घंटे के भीतर) और मल त्याग (24 घंटे के भीतर) की पुष्टि करें
- बच्चे को गर्म रखने के बारे में सलाह
- नाल के ठूंठ को साफ और सूखा रखें
- स्तनपान के दौरान बच्चे द्वारा चूसने का प्रेक्षण
- कम वज़न वाले बच्चों के लिए अधिक मुलाकातें
- नियमित टीकाकरण के महत्व पर ज़ोर

टिप्पणी: जटिलताओं का प्रबंधन करें और ज़रूरत होने पर रेफर करें

Breast feeding

Postnatal care offers an excellent opportunity to find out how the mother is getting along with her baby, particularly with regard to feeding. For many children, breast milk provides the main source of nourishment is the first year of life .In some societies lactation continues to make an important contribution to the child's nutrition for 18 months or longer.

A great asset in India is that an average Indian mother, although poor in nutritional status, has remarkable ability to breast-feed her infant for prolonged periods, sometimes extending to nearly 2 year.

No other food is required to be given until 6 months after birth. At the age of 6 months, breast milk should be supplemented be additional foods rich in protein and other nutrients (e.g., animal milk, soft-cooked mashed vegetables, etc.) These are called supplementary foods which should be introduced vary gradually in small amounts.

Human infant's nutritional (growth), immunological (anti-infective), mental (brain development) and emotional (bonding) needs are entirely met with, by mother's milk. Colostrum, which is the sticky discharge produced by breasts immediately after delivery of the baby contains immunoglobulins and anti-infective cells that provide a newborn cover against most common infections and allergies. Colostrum is discarded in many communities, which is a wrong and harmful practice.

Mature milk that comes-in anytime between the second and the seventh day takes care of an infant's hunger, as well as thirst, which comprises of water to the extent of 95 per cent. Thus an infant needs nothing (including water, vitamins, extra milk, liquid diet, ayurvedic preparations etc) except breastmilk for the first six months of his life. Anything besides breastmilk given to the infant may prove to be harmful. The proteins in breastmilk ensure optimal growth, the fats are just right (obviating the risk of heart disease in later life that is associated with animal milk), and the lactose provides energy, as well as ensuring optimal brain development, as does the aminoacid Taurine.

Breastfed children have been found on an average, to score higher on intelligence tests than non-breastfed children, and they fare better in school. This is due in a large measure to the emotional bonding and security that arises out of the closeness of a mother and her baby while breastfeeding. Factually, breastfeeding binds the whole family together. Breastmilk also provides adequate vitamins and minerals, including calcium, phosphorus and iron, for an infant's development.

Breastfeeding costs a family next to nothing. As breastmilk is produced at the mother's expense, even an undernourished mother produces enough to satisfy her infant's needs. A mother who breastfeeds, needs hardly any extra nourishment. Except, if she is a poor and undernourished mother (to replace her depleting reserves). The fat that accumulates during the nine months of pregnancy is lost by breastfeeding.

स्तनपान

स्तन से अच्छी तरह जुड़ा हुआ बच्चा

1. ठोड़ी स्तन को छू रही है (या बहुत निकट है)
2. मुंह पूरा खुला है
3. निचला होंठ बाहर की ओर मुड़ा है
4. एरिओला का अधिक भाग मुंह के नीचे के बजाय ऊपर दिख रहा है

स्तन से खराब तरह जुड़ा हुआ बच्चा

The other benefits that a mother derives from breastfeeding are reduced risk of ovarian and breast cancers Early stoppage of post delivery blood loss Reduced risk of anemia and osteoporosis

The feeling of confidence that arises from being a nourisher, provider and protector.

Exclusive breastfeeding is a good method of family planning too, as the high Prolactin hormone levels in a lactating mother's blood reduces her fertility for the first few months after delivery.

Bottle-feeding predisposes an infant to

Acute and persistent diarrhea Respiratory tract infections Ear infections Respiratory and skin allergies Malnutrition Obesity Insulin dependent diabetes mellitus Atherosclerotic heart disease.

Artificial feeding is an enormous strain on the mother and the family, in terms of money, energy and time, not to mention the cost of medical treatment of illnesses caused by bottle-feeding. A mother who does not breastfeed runs the risk of getting pregnant again very soon. Poor mothers dilute the formula in order to economise, and end up with undernourished and ill infants.

Maternal Health Intervention under NHM

Session- Maternal Health Intervention under NHM

Session Objective-

- To acquaint the participants about maternal health interventions being initiate and implemented by state under NHM.
- To aware the trainees about their role and responsibilities to achieve the goals and targets of different programs, schemes and interventions under maternal health in NHM
- To educate about key performance indicators to be achieved through beter performance in schemes and programs of maternal health

Contents of session

Schemes and Programs in Maternal Health, Objectives, strategies, Guidelines of these programs and schemes

- JSY, RJSSY, KMK , MDR, HBPNC, Delivery Points, Skill Birth Attendance

Methodology – PPT, Discussions and Brain storming

Duration of session – 1.30 Hour

Note for Trainer's

- Session may be begin with discussions on some basic questions
- Participants may be asked following questions
    - What is maternal health interventions being implemented in the state.
    - What is the role of these schemes in improving the status of maternal health
    - Role of NHM functionaries in maternal health programs and schemes

Activity -1

All the participants may be divided into three groups. Each group may be given a task to write a small note on a scheme of maternal health being implemented in the state.

Presentation may be given by each group. At the end facilitator give his/her comments.

Activity-2

Second part of session may be covered through a presentation covering all aspects of maternal health.

At last 10 minutes may be kept for discussion on question participants may have.

Janani Suraksha Yojana (JSY):
(Cash Incentive for Inst. Delivery)

- Janani Suraksha Yojana (JSY) is a safe motherhood intervention under the National Rural Health Mission (NHM). It is being implemented with the objective of reducing maternal and neonatal mortality by promoting institutional delivery among poor pregnant women.
- Janani Suraksha Yojana was launched in April 2005 by modifying the National Maternity Benefit Scheme (NMBS). It is a 100% centrally sponsored scheme

Beneficiary

- Women of BPL / APL families

Guidelines

Under the scheme,

- A pregnant woman should get herself registered on the nearby Aanganwari Centre, Asha or nearest Sub centre, to procure the Mother and Child Health Card.
- Pregnant woman should have at least three Antenatal Care Check ups by the Doctor or Woman Health worker and should also identify the mode of transport.
- Should get herself vaccinated with TT 1 at the time of registration and with TT 2 after one month. Woman should have one IFA tablet every day till 100 days. Under the scheme, women of every section of society is entitled to get financial assistance for institutional delivery without any barrier of age and number of children. The payment of the amount of JSY should be made within 7 days of delivery otherwise it will be considered as illegal.
- Financial assistance: In urban areas, an amount of Rs. 1000 is paid to the delivered mother and Rs. 200 is paid to ASHA as honorarium.
- Asha Sahyogini gets the payment in two installments, where the pregnant woman has registered herself, undergone ANC and PNC check-ups. If because of some reasons ASHA Sahyogini is not able accompany the delivered woman to the institution for delivery, then she will get Rs. 200 in two installments of Rs. 100 each. An installment of Rs. 100 will be paid after ANC check-ups and another installment of Rs. 100 will be paid after PNC check-ups and immunization of new borne with BCG.
- In urban areas the delivered woman and ASHA are not getting any type of assistance of referral transport facility.
- In areas where ASHA workers are not selected, the Aanganwadi worker is getting the benefit.
- If the woman has delivered the new born at health institution other than the native place, then in that condition she has to get referral slip from the delivery doctor. Along with referral slip, she has to show the Mother – Child Card and the JSY card.
- The amount for home delivery is Rs. 500, both at urban and rural areas.

- Specialist facilities for Caesarian/ complicated deliveries.Government hospitals, where the Specialist doctors are not available, they can hire services of Specialist doctors and can pay up to Rs. 1500. This provision includes the services of Surgeon, Gynecologist, and Anesthetist. This benefit will be given to the private health facilities only after the approval of Chief Medical & Health Officer of the district.

Rajasthan Janani Shishu Suraksha Yojna (RJSSY)

- Rajasthan Janani Shishu Suraksha Yojna launched on 12th September 2011 with initiative to assure free services to all pregnant women and sick neonates till 30 days after birth accessing public health institutions.

Benefit's of Scheme to Pregnant Women

- Free and zero expense Delivery, Caesarean section
- Treatment of sick neonate till 30 days after birth.
- Free Drugs and Consumables for Pregnant Women and sick neonate.
- Free Essential Lab Investigations (Blood, Urine tests and Ultra-Sonography etc.) for Pregnant Women and sick neonate.
- Provision of Free Blood for Pregnant Women and sick neonate.
- Free Referral Transport for Pregnant Women and sick neonate.
- Exemption from all kinds of User Charges for Pregnant Women and sick neonate.
- Free diet during stay in the health institutions (up to 3 days for normal delivery & 7 days for caesarean section)

Deshi Ghee Scheme

- 100 % State Govt. sponsored sponsored scheme
- Implemented in all the districts from 01.03.2009
- 5 liter Desi Ghee
- Applicable for First delivery at govt. institution
- Includes BPL Identified Identified families of Sahriya and Kathodi tribes under State BPL Antyodaya Anna Yojana

Benefits

- Fulfills energy requirements of lactating mothers
- Fulfills Vit i am n A requiirements of newborn through mother

Major provisions

- Coupon of ghee (indicating dairy booth number) given at the time of discharge along with JSY cheque
- 24 hours stay at HF must after delivery
- Essential to produce BPL card,
- ANC card verified verified by doctor (urban)/ ANM (rural) for first delivery
- 5 liter Saras Desi Ghee provided provided within 1 month
- Different packing with 'Janani Swasthya Protsahan Yojana' marked as a token of gift
- In absence of dairy booth provided through milk collection centers
- Reimbursement done to related dairy by Department of Health

Kushal Mangal Karyakram

Kushal Mangal Karyakram (KMK) with an aim to bring down maternal mortality ratio (MMR) in the state. Under the new scheme, the health department would identify high-risk pregnancies.

These are such pregnancies which turn into mortality and add up to maternal mortality ratio. Women who are anemic, suffering from high blood pressure, diabetes, kidney disease, obesity and HIV/AIDS could be at high risk of mortality during pregnancies.

Maternal Death Review

Maternal Death Review (MDR) as a strategy has been spelt out clearly in the RCH – II National Programme Implementation Plan document. It is an important strategy to improve the quality of obstetric care and reduce maternal mortality and morbidity. The importance of MDR lies in the fact that it provides detailed information on various factors at facility, district, community, regional and national level that are needed to be addressed to reduce maternal deaths. Analysis of these deaths can identify the delays that contribute to maternal deaths at various levels and the information used to adopt measures to fill the gaps in service.

Different approaches to investigation of maternal deaths

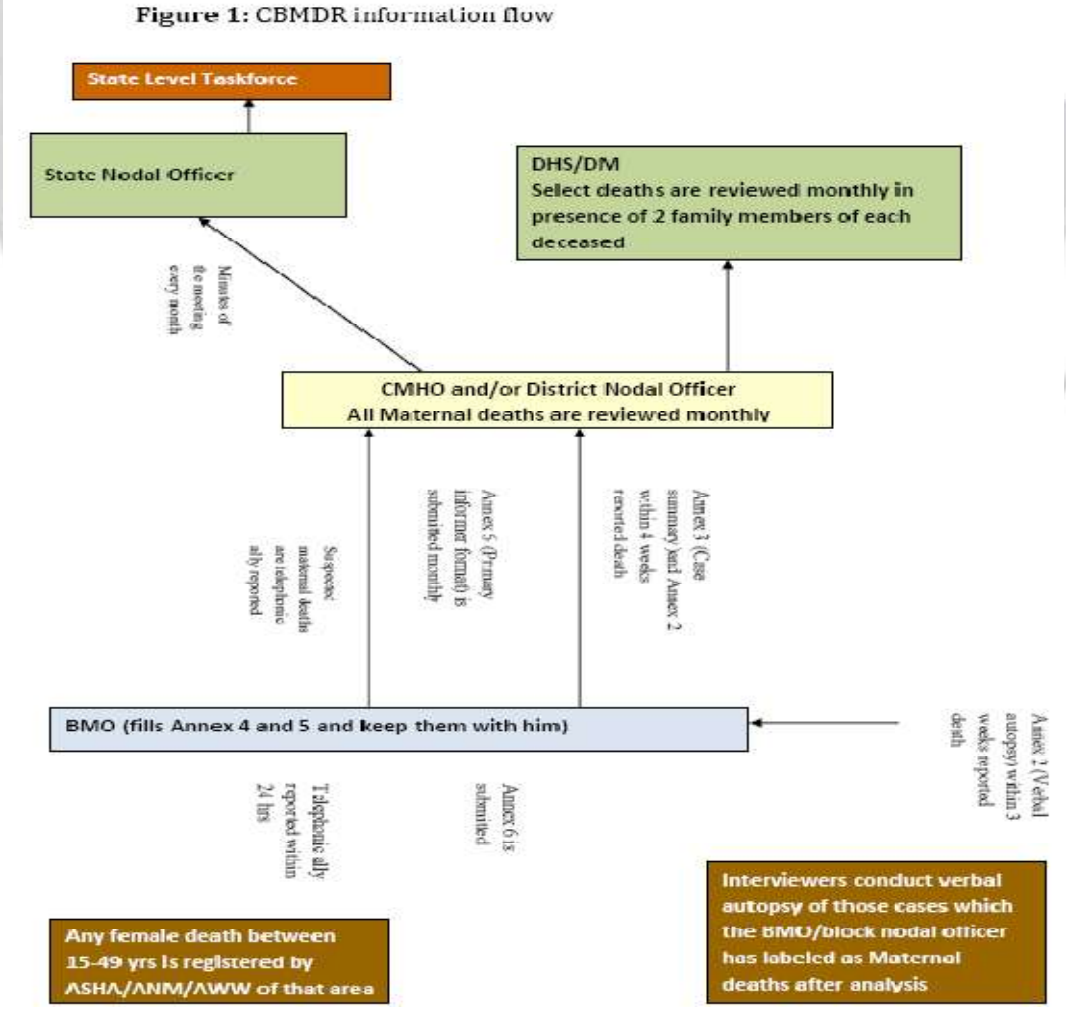
- Community based maternal death review(Verbal autopsy)
- Facility based maternal deaths review
- Confidential enquiries into maternal deaths
- Surveys of severe morbidity(near miss)
- Clinical audit

1. Community-Based MDR (CBMDR)

Community based MDR using a verbal autopsy format is a method of finding out the medical causes of death and ascertaining the personal, family or community factors that may have contributed to the deaths. The verbal autopsy consists of interviewing people who are knowledgeable about the events leading to the death such as family members, neighbors and traditional birth attendants.

Community based reviews must be taken up for all deaths that occurred in the specified geographical area, irrespective of the place of death, be it at home, facility or in transit.

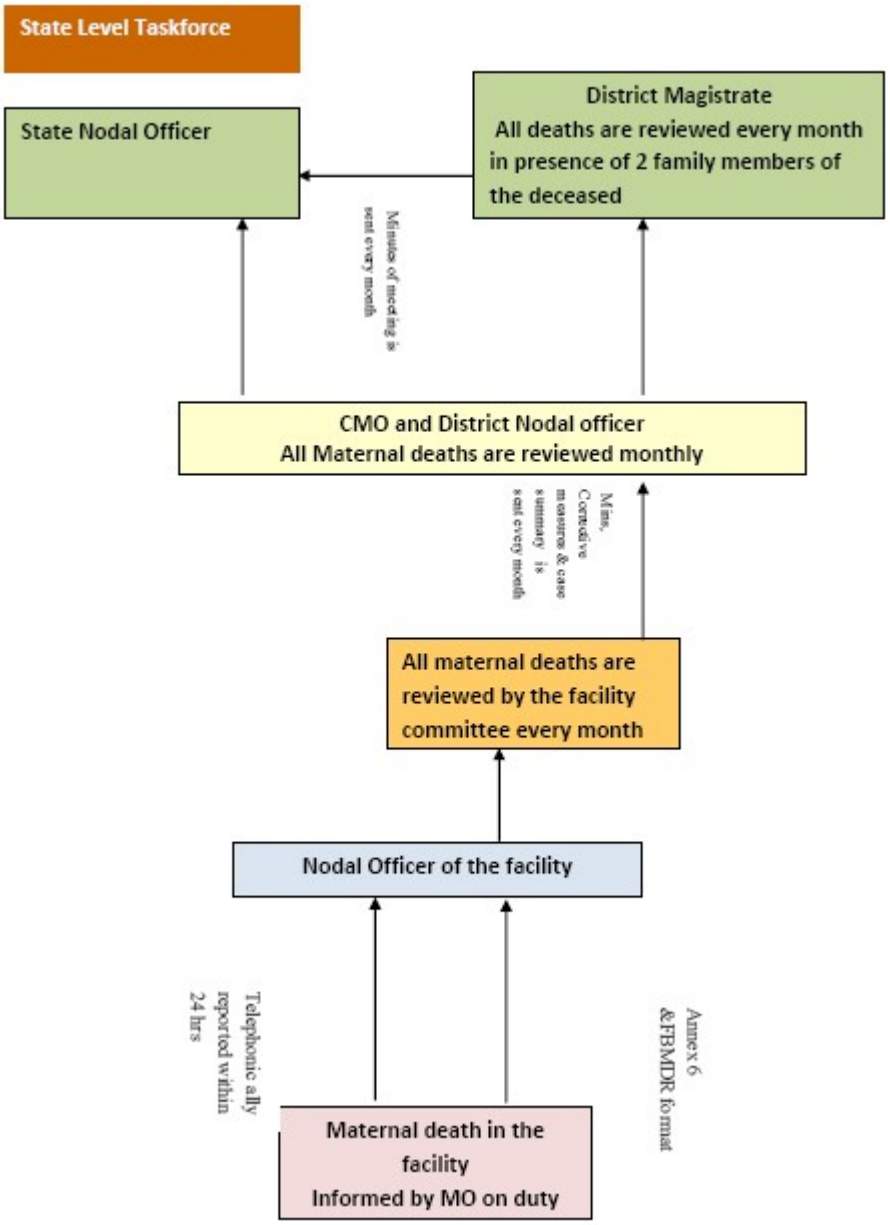
Figure 1: CBMDR information flow



2. Facility-Based MDR

Facility Based Maternal Deaths Reviews will be taken up for all Government teaching hospitals, referral hospitals and other hospitals (District, Sub district, CHCs) where more than 500 deliveries are conducted in a year.

Figure 2: FBMDR information flow



ACTIVITY TIME LINE, ACCOUNTABILITY and INCENTIVES

Activity	Time line	Incentive/Transaction Cost payment suggested	Source of funding
Reporting death of women (15-49 years) by ASHA/other person to the Block PHC MO	Within 24 hours of occurrence of death by phone	Rs.50 per report	HSC untied fund
Reporting death of woman by Block MO to the DNO	Within 24 hours of occurrence of death by phone	No incentive	
Community based investigation	Within 3 weeks of occurrence of death	Rs.100 per person to a maximum of three persons	HSC untied fund
Submission of report by Block PHC MO/facility MDR Nodal MO to DNO in the prescribed form	Within 4 weeks of occurrence of death	No incentive	
Reporting deaths of women by Block MO/ Nodal Officer of Facility to the DNO	Within 24 hours of occurrence of death by phone	No incentive	
Conduct of facility based review meetings and preparation of district MDR report for all deaths in district by the District committee (chaired by the CMO)	Every Month for the deaths reported in previous month.	No incentive	
Conduct of MDR meeting chaired by District Magistrate/Dist. Collector	Once in a month	Incentive of Rs.200 each for two persons of the deceased family	District hospital RKS fund

Newborn Care Practices

Session- Newborn Care Practices

Objectives of Session –

- Orient the participants about Child Health status in Rajasthan
- Acquaint the participants about interventions and activities to maintain the child health as per expected level of achievements

Contents of the session –

- Child Health Scenario of Rajasthan,
- Progress of achievements against MDG 4 targets,
- Danger sign in New Born,
- New born Care, Child Health Care,
- IMNCI,
- Management of Malnutrition,
- CMM,
- Immunization etc.

Methodology – Case study, Brain storming, Discussions, PPT Presentation

Duration of training- 2 Hours

Note for Trainer's

- Session may be begin with discussions on some basic questions
- Participants may be asked following questions
    - ❖ Who is neonate and who is Infant. Difference between neonate, infant and a child. What are the key indicators covered under neonatal and child health to define it.
    - ❖ What is the status of child health
    - ❖ Role of NHM functionaries in neonatal and child health

Activity -1

All the participants may be divided into three groups. Each group may be given a task to analyze a case study

Case study can be identified from participants from their area specific incidents or trainer can give the case study. Each group may have different case study.

Topic of the case study may be following

- ❖ Case of Infant death in which infant was three month old having severe deahorea. Infant was belongs to social outcast and BPL family.
- ❖ Case two of a Neonate with premature born could not be survive.
- ❖ Case three, a 2 year child suffering from mal nutrition.

At the end of the case study there may be three questions about situation. Why this incidents was happened. How it could be avoided. What is the role of Service provider, family members and program managers?

Activity-2

Second part of session may be covered through a presentation covering all aspects of maternal health.

At last 10 minutes may be kept for discussion on question participants may have.

Child Health Scenario of Rajasthan

- In India, an estimated 26 millions of children are born every year. As per Census 2011, the share of children (0-6 years) accounts 13% of the total population in the Country. An estimated 12.7 lakh children die every year before completing 5 years of age. However, 81% of under-five child morality takes place within one year of the birth which accounts nearly 10.5 lakh infant deaths whereas 57% of under-five deaths take place within first one month of life accounts 7.3 lakh neo-natal deaths every year in the Country.

- In 2000, 189 nations made a promise to free people from extreme poverty and multiple deprivations. This pledge became the eight Millennium Development Goals (MDGs) to be achieved by 2015.

Goal 4: Reduce Child Mortality:

The target is to reduce Under-Five Mortality Rate (U5MR) by two-thirds, between 1990 and 2015. In case of India, it translates into a goal of reducing U5MR to 42 per 1000 live births by 2015 and assessed by the following three targets:

- Under five mortality rate
- Infant mortality rate
- Proportion of 1 year old children immunised against measles.

Progress of achievements against MDG 4 targets are as follows:

- India set a target of bringing down under five mortality to 42/1000 live birth by 2015. Under 5 mortality rate has declined to 49/1000 live births in 2013 (SRS). 11 States have achieved MDG4 (<42 per 1000 live births) namely Andhra Pradesh, Delhi, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu, Telangana and West Bengal.

- Infant Mortality Rate currently stands at 40 /1000 live births (SRS 2013), against the MDG target of 29 /1000 live births by 2015. 15 States/UTs have already achieved MDG 4 (<29 per 1000 live births) namely Kerala, Tamil Nadu, Goa, Andman & Nicobar Islands, Chandigarh, Daman & Diu, Delhi, Lakshadweep, Puducherry, Manipur, Maharashtra, Nagaland, Tripura, Sikkim, Punjab. Further, 13 States/UTs are near to achieving MDG4 namely West Bengal, Gujarat, Karnataka, Jharkhand, Uttarakhand, Himachal Pradesh, Jammu & Kashmir, Dadar & Nagar Haveli, Arunachal Pradesh, Mizoram, Bihar, Haryana, Andhra Pradesh.

- Children (12-23 months) immunised against measles has reached a coverage of 74% in 2009 (CES 2009) against a target of universal immunization against measles. Measles

immunisation in rural areas improved from 61.8% to 72.4% over a period of four years (2005 to 2009), while urban measles immunisation coverage in this period declined from 79.4 from 78.3%.

Causes:

- Most common causes of under 5 mortality are – Neo natal death , Diarrhea, Pneumonia, Measles and Malaria etc.
- Malnutrition is the most important underlying cause leading to child deaths.
- Neonatal deaths contribute maximum to infant mortality.
- Most common causes of NMR are – Sepsis, Birth asphyxia, Prematurity and low birth weight, Tetanus, Hypothermia etc.

Prevention

- Neonatal deaths can be prevented by providing essential newborn care to all children. The key components of which are –
- clean delivery and clean cord care,
- immediate care/resuscitation at birth,
- warmth-rooming in (prevention and/or management of neonatal hypothermia and hyperthermia)
- breastfeeding (early initiation and exclusive for 6 months),
- Hygiene
- Care of LBW infants
- Early detection and treatment of sickness at home and health facility.
- Maternal health is closely related to child health.

New Born Care

Baby should be: -

- Dried and wrapped immediately after birth.
- Properly covered according to weather conditions and to be kept warm.
- Head and feet should be kept covered.
- Given bath only after 48 hours.
- Passing stools at least once in first 24 hours and urine at least once in first 48 hours.
- Burping should be done after every feed.
- Cord stump should be kept clean and dry.
- Apply nothing on the cord stump.

Danger sign in New Born

Following conditions in a baby needs contact with M. O. or ANM

- Difficulty in breathing
- Inability to suck
- Inablity to pass urine and stools
- Umbilical stump is red or has pus
- More than 10 pustules over body or one large boil
- Jaundice
- Fever
- Diarrhoea
- Dull and lethargic baby
- Seizure
- Eyes are red or infected
- Any birth defects are seen

Essential Equipments and Accessories needed at New Born Care Corner

1. Baby Tray
2. Pediatric Stethoscope
3. Baby Scale
4. Radiant Warmer
5. Self-inflating Bag Mask (Neo-natal size 0-1)
6. Oxygen Hood (neonatal)

7. Laryngoscope and Endotracheal Intubation Tubes
8. Two sets of pencil cell batteries (one in spare)
9. Mucus Extractor with Suction Tube and a Foot Operated Suction Machine
10. Nasogastric Tube
11. Blankets
12. Two clean and dry towels
13. Feeding tubes
14. Empty vials for blood collection
15. Alcohol handrub
16. HLD/Sterile Gloves
17. Digital Thermometer
18. ARI Timer

Breastfeeding

- Breast feeding to the new born should be started at the earliest, preferably within one hour of delivery to develop proper sucking.
- Breast milk of first day (colostrum) is very useful for the newborn because it is nutritious and rich in protective antibodies against common infections like measles.
- Exclusive breastfeeding should be done for six months and no prelacteal feeds (gripe water, honey) should be given to the baby during this time.
- Breastfeeding should be given on demand.
- Exclusive breastfeeding decreases the chances of diarrhoea and upper respiratory tract infections in the newborn; it decreases chances of pregnancy during that period. Give only breast feeds to your baby for six months and protect baby from illnesses like diarrhoea and others Mother's milk is best for health and growth of baby

COMPLEMENTARY FEEDING

- Any food given to the baby in addition to breast milk is called complementary foods.
- After the age of 6 months, breast milk is not enough for mental and physical growth of the baby so complementary feeding is essential. Timely introduction of a variety of energy rich complementary foods in adequate amounts in addition to breastfeeding keeps the baby healthy

Thrust area under Child Health programme

Thrust Area 1 : Neonatal Health

- Essential new born care (at every 'delivery' point at time of birth)
- Facility based sick newborn care (at FRUs & District Hospitals)
- Home Based Newborn Care

Thrust Area 2 : Nutrition

- Promotion of optimal Infant and Young Child Feeding Practices
- Micronutrient supplementation (Vitamin A, Iron Folic Acid)
- Management of children with severe acute malnutrition

Thrust Area 3: Management of Common Child hood illnesses

- Management of Childhood Diarrhoeal Diseases & Acute Respiratory Infections

Thrust Area 4: Immunisation

- Intensification of Routine Immunisation
- Eliminating Measles and Japanese Encephalitis related deaths
- Polio Eradication

The strategies for child health intervention focus on improving skills of the health care workers, strengthening the health care infrastructure and involvement of the community through behaviour change communication.

Immunization Schedule of Baby

राष्ट्रीय टीकाकरण शेड्यूल (संशोधित पेन्टावेलेन्ट के पश्चात्)

गर्भवती महिला	टी.टी.
Early in Pregnancy	
4 सप्ताह के बाद 1st खुराक	

यदि गर्भवती महिला को टी.टी. की तीन वर्ष के अन्दर दो टी.टी. खुराक मिल चुकी है तो सिर्फ एक बूस्टर खुराक ही दी जायेगी।

सैद्धान्ति रूप से 36 सप्ताह तक के गर्भ पर टी.टी. 2 या बूस्टर खुराक दे दी जानी चाहिए परन्तु अगर किसी कारणवश नहीं दी गई है तो 36 सप्ताह के बाद भी दी जानी चाहिए।

नवजात के लिए	बी.सी.जी.	हैपेटाइटिस बी	पैन्टावेलेन्ट		ओ.पी.वी.	मिजल्स	
जन्म पर							
1½ माह (6 सप्ताह)							
2½ माह (10 सप्ताह)							
3½ माह (14 सप्ताह)							
9-12 महीने							

बच्चों के लिए	डी.पी.टी.	ओ.पी.वी.	मिजल्स	*	टी.टी.
16–24 माह					
5–6 वर्ष					
10 वर्ष					
16 वर्ष					

विटामिन 'ए'

- 6 महीने के अंतराल में, विटामिन 'ए' की 9 रोगनिरोधी खुराक दी जानी है।
- पहली खुराक (1 लाख I.U.) मीजल्स टीके के साथ 9–12 माह पर एवं दूसरी खुराक से नवीं खुराक (2 लाख I.U.) –16 माह से 5 वर्ष की उम्र तक साल में 2 बार कम से कम 6 माह के अन्तराल पर देनी है।

Schemes and Programs on Child health Under NHM

Session- Schemes and Programs on Child health Under NHM

Session Objective –

- To acquaint the participants about child health interventions being initiate and implemented by state under NHM.
- To aware the trainees about their role and responsibilities to achieve the goals and targets of different programs, schemes and interventions under child health in NHM
- To educate about key performance indicators to be achieved through better performance in schemes and programs of child health

Contents of session

Schemes and Programs in Child health, Objectives, strategies, Guidelines of these programs and schemes

- RBSK, NSSK, F-IMNCI , FBNC, MTC, CMM, Immunization, MI,

Methodology – PPT, Discussions and Brain storming

Duration of session – 1.30 Hour

Note for Trainers

- Session may be begin with discussions on some basic questions
- Participants may be asked following questions
  - ❖ What is child health interventions being implemented in the state.
  - ❖ What is the role of these schemes in improving the status of child health
  - ❖ Role of NHM functionaries in child health programs and schemes

Activity -1

All the participants may be divided into three groups. Each group may be given a task to write a small note on a scheme of child health being implemented in the state.

Presentation may be given by each group. At the end facilitator give his/her comments.

Activity-2

Second part of session may be covered through a presentation covering all aspects of maternal health.

At last 10 minutes may be kept for discussion on question participants may have.

Schemes and programs of Child health

Rashtriya Bal Swasthya Karyakram (RBSK)

Objectives - Rashtriya Bal Swasthya Karyakram (RBSK) is an important initiative aiming at early identification and early intervention for children from birth to 18 years to cover 4 'D's viz. Defects at birth, Deficiencies, Diseases, Development delays including disability

Strategy - It is important to note that the 0-6 years age group will be specifically managed at District Early Intervention Center (DEIC) level while for 6-18 years age group, management of conditions will be done through existing public health facilities. DEIC will act as referral linkages for both the age groups. First level of screening is done at all delivery points through existing Medical Officers, Staff Nurses and ANMs. After 48 hours till 6 weeks the screening of newborns will be done by ASHA at home as a part of Home Based New-born Care (HBNC) package. Outreach screening will be done by dedicated Mobile Health teams for 6 weeks to 6 years at anganwadis centres and 6-18 years children at school. Once the child is screened and referred from any of these points of identification, it would be ensured that the necessary treatment/intervention is delivered at zero cost.

Guidelines

Child Health Screening and Early Intervention Services under RBSK envisages to cover 30 selected health conditions for Screening, early detection and free management. States and UTs may also include diseases namely hypothyroidism, Sickle cell anaemia and Beta Thalassemia based on epidemiological situation and availability of testing and specialized support facilities within State and UTs. Selected Health Condions.

F-IMNCI

This facility-based-care IMNCI (Integrated Management of Neonatal and Childhood Illness) focuses on providing appropriate inpatient management of major causes of neonatal and childhood mortality such as asphyxia, sepsis, and low birth weight in neonates; and pneumonia, diarrhoea, malaria, meningitis, and severe acute malnutrition in children.

NSSK

- To provide care after birth to neonates, 2 days training to Medical officers and staff posted at delivery points are given NSSK training.
- The objective of NSSK is to have one person trained in Basic newborn care and resuscitation at every delivery.
- Ideally all staff involved in conducting delivery should be trained in NSSK.

Newborn Care interventions

New Born care corners: (Essential newborn care & resuscitation)

NBCC is a space within the delivery room in any health facility where immediate care is provided to all newborns at birth. This area is MANDATORY for all health facilities where deliveries are conducted.

To deliver immediate care to New Born to prevent Birth Asphyxia and Hypothermia, Newborn care Corners (NBCC) at all Delivery Points and Newborn Stabilization Units at FRU CHCs. They equipped for resuscitation and stabilization by trained personnel and care provided by ANM, Staff Nurses, Doctors, depending on the level of health facility

- Established at
    - Labour Room
    - OT

- Equipments Supplied
  - Radiant Warmer
  - Suction Machine
  - Weighing Machine
  - Ambu bag
  - Thermometer.
- Operational Cost — Rs. 2000/=
- Presently Established — at 1665 DPs
- Training — 2 Days NSSK training

Steps of Setting Newborn Care Corner in a facility

- Earmark an area about 20-30 sq. ft. in size within the labor rooms of all health facilities for establishing a newborn corner. For FRUs and district hospitals, also set up newborn corners in operation theatres where caesarean sections are conducted.
- Equip the corner with a radiant warmer and resuscitation kits.

Newborn Stabilization Unit

NBSU is a facility within or in close proximity of the maternity ward where sick and low birth weight newborns can be cared for during short periods. All FRUs/CHCs need to have a neonatal stabilization unit, in addition to the newborn care corner.

- To Stabilize New born with some complications like Birth Asphyxia, Infections, Diarrhoea etc., till they reach higher center.
- 10% newborn out of total deliveries needs stablization.
- Equipments Supplied
  - Radiant Warmer
  - Ambu Bag
  - Laryngoscope
  - Weighing Machine
  - Thermometer
  - Suction Pump
  - Hub Cutter
  - Light for examination

Steps of setting NBSU

1 For setting up a 4-bedded stabilization unit, at least 200 sqft of floor space is required. The unit should be located within or in close proximity to the maternity ward.
2 In addition, two beds in the postnatal ward should be dedicated for rooming in.
3 Civil work. Basic civil work required to set up a stabilization unit are:
Power supply: The unit should have 24 hr uninterrupted stabilized power supply.
Water supply: The unit should have 24 hr uninterrupted running water supply.
Lighting: The unit should be well lit, preferably with compact fluorescent light (CFL) panels.
Floor surfaces: The floor surfaces should be easily cleanable thus minimizing the growth of micro-organisms.
Walls: As with floors, the ease of cleaning, durability, and acoustical properties of wall surfaces needs to be considered.
4 Equipment: The equipment for maintaining temperature and conducting resuscitation are required.

Sick Newborn Care Unit: (Facility based care for sick newborn)

SNCU is a neonatal unit in the vicinity of the labor room which will provide special care (all care except assisted ventilation and major surgery) for sick newborns. Any facility with more than 3,000 deliveries per year should have an SNCU (most district hospitals and some sub-district hospitals would fulfill this criteria).

- To Provide near intensive care to Sick Newborn with some complications like Birth Asphyxia, Infections, Diarrhoea etc.
- 10% newborn out of total deliveries needs stablization.
- Equipments Supplied
    - Radiant Warmer
    - Ambu Bag
    - Laryngoscope
    - Weighing Machine
    - Thermometer
    - Suction Pump
    - Hub Cutter
    - Light for examination

Steps of Setting up SNCU

1. Project the bed demand.

   The minimum recommended number of beds for an SNCU at the district hospital is 12. However, if the district hospital conducts more than 3,000 deliveries per year, 4 beds should be added for each 1,000 additional deliveries.

2. Estimate the required space and identify the space.

   a. An average floor area of 50 sqft per bed should be available for a patient care area with an additional 50 sqft to be utilized as ancillary area. Therefore, on an average, a total area of 100 sqft per patient is required. For example, for a 12-bedded SNCU, 1,200 sqft floor area is required.

   b. Additional space will be required for the step-down area which will have beds for babies rooming-in with the mothers after the acute phase of illness is over. The number of beds (adult beds would be required for rooming-in babies with mothers) is 30% of the SNCU beds. For example, a 12-bedded unit will require 4 additional adult beds for the step down.

3. Design the unit.

   The unit should be so designed as to have the following areas:

   a. Patient care area: For a unit of 12 beds, the patient care area would be 600 sq ft (50 sq ft per bed).
   b. The patient care area can be designed to have two interconnected rooms separated by transparent observation windows from the nurses' working place in between. While, one room can be used for intramural newborns (those born within the health facility), another room can be used for extramural newborns (those born outside the health facility).
   c. Ancillary area: 600 sqft ancillary area should include separate areas for hand washing and gowning area at the entrance, nurses' work station, clean area for mixing intravenous fluids and medications, doctors duty room, computer terminal,

mother's area for expression of breast milk and learning mother crafts, unit store and side lab. It is desirable to have areas for portable x- ray, boiling and autoclaving and laundry room.

d. Step-down area: In addition to the patient care area and ancillary space, the SNCU design should include the step-down unit. The step-down could be within the premises or in close proximity.

4. Identify and provide for civil, electrical and mechanical requirements.

Expected services to be provided at newborn care facilities

Newborn Care Corner	Stabilization Unit	Special Newborn Care Unit
Care at birth	**Care at birth**	**Care at birth**
• Prevention of infection • Provision of warmth • Resuscitation • Early initiation of breastfeeding • Weighing the newborn	• Prevention of infection • Provision of warmth • Resuscitation • Early initiation of breastfeeding • Weighing the newborn	• Prevention of infection • Provision of warmth • Resuscitation • Early initiation of breastfeeding • Weighing the newborn
Care of normal newborn	**Care of normal newborn**	**Care of normal newborn**
• Breastfeeding/feeding support	• Breast feeding/feeding support	• Breast feeding/feeding support
Care of sick newborn	**Care of sick newborn**	**Care of sick newborn**
• Identification and prompt referral of 'at risk' and 'sick' newborn	• Management of low birth weight infants ≥1800 grams gwith no other complication • Phototherapy for newborns with hyper-bilirubinemia* • Management of newborn sepsis • Stabilization and referral of sick newborns and those with very low birth weight(rooming in) • Referral services	• Managing of low birth weight infants <1800grams g • Managing all sick newborns (except those requiring mechanical ventilation and majorsurgical interventions) • Follow-up of all babies discharged from the unit and high risk newborns • Immunization services • Referral services
Immunization services	Immunization services	Immunization services

Home based newborn care by ASHA

Ffor all newborns those delivered at home or health facility and 6 visits in first 42 days of life in case of institutional delivery, 7 visits in case of home deliveries

- For both Home and Institutional Delivery
- For both and Mother and Child
- 1, 3, 7, 14, 21, 28 and 42 day visit
- 1st visit should be with ANM with in 24 hour

Role of ASHA

- Identify Danger sign
- Incentive Rs. 250/=
- Early initiation of breast feeding
- Exclusive breast feeding for six months.
- Supplementary feeding.
- Continue breast feeding for 2 years
- Increased ORS and Zinc use in diarrhea.
- Improved immunization coverage.
- Danger sign
- Cord care
- Increased access to care.
- Better awareness.
- Maintenance of temperature
- Early detection of Pneumonia and sepsis
- Promoting hygiene practices
- Greater care and support of high risk baby.

A new scheme has been launched to incentivize ASHA for providing Home Based Newborn Care. ASHA will make visits to all newborns according to specified schedule up to 42 days of life. The proposed incentive is Rs. 50 per home visit of around one hour duration, amounting to a total of Rs. 250 for five visits. This would be paid at one time after 45 days of delivery, subject to the following :

- recording of weight of the newborn in MCP card
- ensuring BCG , 1st dose of OPV and DPT vaccination
- both the mother and the newborn are safe till 42 days of the delivery, and
- registration of birth has been done

CHILD CARE

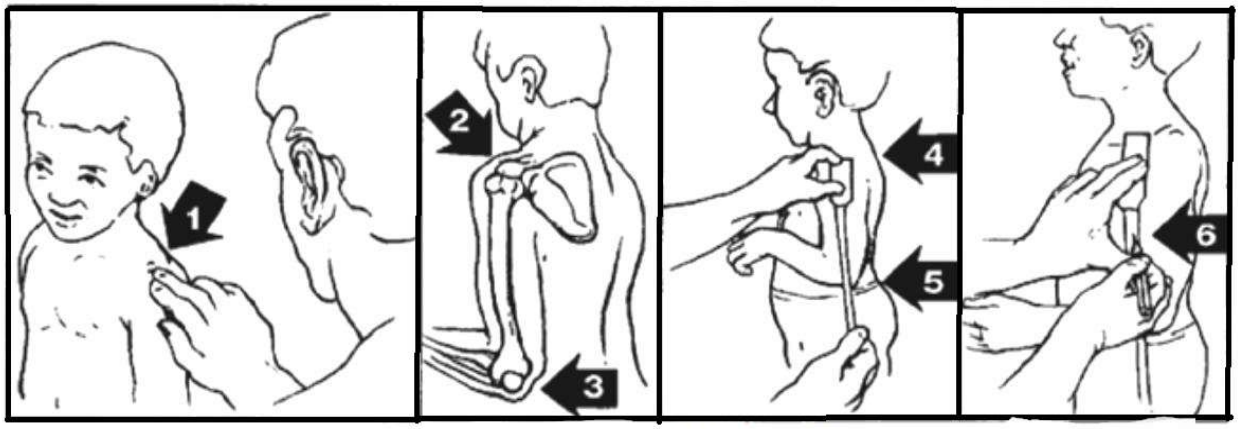
Definitions – Types of Malnutrition

- Underweight - low weight for age (Composite indicator measure of acute and chronic malnutrition)
- Stunting – low height for age (chronic malnutrition)
- Wasting - low weight for height (indicator of acute malnutrition) - age independent (6-59 month) - closely associated with death (Less than -2 SD than normal) (acute malnutrition)

Identification of SAM

- Poedal Oedema
- MUAC <11.5 cm
- Medical Complication
- Z Score

How to identify children with SAM in community.

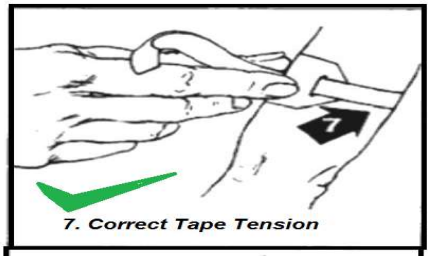


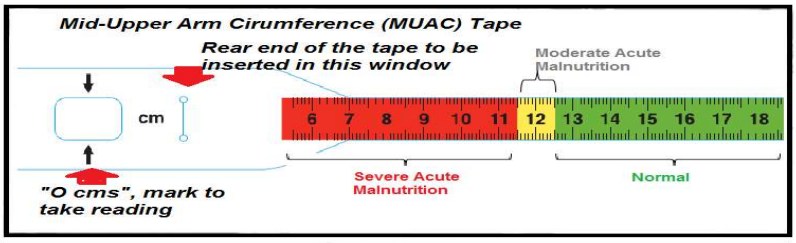
1. Locate tip of the shoulder

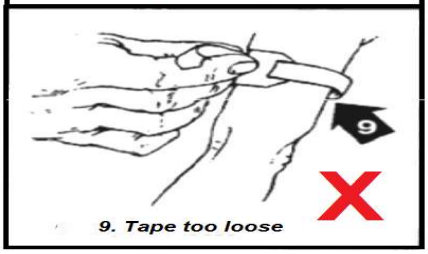
2. Tip of the shoulder
3. Tip of Elbow

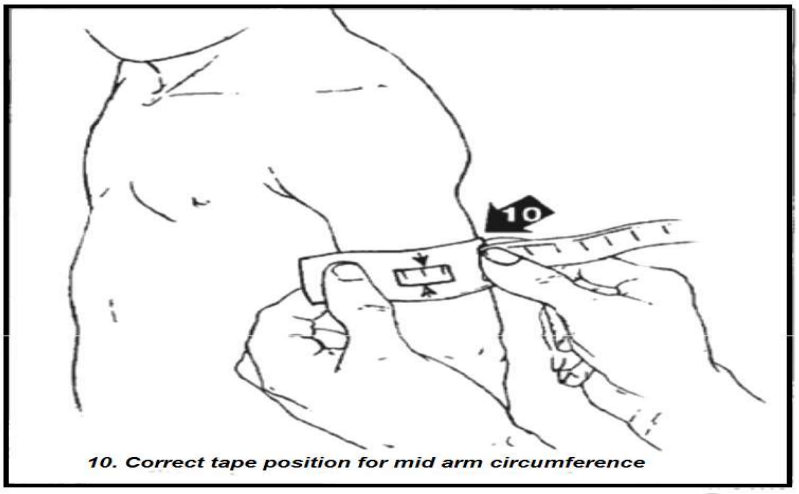
4. Put tape at tip of shoulder
5. Pull tape past tip of bent elbow

6. Mark Midpoint

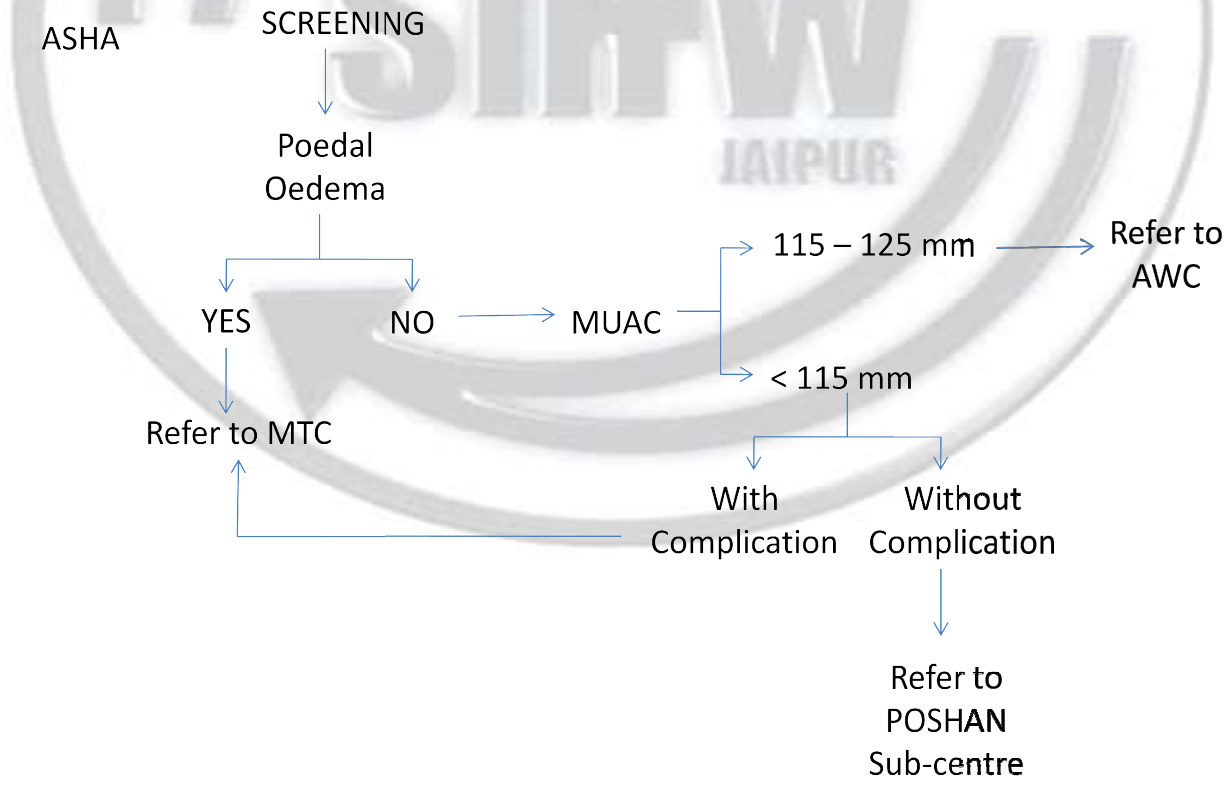




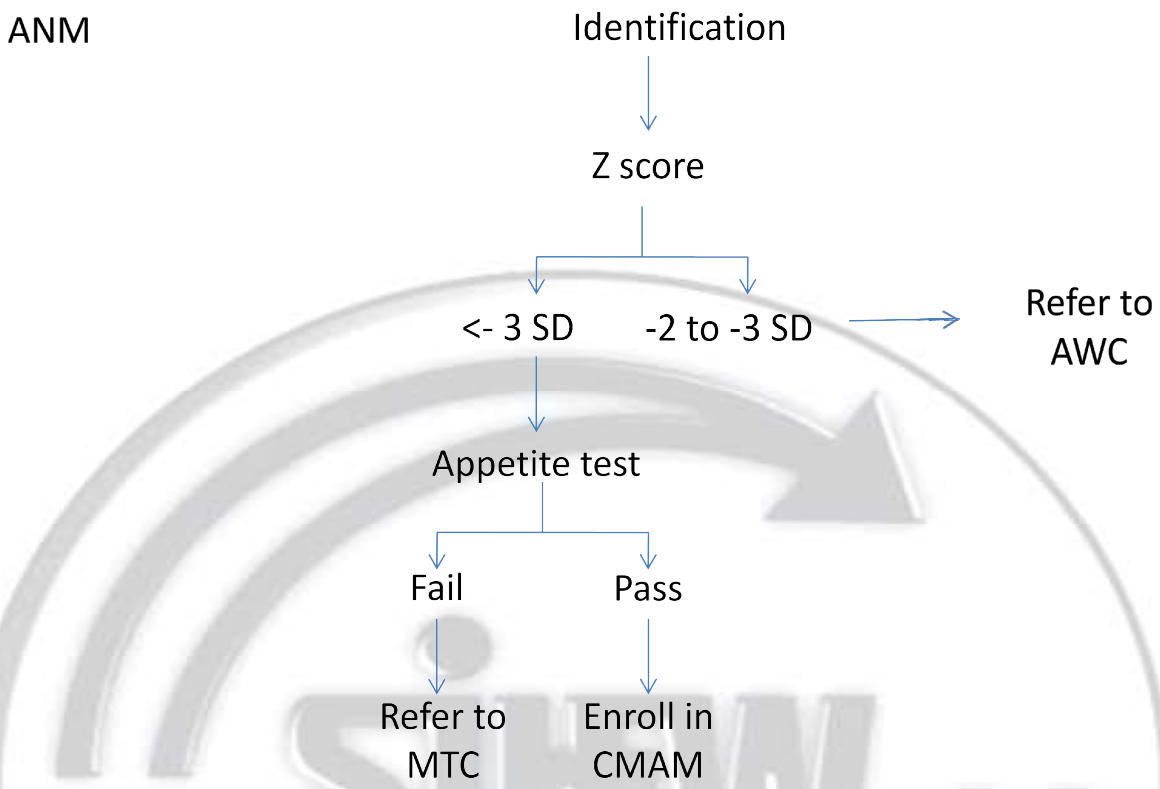




Flow chart for Children with SAM



Flow chart for Children with SAM



Malnutrition Treatment Centre

What is MTC?

- A facility based care centre
- A unit for the management of severely malnourished children
- Children admitted with defined admission criteria
- Children kept under observation and provided with medical and therapeutic care
- Focus on improving the skills of mothers on complete care and feeding
- Convergence with AWC and ASHA Sahyogini for follow up of children at household level

Infrastructure

- Established at Medical Colleges, District hospital & CHCs
- 10 / 6 /3 bedded separate ward

Facilities at MTC

- Patient area to house the beds; in NRC adult beds are kept so that the mother can be with the child.
- Play and counselling area with toys; audiovisual equipment like TV , DVD player and IEC material.
- Nursing station
- Kitchen and food storage area attached to ward, or partitioned in the ward, with enough space for cooking, feeding and demonstration.
- Attached toilet and bathroom facility for mothers and children along with two separate hand washing areas.

Supplies at MTC

- Stand-ometer
- Length board
- MUAC tape
- Measuring cups and spoons
- Kitchen equipments and utensils
- Equipments for medical test
- Medicines
- Bed, mattresses, bed sheets, plastic mats, blankets, mosquito nets
- Room heaters, Coolers
- Basic furniture for staff
- Fly catchers
- Shoe racks, Dust Bins
- Infant feeding tube (NG tube 6 or 8 no.)
- Toys for children
- Dari, chatai ,Trunks
- Bedside board for room temperature

Staff at MTCs

- Pediatrician / Trained MO (1 – 2)
- GNMs/ Staff nurses (4)

Documentation Records at MTC

- MTC register
- SAM charts

- Follow up card
- Discharge card
- Mother and Child Protection card
- Roaster for admission and follow up

Preparation of Therapeutic Feeds (F-75 and F-100)

	Starter Diet (Cereal Based) F-75	Catch –Up Diet (F-100)
Fresh Cows Milk (Toned Milk)	**300**	**900**
Sugar	**70**	**75**
Powdered Puffed Rice	**35**	**-**
Vegetable Oil	**20**	**20**
Water make up to 1000 ml	**1000**	**1000**

Energy (kcal/100ml)	**75**	**100**
Protein (g/100 ml)	1.1	2.9
Lactose (g/100 ml)	1.2	4.2

Community Based Management of Children with Acute Malnutrition (CMAM) in Rajasthan

Introduction

Severe acute malnutrition remains a major killer of children under five years of age. Until recently, treatment has been restricted to facility-based approaches, greatly limiting its coverage and impact. New evidence suggests, however, that large numbers of children with severe acute malnutrition can be treated in their communities without being admitted to a health facility or a therapeutic feeding centre.

The community-based approach involves timely detection of severe acute malnutrition in the community and provision of treatment for those without medical complications with ready-to-use therapeutic foods or other nutrient-dense foods at home. If properly combined with a facility-based approach for those malnourished children with medical complications and implemented on a large scale, community-based management of severe acute malnutrition could prevent the deaths of hundreds of thousands of children.

Objectives of Community Based Management of Severe Acute Malnutrition Strategy:

- To assess the effectiveness, feasibility and safety of Community Based Management of Severe Acute Malnutrition in children by providing therapeutic care in Rajasthan.
- To develop a SAM tracking mechanism
- To develop a cost effective, replicable, evidence based Community based management of SAM children which can be roll out in over all Rajasthan.
- To establish standard protocols for CMAM Strategy
- To develop an active response mechanism for Children at high risk or in the most challenging condition.
- To develop a capacity building mechanism of the employees and community.
- To work on preventive aspect by addressing and treating all MAM

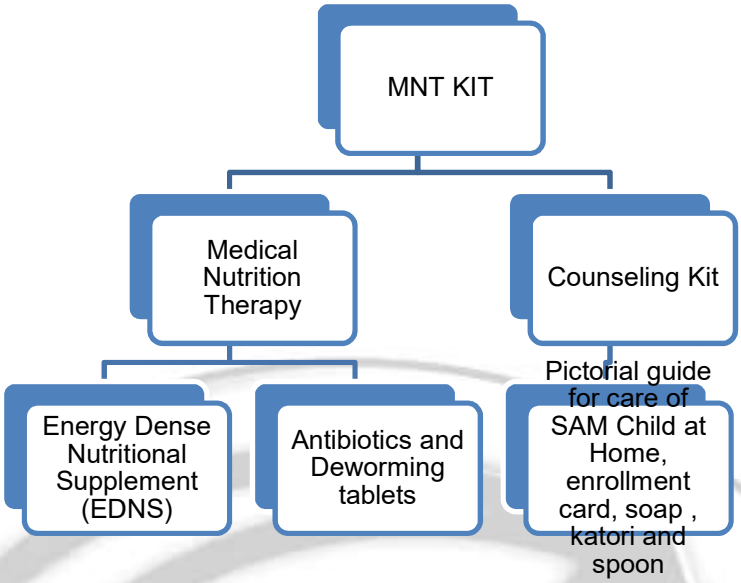
Core Component of Community Based Care of Children with Severe Acute Malnutrition

- Community Outreach
- Outpatient care for children with SAM without medical complications at decentralized health facilities and at home
- Inpatient care for children with SAM with medical complications or no appetite
- Services or programmes for the management of moderate acute malnutrition (MAM)
- Energy Dense Therapeutic Food
  Energy-dense, micronutrient enhanced pastes used in therapeutic feeding.

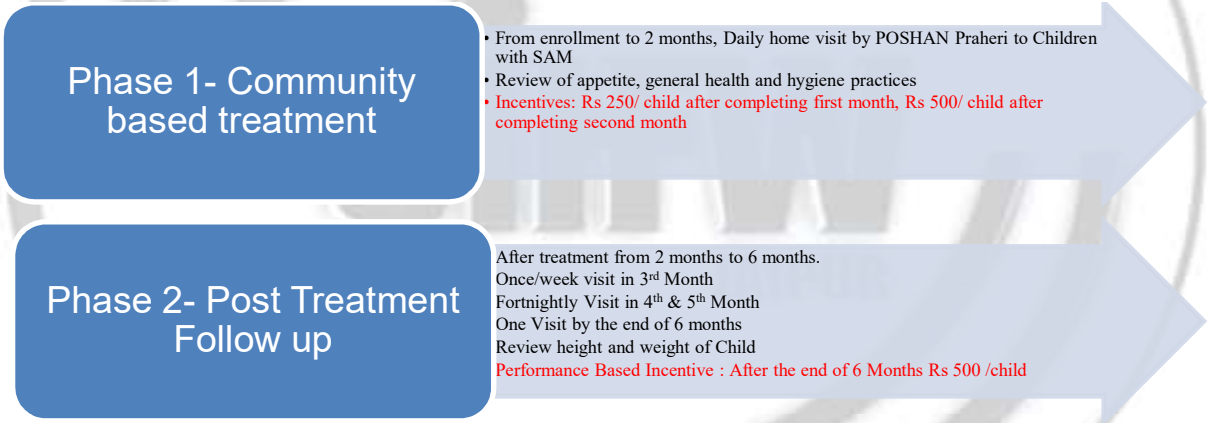
POSHAN PRAHERI

- Counseling to Caretaker, Family Members of SAM child by using BCC tools.
- MNT Kit given to the family for a week and same trend followed till 8 weeks
- Follow up home visits by Poshan Praheri to access the improvement in Child health

MNT Kit



Two Phases of Program



POSHAN DAY – SUB CENTER

Weekly Celebration of POSHAN DAY to do the anthropometric and clinical assessment of SAM Children

For celebration of POSHAN DAY – Rs 400/ Sub Center

Family Planning Practices

Session- Family Planning Practices

Sessions Objective-

- Orient the participants about Family Planning Program its objectives, key Strategies and Practices
- Provide clarity on role and responsibilities of different stakeholders in Family Planning Program.
- Family planning counseling and method specific precautions-Dos Don'ts
- Impart Knowledge about Standard Procedures and Guidelines for sterilizations and other methods

Contents-

- Family Planning Program in India, Perspectives and Issues,
- Practices and Methods of Family Planning,
- Quality of care and SoPs in Family Planning
- Counseling and Method specific counseling

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Methodology

Group Exercise, Presentation, Brain storming

Duration -1.30 Hours

Note for Trainers

- Session may be begin with discussions on some basic questions
- Participants may be asked following questions
    - ❖ What is Family Planning Why it is important.
    - ❖ What is ELA and how it is calculated.
    - ❖ What is TFR and Growth Rate,
    - ❖ Relation between Birth rate & Family planning
    - ❖ What is the role of service providers, program managers in Family planning

Activity -1

All the participants may be divided into three groups. Each group may be given case of eligible couple who wants family planning

A newly married couple – What method they use and why ?

A couple having one child, do not want have pregnancy, need to have spacing. What is to be appropriate for FP

Couple have three children do not want more children

Each group should provide details of methods with Do and Don'ts. At the end facilitator give his/her comments.

Activity-2

Second part of session may be covered through a presentation covering all aspects of Family Planing.

At last 10 minutes may be kept for discussion on questions of participants may have.

Family Planning Practices

Definition

- Total Fertility Rate(TFR)

-Total fertility is the mean number of children a woman would have by age 50 if she survived to age 50 and were subject, throughout her life, to the age-specific fertility rates observed in a given year. The total fertility is expressed as the number of children per woman.

- Couple protection rate (CPR)
  - It is defined as the percentage of eligible couples effectively protected against child birth by one or other methods of family planning. CPR is an indicator of the prevalence of contraceptive practice in the community.
- CRUDE BIRTH RATE-:The crude birth rate is the annual number of live births[1] per 1,000 population.
- Unmet need for spacing
  - includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant who want more children after two years or later and are currently not using any family planning method. The women who are not sure about whether and when to have next child are also included.
- Unmet need for limiting
  - includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method(These definitions are same as DLHS-2).

Expected Level of Achievement

- Expected Level of Achievement (ELA) is based on their unmet need, TFR and present performance. The districts can formulate their district wise ELA based on the district unmet need emerging from the Health Indicators-DLHS III/ AHS.
- How to calculate ELA?

It is possible to calculate ELA on the basis of unmet need

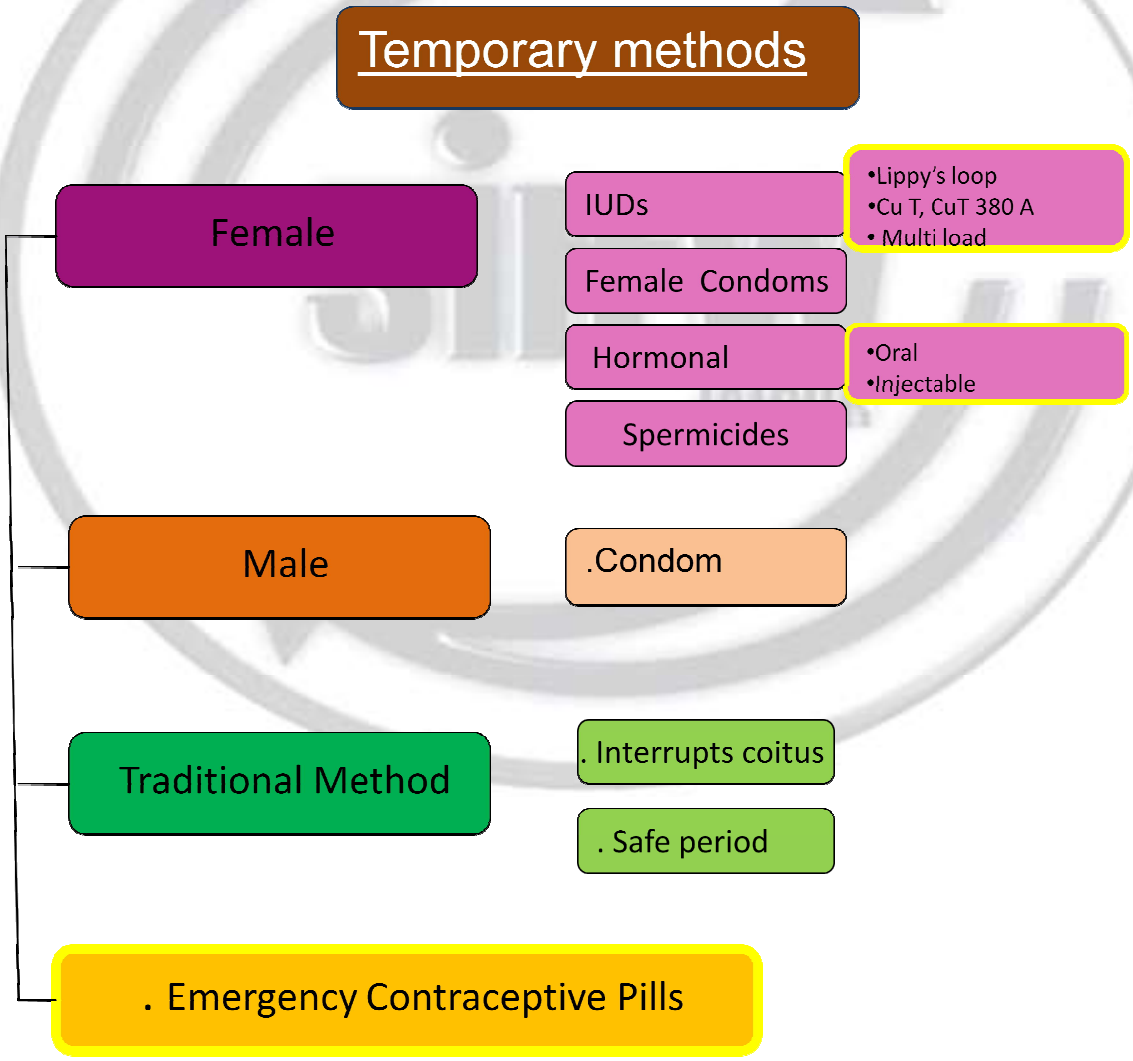
- Pop. of a block = 100,000
- Eligible couples = 17% i.e. 17,000
- Unmet need services = 20% which means 3400 couples need FP services
- Unmet need for limiting (12%)= 2040 eligible couples (for tubectomy & vasectomy)
- Unmet need for spacing (8%)=1360 eligible couples for spacing

(It has been observed whatever method you employ to calculate the ELA it comes to around 0.5-0.7% of the population in most of the states/districts)

Population Stabilization

- Population stabilization is a stage when the size of the population remains unchanged. It is also called the stage of zero population growth. Global population is said to be stabilizing when births equal deaths.
- What are the factors that influence population growth? Natural increase denotes the difference between the number of births and deaths. The country has seen declining death rates but the birth rates remain high; birth rates are high due to two factors. The first is unwanted and unplanned fertility - children who are born because of lack of poor access to contraceptive services, also known as the "unmet need". The birth of three and above three children accounts for 45% of the 26 million births that take place each year.

Second is the desire for larger families (called "wanted fertility") because of socio-cultural reasons, particularly preference for a male child and high infant mortality. This accounts for 20% of births.



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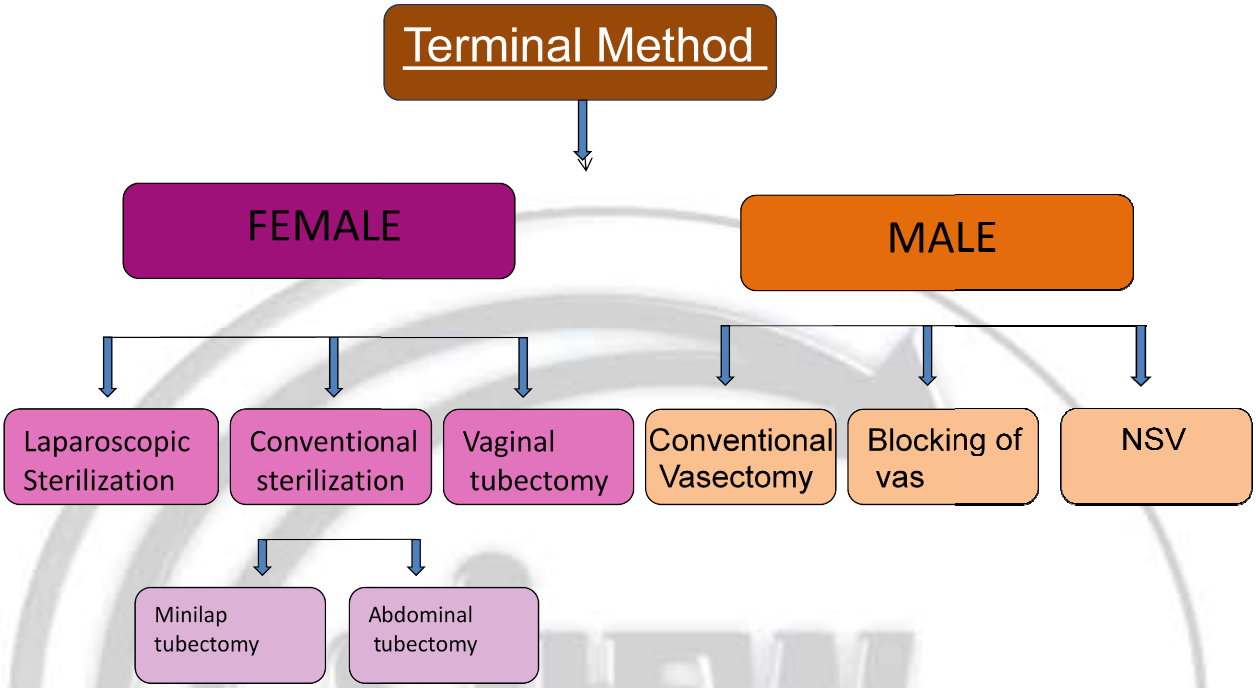
Terminal Method
FEMALE
MALE
Laparoscopic Sterilization
Conventional sterilization
Vaginal tubectomy
Conventional Vasectomy
Blocking of vas
NSV
Minilap tubectomy
Abdominal tubectomy

6

Chapter -8 Family Planning Schemes and Programs

Session- Family Planning Intervention under NHM

Session Objective-

- To acquaint the participants about Family Planning interventions being initiate and implemented by state under NHM.
- To aware the trainees about their role and responsibilities to achieve the goals and targets of different programs, schemes and interventions under Family Planning in NHM
- To educate about key performance indicators to be achieved through better performance in schemes and programs of Family Planning.

Contents of session

Schemes and Programs in Maternal Health, Objectives, strategies, Guidelines of these programs and schemes

ESB by ASHA, HDC, PPIUCD, Incentives for acceptors, Compensation to service providers, Indemnity Scheme, Family Planning Insurance Scheme, JSK- Jyoti Schme, Prerna Scheme, Santushti Scheme. District Specific Schemes

Methodology – PPT, Discussions and Brain storming

Duration of session – 1.30 Hour

Note for Trainer's

- Session may be begin with discussions on some basic questions
- Participants may be asked following questions
  - ❖ What is FP interventions being implemented in the state.
  - ❖ What is the role of these schemes in improving the status of TFR
  - ❖ Role of NHM functionaries in FP programs and schemes

Activity -1

All the participants may be divided into three groups. Each group may be given a task to write a small note on a scheme of FP being implemented in the state.

Presentation may be given by each group. At the end facilitator give his/her comments.

Activity-2

Second part of session may be covered through a presentation covering all aspects of maternal health.

At last 10 minutes may be kept for discussion on question participants may have.

Family Welfare Schemes

ESB (Ensuring Spacing in Birth)

About scheme : ASHAs to counsel **newly married couples** to ensure spacing of **2 years** after marriage and couples with **1 child** to have spacing of **3 years** after birth of **1st** child.

**In Urban Areas - Link worker to be involved .*

** In states where ASHAs are not in place in rural areas - AWW services to be utilized.*

Incentives to ASHA :

- Rs. 500 - For ensuring spacing of **2 years** after marriage.
- Rs. 500 - For ensuring spacing of **3 years** after the birth of 1st child.
- Rs. 1000 - Incase a couple opts for a **permanent** method upto 2 children only.

Home Delivery of Contraceptives (HDC)

- ASHAs are now delivering contraceptives at doorstep of beneficiaries.
- *Eligible couples are able to access contraceptive services in the privacy of their homes*
- ASHA may charge a nominal amount of
    - Rs. 1 for a pack of 3 condoms,
    - Rs. 1 for a cycle of OCP and
    - Rs. 2 for an ECP.

ASHA to replenish stock every month from CHC, Block PHC

Compensation for PPIUCD

Coverage : Applicable across India and covers service providers (Nurses, Doctors)

Incentives :

- Rs 150 – To service providers as compensation for extra work done in addition to regular work.
- Rs 150 – To ASHAs for escorting client to facility for insertion.

**Scheme is for rural areas but is also applicable for urban areas through Link workers*

** If ASHAs are not in place - Services of AWW may be utilized.*

Sterilization Compensation Scheme

	Breakup of the Compensation package	Acceptor	ASHA/ Health Worker	Surgeon+ Anaesthetist	Staff Nurse	Others	Total
11 High focus states (UP, BH, MP, RJ, CG, JH, OD, UK, AS, HR, GJ)	**VASECTOMY**	2000	300	250	30	120	**2700**
	TUBECTOMY	1400	200	200	30	170	**2000**
	TUBECTOMY (PPS)	2200	300	300	50	150	**3000**
Other High focus states (NE states, J&K, HP)	**VASECTOMY**	1100	200	100	15	85	**1500**
	TUBECTOMY	600	150	100	15	160	**1000**
Non High focus states	**VASECTOMY**	1100	200	100	15	85	**1500**
	TUBECTOMY (BPL + SC/ ST only)	600	150	100	15	160	**1000**
	TUBECTOMY (APL)	250	150	100	15	160	**650**

Family Planning Indemnity Scheme

Sno.	Claims arising out of Sterilization Operation	Amount (Rs.)
A	Death at hospital/ within seven days of discharge	**2,00,000**
B	Death following Sterilization (8^{th} – 30^{th} day from discharge)	**50,000**
C	Expenses for treatment of Medical Complications	**25,000**
D	Failure of Sterilization	**30,000**
E	Doctors/facilities covered for litigations up to 4 cases per year including defence cost	**2,00,000 (per case)**

Jyoti Scheme

- Launched on April 1, 2011
- Applicable for females with no male child & 1-2 female child & have undergone sterilization
- Give preference in health services, education and employment

Objective

- Promote Females as role model for small families
- Girl child

Eligibility: 22 – 32 years

Benefits

- Felicitation Felicitation at national national and local functions functions
- Help in education
- Free health facilities facilities in govt. hospitals hospitals
- Participation in activities related to development in social sector
- Learning visits in different states
- Preference in selection as ASHA/AWW

Eligible females can apply to Dy. CM&HO (FW) with Bonafide, Sterilization certificate and photo ID

Parivar Kalyan Beema Yojana

In case of death or any complication complication due to sterilization operation

- Death in hospital or within 7 days of discharge Rs. 2,00,000/- –
- Payment of Rs. 50,000/- through RMRS immediately given later taken from insurance company
- Death within 8 - 30 days – Rs. 50,000/-
- Failure Failure of operation operation – Rs. 30,000/-
- Complications within 60 days of operation – actual expenditure with upper limit of Rs. 25,000/-
- Indemnity insurance per doctor/ institute (not more than 4 in a year) – Rs. 2,00,000/-

District Schemes

Sterilization Initiative - Jhunjhunu and Pali

• Nano cars offered on lottery basis to people who get sterilized ¾Other include – cash and mobiles
• Other schemes

After birth of one girl child

- Men get – Rs. 15,000/-
- Women get – Rs. 10,000/-

Schemes for Institutes for Sterilization

NGO & Private health facilities registered in motivational/ promotional scheme paid for

- Male sterilization – Rs. 1300 /- per case
- Female sterilization – Rs. 1350/- per case
- IUD insertion – Rs. 75 /- per case
  - No user charges from the case
  - No operation fee

- Benefit to motivator
  - For male sterilization – 200/-
  - For female sterilization sterilization – 150/-

- In case of death or complications payment given as per the insurance policy

PRERNA Scheme

- In order to help push up the age of marriage of girls and space the birth of children in the interest of health of young mothers and infants, Jansankhya Sthirata Kosh (National Population Stabilization Fund) has launched PRERNA, a Responsible Parenthood Strategy in seven focus states namely Bihar, Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha and Rajasthan.

- The strategy recognizes and awards couples who have broken the stereotype of early marriage, early childbirth and repeated child birth and have helped change the mindsets of the community.

- In order to become eligible for award under the scheme, the girl should have been married after 19 years of age and given birth to the first child after 2 years of marriage. The couple will get an award of Rs. 10,000/- if it is a Boy child or Rs. 12,000/- if it is a Girl child. If the birth of the second child takes place after 3 years of the birth of first child and either parent voluntarily accept permanent method of family planning within one year of the birth of the second child, the couple gets an additional award of Rs.5,000/- (Boy child) / Rs.7,000/- (Girl child). The amount of award is given in the form of National Saving Certificate (NSC). The scheme is meant only for Below Poverty Line or BPL families.

SANTUSHTI Scheme

Santushti is a scheme of Jansankhya Sthirata Kosh (JSK) for the highly populated States of India viz Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Jharkhand, Chhattisgarh & Odisha. Under this scheme, Jansankhya Sthirata Kosh, invites private sector gynecologists and vasectomy surgeons to conduct sterilization operations in Public Private Partnership (PPP) mode.
According to this Scheme, an accredited private Nursing Home/Hospital can sign atripartite MoU between the State Health Society as 1st party, accredited private health facility as 2nd party and JSK as the third party. Upon signing the MoU the private hospitals/nursing homes are entitled to incentive by JSK. The accreditation is done by the district and approved by the State Health Society.
Requisites for the scheme:-

- Accredited Private Hospitals/Nursing Homes, who conduct 10 or more Tubectomy (Female Sterilization) and Vasectomy (Male Sterilization) operations in a month, are eligible for payment under Santushti Strategy;
- Private facilities conforming to the aforesaid criteria are entitled to claim Rs.500/- per case from JSK besides entitlement from NHM;
- JSK pays wage compensation to the clients undergoing sterilization operation, @ Rs. 600/- Tubectomy and Rs. 1100/- for Vasectomy;
- Reputed NGOs working in the state are eligible to participate in the Scheme provided their facility is credited by the State Health Society (after meeting the requisite criteria for quality assurance) and
- Private sector is also permitted to utilize infrastructure of PHCs, CHCs for conducting the sterilization operation of Tubectomy and Vasectomy.

i. National Helpline

Jansankhya Sthirata Kosh initiated a first of its kind National Helpline in India on Reproductive, Sexual Health, Family Planning and Infant and Child Health etc.
The aim of National Helpline is to provide reliable information on Reproductive Health, Sexual Health, Contraception, Pregnancy, Child Health and related issues. It is specifically for adolescents, newly married and about to be married persons from the High Focus States of Bihar, U.P. Rajasthan, Madhya Pradesh, Jharkhand and Chhattisgarh but anyone of any age can seeks help. Initially, M/s

Sparsh BPO service Limited had been awarded the contract for one year period. The contract was extended for another year.

Type of service	Type of facility	Wage compensation to the beneficiaries by JSK	Payment to private facility by JSK
Tubectomy	Private	Rs. 600/-	500/-
Vasectomy	Private	Rs. 1100/-	500/-

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another year.

Adolescents Health

Session- Adolescent Health under NHM

Session Objective-

- To acquaint the participants about Adolescent Health its components schemes startetgy and interventions being initiate and implemented by state under NHM.

- To aware the trainees about their role and responsibilities to achieve the goals and targets of different programs, schemes and interventions under Adolescent Health components in NHM

- To educate about key performance indicators to be achieved through better performance in schemes and programs of Adolescents.

Contents of session

Schemes and Programs in Adolescent health, Objectives, strategies, Guidelines of these programs and schemes

Importence of Adolescents Health, National Strategy of Adolescent health, RKSK, WIFS, AFHS,ARSH, ***Menstrual Hygiene Scheme***. Adolescent Health Day, Peer Educators, Couseling and IPC, Prectices and behaviours of adolescents, Risks and threats during adolescents, Miths and Misconceptions gender and sex and sexuality.

Methodology – PPT, Discussions and Brain storming Case Studies, Role play, Quize

Duration of session – 2.30 Hour

Note for Trainers

Session should be started with brief discussions on profile of Adolescents. A PPT can be present of status of Adolescenet health in India and State.

Participants may be asked to imagin about their adolescence and try to recollect the incidents, problems and issues which were mostly bother them at that time. Each participant should share at least one incident of issues of their life which affect their life. This incedent should be shared by each participant in the session. Sharing of the experiences of adolescence will create a learning atmosphere and session would lead to right directions.

Activity -1 Duration-30 minutes

All the participants may be divided into three groups. Each group may be given a task to write problems and issues of adolescent girls and boys. Problems may be catagorise into social, educational emotional and health related aspects.

Presentation may be given by each group. At the end facilitator give his/her comments.

Activity-2 –Duration 60 Minutes

Some selected case studies may be given to the participants (Refrence materal of RKSK GoI). They may be asked to discuss the situation and present it into common session

Some role plays on following topins should be performed

- Early Marriege and early pregnencey,
- Socio-Psyco problems during adolescence,
- Cotraceptive use and it need
- STI-RTI problems

A small scrpt of Role plays may be given to participants (Refrence Matereal of RKSK may be used) and ask them to perform on the same at the end of performance brain storming should be conducted.

Activity-3 duration-30 Minutes

List of 20 questions may be prepared or obtained from Mudules of RKSK and Quize may be conducted to assess the knowledge and attitude of the participants and also ensure the clarity on miths and misconceptions on various aspects of sex and sexuality.

At last 10 minutes may be kept for discussion on question participants may have.

Adolescence Health

By definition, the term, adolescence, is applied to the lifespan, usually between 10 to 19 years, in which children undergo rapid changes in body size, physiology and psychological and social functioning.

This is the net result of surging hormones and social expectations designed to foster the transition from childhood to adulthood. True to the literal meaning of the term (the Greek word, adolescere denotes “to grow and to mature”), the sentinel occurrence during the period of adolescence is, “rapid growth”, not just physical and biological (sexual) but also emotional, cognitive, psychological, and social.

Adolescence begins with the onset of puberty, defined by the UNICEF as “the sequence of events by which the individual is transformed into a young adult by a series of biological changes.” It is during this period that secondary sex characteristics develop. These sex characteristics have been rated into five stages by Tanner. Globally a secular trend is being noticed towards earlier puberty. What indeed constitutes end of puberty remains controversial.

Arbitrarily, adolescence is divided into three phases: early, middle and late adolescence. Early adolescence refers to age 10 to 13 years, middle adolescence to 14 to 16 years and late adolescence to 17 to 20 years.

Why invest in Adolescents?

Adolescents (10-19 years) constitute about one fourth (21.4% or 243 million) of India’s population and young people (10-24 years) about one third (or 350 million) of the population. This represents a huge opportunity that can transform the social and economic fortunes of the country In order to enable adolescents to fulfill their potential, substantial investments must be made in: education, health, growth and development and other areas like nutrition and mental well being.
Investments in adolescents will have returns which are immediate and cause direct positive impact on India’s health goals and achievement of MDGs - especially Goals 1, 2, 3, 4,51 and at the same time enhance economic productivity, effective social functioning, and overall population development. Thanks to the concerted efforts of the World Health Organization (WHO) and the UNICEF, a worldwide campaign has begun to focus attention on adolescence. In India, the Indian Academy of Pediatrics (IAP) took lead in focusing attention on adolescence by declaring the year 2000 as the IAP Year of the Adolescent and the August 1 (first day of the World Breastfeeding Week) every year a the Teenager Day. Health problems of children up to 18 years (inclusive) should be the responsibility of pediatricians.

Social context of adolescents in India

Adolescence is characterized by rapid rate of growth and development, though most of adolescents are healthy or show lower levels of morbidity and mortality compared to children and adults. It is well recognized that adolescents developed health problems due to their unfavorable social conditions and their adaptive nature to unhealthy behaviors.

A considerable proportion of adolescents, both boys and girls, face challenges to their healthy development into adulthood, due to a variety of factors, including structural poverty, lack of information, unfavorable social norms, missed opportunity of education, lack of vocational training and societal expectations of early marriage, childbearing, forceful parenting with social discrimination.

Service provisions for adolescents are influenced by many factors. For example, at the level of the health system, a lack for adequate privacy and confidentiality and the judgmental attitudes of service providers, who often lack counseling skills, are barriers that limit access to services.

Education

A strong positive relationship exists between education and health outcomes whether measured by death rates, illness, health behaviors or health knowledge. There are marked inequalities in education among adolescents in India, access and completion being influenced by social class, caste, ethnicity and gender. While 32 million children enroll in class 1, only 8 million graduate from class 12. One out of two children (53%) dropout during class 1-10, with an even higher proportion for marginalized sections (75%). Only 2.35% of adolescent continue higher secondary education with high dropout rates for both girls and boys.

Early childbearing

Teenage pregnancy and motherhood, is frequent. One in five young women age 20-24 had their first baby before 18 years of age. Overall, 16% of adolescent girls had begun childbearing in 15-19 years age group (had a live birth or were pregnant with their first child). Among married adolescents a much higher proportion i.e. 58% are mothers or have already begun childbearing and in many cases they have already had more than one birth.

Gender discrimination

Adolescent girls continue to face gender discrimination and boys are bestowed with socially accepted advantages. The declining sex ratio, lower school-enrolment and higher drop-out rates, early marriage, incidence of domestic violence, under-age pregnancy, unsafe motherhood and increasing incidence of sexual abuse (UNFPA, 2006) clearly are unfavorable for the girls while the boys are at a risk of unhealthy behaviors which promote mental health problems, violent behaviors and noncommunicable diseases. These factors have a direct or indirect influence on the health and well-being of adolescents and form an essential component of the background environment in which adolescent health issues should be understood. Program interventions must therefore adopt a gender sensitive approach towards promoting health and well-being of adolescents.

Health Issues

Adolescences is considered a healthy period nonetheless, more than 33% of the disease burden and almost 60 percent of premature deaths among adults can be associated with behaviors or conditions that began or occurred during adolescence—for example, tobacco and alcohol use, poor eating habits, sexual abuse, and risky sex (WHO 2002).

Nutrition

Malnutrition and anemia affect large sections of the Indian population, and are particularly high among adolescents. Findings from National Family Health Survey 3 (NFHS 3) indicate that as many as 56% of females and 30% of males in the 15-19 age group are anemic. Out of this, 17% females and 13% males suffer from moderate to severe anemia. More than half of women are anemic in every age group with the prevalence being higher for younger. Similarly prevalence of anemia in boys is higher for adolescents aged 15-19 years than for men aged 20-24 years and older age groups.

In the age group 15-19, nearly half of the females (47%) and nearly three-fifth of the males (58%) are thin. At the same time, 2.4% females and 2% males in the age group 15-19 suffer from obesity. Young people in rural areas are more likely than youth in urban areas to be abnormally thin and less likely to be overweight or obese. As is to be expected, the likelihood of being abnormally thin generally declines with education and wealth and the likelihood of being overweight/obese increases. NFHS-3.

Sexual and Reproductive Health (SRH)

Findings from the Youth Study (2006-07) suggest that adolescents and youth have limited awareness of majority of sexual and reproductive health matters. Only 15% young men and women in 15-24 age group reported that they had received family life or sex education in school or through special program sponsored by the government or NGOs although they expressed the need.

Findings from NFHS-3 suggest that age-specific fertility rate in the age group of 15-19 years contributes to 17% per cent of the total fertility rate. The contraceptive prevalence rate among married adolescent teenagers (age 15-19) is as low as 23%, which increases to 46% among women age 20-24 years. Contraceptive use in adolescents increases with education and wealth index.

Condom use at first intercourse in 15-19 years adolescent is only 3% in girls and 19% in boys, indicating wide gender gap and lack of both contraceptive information and accessibility among girls.

Awareness of Sexually Transmitted Infections (STIs) and comprehensive knowledge of Human Immunodeficiency Virus (HIV) among adolescents is a concern. As per NFHS 3 awareness of STIs other than HIV/AIDS was limited in 15-24 years age group, just 19% of young men and 15% of young women reported awareness of STIs. The contraceptive knowledge is quite high among adolescents but there are huge gaps between knowledge and usage. Only 23% of married girls reported use of any contraceptive method.

In context of maternity care, a little over three-fourths of mothers in the age group 15-19 received antenatal care (ANC) for their most recent birth during the five years preceding the survey. However, only 53% received three or more antenatal care visits and only 43% received the first antenatal care visit in the first trimester, as recommended. Only 47% of adolescent deliveries were assisted by health personnel, compared to 51% for older youth (age 20-24). Utilization of all maternity care services is much higher in urban than rural areas, and increases sharply with wealth and education.

Non-Communicable Diseases

According to WHO- NCD country Profiles 2011, non-communicable diseases are estimated to account for 53% of all deaths in India. NCDs also cause significant morbidity both in urban and rural population, with considerable loss in potentially productive years of life. It is estimated that the overall prevalence of diabetes, hypertension, Ischemic Heart Diseases (IHD) and Stroke is 62.47, 59.46, 37.00 and 1.54 respectively per 1000 population of India. As the main preventable risk factors for NCDs are tobacco & alcohol consumption; poor dietary habits, sedentary life style and stress, it is imperative to initiate promotion of healthy life style at a younger age. The adolescent period provide an opportune time for positive behaviour modification to mitigate emergence of risk factors leading to noncommunicable diseases.

Gender Based Violence

In India, among female adolescents age 15-19, 23% reported having experienced physical or sexual violence (NFHS 3). Nearly one out of three (31%) ever-married female adolescents age 15-19 reported experiencing physical, sexual, or emotional violence perpetrated by their spouse. Of these, 25% have experienced physical violence, 13% sexual violence, and 13% emotional violence. In the case of sexual violence, the prevalence declines to 11% for age 20-24, and 10% for age 25-49. There is wide variation between Indian states, ranging from 3% spousal violence in Himachal Pradesh, to 52% in Bihar. The incidence is higher in rural than urban areas.

National Adolescent Health Strategy

The strategy is a paradigm shift as it realigns existing approaches to focus on community based health promotion and prevention and strengthening of clinic based preventive, diagnostic and curative services across levels of care. The approach proposed in the strategy is based on a continuum of care for adolescent health and development needs through provision of information, commodities and services at the community level with mapped out referral linkages through the three tier public health system. Most importantly, it proposes a convergent model of service delivery which will actively engage adolescents and first level service providers like teachers in schools, ASHA and ANMs in the community, AWW under the ICDS and Youth volunteers of the civil society to secure and strengthen mechanisms for access and relevance.

3.1 The Vision

All adolescents in India are able to realize their full potential by making informed and responsible decisions related to their health and well-being.

3.2 Objectives

- Increase the availability and access to information about adolescent health;
- Increase accessibility and utilization of quality adolescents counseling and health services; and
- Forge multi-sectoral partnerships to create safe and supportive environments for adolescents.

3.3 7Cs

A combination of prevention, health promotion and healthy development strategies are proposed, offering a continuum of care for adolescent health and development needs. Interventions in the strategy are designed to provide information, commodities and services at the community level and map referral linkages through the three tier public health system.

Most importantly, the strategy proposes a convergent model of service delivery which will actively engage with adolescents through first level service providers. To implement this paradigm shift, seven critical components need to be leveraged based on Health Promotion and Prevention Models and encompassing elements beyond the clinical services. These are as below:

1. **COVERAGE:** 10-14 & 15-19 yrs; Girls & Boys; unmarried & married; rural & urban; In-school & out-of-school
2. **CONTENT:** Nutrition; Sexual & Reproductive Health; Mental health; Injuries & violence (GVB) ; Substance misuse; and Non -communicable diseases
3. **COMMUNITIES:** Peer educators, teachers educational institutes, home, teen clubs, work places, vocational training institutes
4. **CLINICS:** Adolescent Health Clinics at Sub-Centre , PHC, CHC onwards with a dedicated counsellors, District Hospital; Medical Colleges
5. **COUNSELLING:** Peer Educator at community level. Dedicated and trained counsellors at facilities
6. **COMMUNICATION:** Social & Behavior Change Communication, use of traditional and new methods
7. **CONVERGENCE**: Dept. of Education; Women & Child Development; Youth affairs, Social Justice , Police, NGOs, Public-Private Partnerships

Strategic Priorities

IMPROVE NUTRITION

- To reduce the prevalence of malnutrition among adolescent girls and boys
- To reduce the prevalence of iron deficiency anemia among adolescent girls and boys

ENABLE SEXUAL AND REPRODUCTIVE HEALTH

- To improve knowledge, attitudes and behaviors in relation to sexual and reproductive health
- To reduce teenage pregnancies
- To improve birth preparedness, complication readiness and; provide early parenting support for adolescent parents

ENHANCE MENTAL HEALTH

- To address mental health concerns of adolescents

PREVENT INJURIES AND VIOLENCE (INCLUDING GENDER BASED VIOLENCE)

- To promote favorable attitudes for preventing injuries and violence (including gender-based violence) among adolescents

PREVENT SUBSTANCE MISUSE

- To increase adolescents' awareness of the adverse effects and consequences of substance misuse

ADDRESS NON COMMUNICABLE DISEASE

- To promote behavior change in adolescents for prevention of non-communicable diseases hypertension, stroke, cardio-vascular diseases and diabetes

Brief overview of Operational Framework – Rashtriya Kishor Swasthaya Karyakaram (RKSK)

The goal of adolescents making informed decisions for health and well-being will be achieved through the following as shown in the (fig.):

- Health Promotion for Healthy Community
- Strengthened Clinical Services
- Community-based Approach
- Strategic Partnership

4.1 Key Interventions for Operationalising for RKSK

4.1.1 Community based interventions:

- Peer Education (PE)
- Quarterly Adolescent Health Day (AHD)
- Weekly Iron and Folic Acid Supplementation Programme (WIFS)
- Menstrual Hygiene Scheme (MHS)

4.1.2 Facility based interventions

• Strengthening of Adolescent Friendly Health Clinics (AFHC)

4.1.3 Convergence

- within Health & Family Welfare - FP, MH (incl VHND), RBSK, NACP, National Tobacco Control Programme, National Mental Health Programme, NCDs, IEC
- with other departments/ schemes - WCD (ICDS,KSY, BSY, SABLA), HRD (AEP, MDM), Youth Affairs and Sports (Adolescent Empowerment Scheme, National Service Scheme, NYKS, NPYAD)

4.2 Peer Education

The PE programme aims to ensure that adolescents or young people between the ages of 10-19 years benefit from regular and sustained peer education covering nutrition, sexual and reproductive health, conditions for NCDs, substance misuse, injuries and violence (including GBV) and mental health. This is eventually expected to improve life skills, knowledge and aptitude of adolescents.

Key features of the PE operational framework in rural areas include:

- In every village, it is expected that at least four peer educators i.e. Two male and two female peer educators will be selected per village/1000 population/ASHA habitation. To ensure coverage of adolescents in both schools and out of school, two peer educators (i.e., one male and one female) will be selected to work with young people in school, and similarly, two peer educators will be selected to work with young people out of school. States / districts can vary this norm depending upon the number of adolescents in school/ out of school (drop outs).

- Each male and female peer educator will be expected to:

- Form a group of 15-20 boys and girls respectively from their community and conduct weekly one to two hour participatory sessions using PE kits, which include books detailing a curriculum for PE sessions and games.

- Participate in Adolescent Health Day to inform and educate young people

- Refer young people to: 1) AFHCs and/or Adolescent Helpline; and 2) the Adolescent Health Day for health check-ups.

- PEs will constitute Adolescent Health Club at sub-centre level, under the overall guidance of ANM. These clubs will meet monthly to discuss issues of PEs and get support from ANM.

- Peer Educators are expected to maintain a diary, including a brief overview of each session and the number of participants. At the end of each month, Peer Educators are to develop a brief composite report of the number of sessions and average attendance rates.

The PE programme in urban areas will operate in a similar manner as rural areas. It provides operating guidelines for implementing Peer Education (PE) at the village and urban slum levels. The guidelines cover programme planning and preparation, including implementation modalities; b) recruitment and retention of peer educators; c) training; d) facilitating PE sessions; e) supportive supervision and management; and finally, f) monitoring and review.

4.3 Adolescent Health Day

AHD, one of the strategies to achieve the objectives of the adolescent health program seeks to:

- Improve coverage with preventive and promotive interventions for adolescents
- Increase awareness among adolescents, parents and families and stakeholders about the determinants of adolescent health such as nutrition, SRH, mental health, injuries and violence (including GBV), substance misuse and NCDs
- Improve awareness of other AH related services, in particular Adolescent Friendly Health Clinics (AFHCs)/helplines.

The AHD should be organized in every village once every quarter on a convenient day (preferably on a Sunday) following the VHND; in Sabla districts, this day should coincide with the existing Kishori Diwas. AWCs or community spaces may be used as venues for organizing the AHD. During an AHD, services should be offered to all the adolescent target groups (male/ female; 10-14 and 15 – 19 age; school going, drop out; and married adolescents). Efforts should also be made to reach out to other stakeholders including parents, school teachers and PRI members to sensitize them on adolescent health needs.

4.4 Weekly Iron And Folic Acid Supplementation (WIFS)

The Ministry of Health and Family Welfare has launched the Weekly Iron and Folic Acid Supplementation (WIFS) Programme to meet the challenge of high prevalence and incidence of anaemia amongst adolescent girls and boys. WIFS is evidence based programmatic response to the prevailing anaemia situation amongst adolescent girls and boys through supervised weekly ingestion of IFA supplementation and biannual helminthic control. The long term goal is to break the intergenerational cycle of anaemia, the short term benefits is of a nutritionally improved human capital.

Salient features of WIFS:

a. Objective of Weekly Iron Folic acid Supplementation (WIFS)

- To reduce prevalence and severity of anaemia in 10-19 years adolescent population.

b. Target groups

Weekly Iron folic Acid supplementation programme to be planned and implemented for the following two target groups in both rural and urban areas:

- School going adolescent girls and boys in 6th to 2th class enrolled in government/government aided/municipal schools.
- Out of school adolescent girls.

c. Intervention

- Administration of supervised Weekly Iron-folic Acid Supplements of 100mg elemental iron and 500ug Folic acid using a fixed day approach.States have been requested to establish Monday as WIFS day - identifying Monday as the day for ingestion of IFA supplementation
- Screening of target groups for moderate/severe anaemia and referring these cases to an appropriate health facility.
- Biannual de-worming (Albendazole 400mg), six months apart, for control of helminthes infestation.
- Information and counselling for improving dietary intake and for taking actions for prevention of intestinal worm infestation.

d. Convergence:

WIFS Programme will serve as an entry point for counseling adolescents and addressing their health and nutrition needs through programmes and platforms like Ministry of Women and Child Development's Sabla, Government/ Government aided and Municipal school that come under the aegis of Ministry of Human Resource Development and MOHFW's Adolescent Reproductive and Sexual Health Programme and Menstrual Hygiene Scheme Convergence with key stakeholder ministries like the Ministry of Women and Child Development and Ministry of Human Resource Development is an essential part of implantation plan of the WIFS programme. Key convergent areas include: joint programme planning, capacity building of nodal service providers including Medical Officers, Aganwadi Worker (AWW) Staff Nurses, School teachers, monitoring and a comprehensive communication component.

4.5 Menstrual Hygiene Scheme

The Ministry of Health and Family Welfare has launched a new Scheme for Promotion of Menstrual Hygiene among adolescent girls in the age group of 10-19 years in rural areas. This programme aims

at ensuring that adolescent girls (10- 19 years) in rural areas have adequate knowledge and information about menstrual hygiene and have access to high quality sanitary napkins along with safe disposal mechanisms. In addition to this, the scheme includes guidance for states on sourcing and procurement, quality assurance, distribution mechanisms, incentives and subsidy, storage, and safe disposal. The programme is administered as part of the NRHM programme at the State and District levels

Objectives:

• To increase awareness among adolescent girls on Menstrual Hygiene
• To increase access to and use of high quality sanitary napkins to adolescent girls in rural areas.
• To ensure safe disposal of Sanitary Napkins in an environmentally friendly manner.

4.6 Adolescent Friendly Health Clinics (AFHCs) now names as UJALA clinics

Both the Peer Education Programme and the AHD should lead to referrals to AHFCs which would seek to provide a combination of commodities, IEC and curative services at PHC, CHC and DH levels plus outreach and referral services:

Commodities

- Weekly Iron & Folic Acid Supplementation & Albendezole
- Sanitary napkins
- Contraceptives
- Medicines
- Pregnancy testing kits

Information (IEC & IPC)

- Counseling on nutrition, menstrual hygiene and disorders, personal hygiene, use of sanitary napkins, use of contraceptives, sexual concerns, depression, sexual abuse, gender violence, substance abuse and promoting healthy behavior to prevent non communicable diseases
- Posters/booklets/pamphlets, wall writing and Visuals
- Counsellors will be recruited at AFHCs operationalized at CHC, SDH and DH level

Curative Services

- Treatment of severe malnutrition and Iron deficiency anaemia
- Treatment of common RTI/STI problems
- Treatment menstrual disorders
- Management of puberty related or sexual concerns of males and female
- Mental health service/management of depression
- Management of injuries
- Management of sexual abuse among girls
- Management of substance abuse
- Management of non-communicable diseases like hypertension, stroke, cardio-vascular diseases and diabetes

Routine Immunization

Session : Routine Immunization

Session Objective

- To explain the milestones in the immunization program in India.
- To describe the recent initiatives by Government of India to strengthen RI
- To list the responsibilities of medical officers in routine immunization

Contents of session

- **National Immunization Schedule**
- **Micro-planning for immunization services**
- **Cold Chain and Logistic Management**
- **Safe Injection and Waste Disposal**
- **Inactivated Polio Vaccine**

Note for Trainer's

- Session may be begin with discussions on some basic questions
- Participants may be asked following questions
    - ❖ What is Status of Immunization in the state.
    - What is **National Immunization Schedule**

Activity -1

All the participants may be divided into three groups. Each group may be given a task to write a small note on Following

- List the diseases preventable by vaccination under the Universal Immunization Program
- Explain the vaccines given under National Immunization Schedule
- To describe the dose, route, site and technique of administration of vaccines

Routine Immunization

Immunization is the process of giving vaccines (vaccination) to the development of body's protective response. Immunization significantly lowers the morbidity and mortality rates in children by protecting them from Vaccine Preventable Diseases (VPDs). It is one of the safest and most effective methods of preventing childhood diseases.

Milestones in the Immunization Program in India

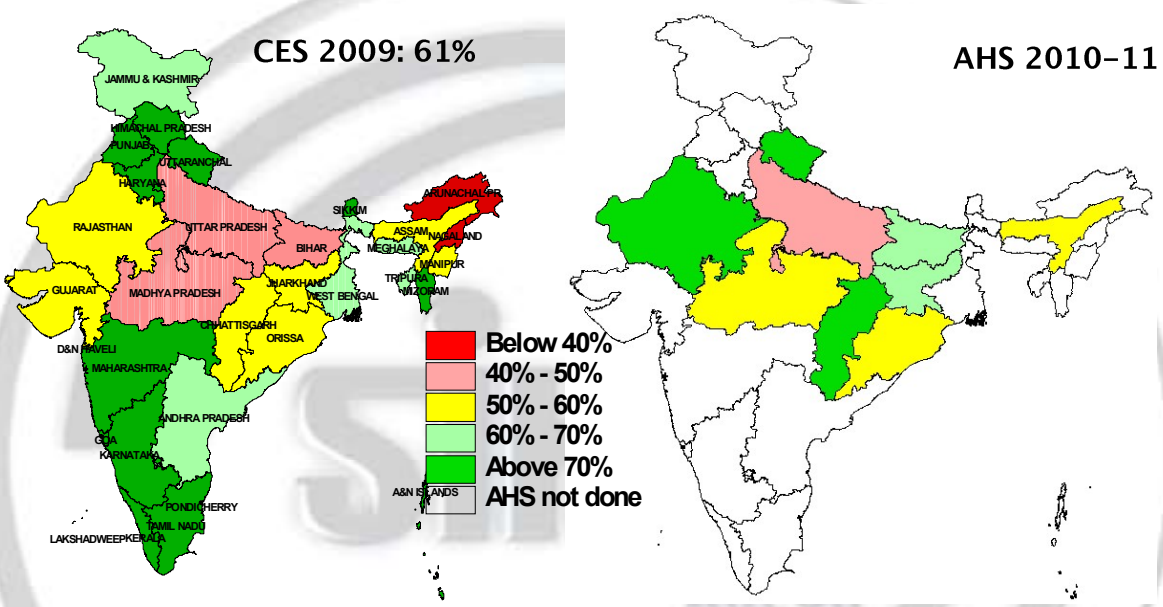
Immunization Program was first introduced as Expanded Program of Immunization (EPI) in 1978 and later changed to Universal Immunization Programme (UIP) in 1985 to progressively cover the country.It became part of Child Survival and Safe Motherhood program in 1992 and Reproductive and Child Health program in 1997. Over the years, various new vaccines have been introduced as mentioned in the diagram below.

Initiatives undertaken by GoI to strengthen the Immunization Programme

Under the **National Rural Health Mission**, introduced since 2005, Govt. of India has taken new initiatives to strengthen the Immunization Program. These are introduction of Auto Disable (AD) syringes and hub cutters; financial support for alternate vaccine delivery to session sites from the last vaccine storage point; mobility support to State and District Immunization Officers and other supervisory staff; alternate vaccinators for sessions in urban slums and under-served areas, including vacant SCs; mobilization of children and pregnant women by ASHAs; preparing microplans for SC, PHC/CHC and district; quarterly RI review meetings at state, district and block levels; Training of

HWs, MOs, cold chain and data handlers; Computer Assistants for every district and at state; Decentralized printing of recording, reporting and monitoring tools (e.g. Immunization cards, monitoring charts, tracking bags, temperature charts); Injection safety (red and black bags, bleach solution and twin buckets); Miscellaneous (e.g. polythene bags, POL for generators etc.); Strengthen cold chain maintenance and expansion; Strengthen vaccine delivery from state to district to the PHC/CHC.

Immunization coverage: Coverage Evaluation Survey (CES) 2009 reported that only 61% of children in India received all of their primary vaccines by 12 months of age, leaving approximately 10 million of vulnerable infants and children un-immunized. There is a wide variation in coverage among and within states and also there are issues of access and utilization of services. Recent Annual Health Survey (AHS) 2010-11, was conducted in 9 high priority states of the country. Around 5.7 million missed infants are located in these states.



State	% Full immunization
UTTAR PRADESH	45.3
MADHYA PRADESH	54.9
ODISHA	55
ASSAM	59
JHARKHAND	63.7
BIHAR	64.5
RAJASTHAN	70.8
CHHATTISGARH	74.1
UTTARAKHAND	75.4

Recent RI-Strengthening initiatives

Government of India declared the year 2012-13 as the **"Year of intensification of routine immunization"**. Various strategic actions were initiated as Health systems improvement by increased funding for supportive supervision and mobilisation of beneficiaries ; Regular program reviews; four rounds of immunization weeks were conducted and 5 million children immunized;Web based mother and child tracking system (MCTS) to prevent left out and drop outs; Strengthening AEFI surveillance; National cold chain management information system (NCCMIS) launched; National effective vaccine management (EVM) assessment conducted in 10 states to strengthen cold chain and vaccine management; Teeka express, a specially designed vehicle to deliver vaccine at session site in hard to reach areas launched; Scale-up of laboratory based measles outbreak surveillance to 14 states and MNTE validation to validate 3 states in addition to 15 states already validated; Integration with polio program in following areas:

- ~400,000 High risk areas identified as a part of emergency preparedness and response plan for polio eradication, linked to RI session sites to ensure RI services.
- State Task Force for Immunization (STFI) and District Task Force for Immunization (DTFI) being constituted.
- Integrated communication with branding and logo for communication
- Realigning monitoring strategy to generate actionable data and intensified RI monitoring started by hiring and training external monitors in priority states at the sub-district level.
- UIP reviews integrated with AFP surveillance reviews.
- Intensified and focused training of all ANMs, AWWs and ASHAs in 9 priority states to track missed children for immunization with support by WHO-India.

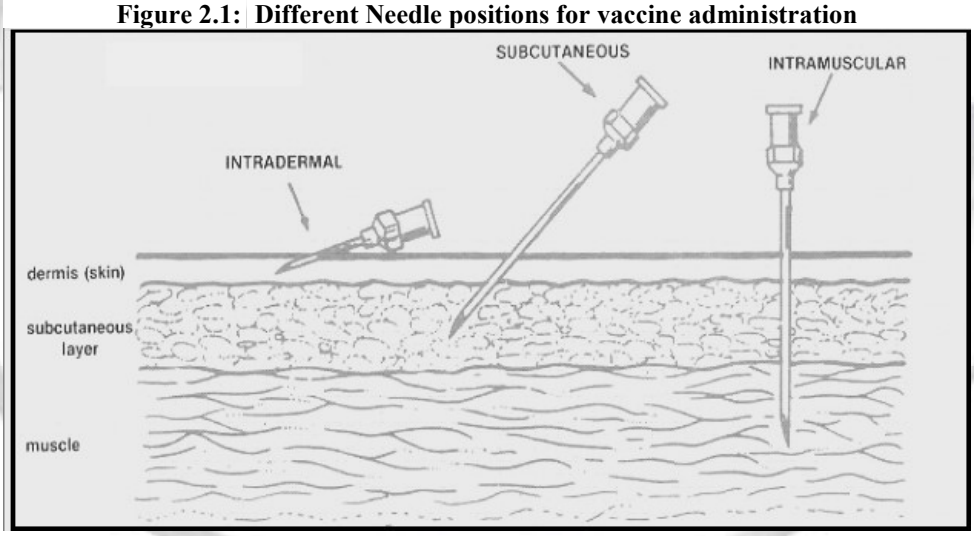
Under the Universal Immunization Program, vaccines are provided to prevent the following vaccine preventable diseases:

- **Diphtheria**
- **Pertussis**
- **Tetanus**
- **Polio**
- **Measles**
- **Tuberculosis**
- **Hepatitis B**
- **Haemophilus Influenzae B**
- **Japanese Encephalitis**

The goal of Universal Immunization Programme is to fully immunize each child i.e. give

- BCG, 3 doses of DPT-HepB/Penta, 3 doses of OPV and Measles-1st dose before 1 year of age AND
- Measles 2nd dose, DPT-Booster-1 and OPV-Booster before 2 years of age.**National**

Figure 2.1: Different Needle positions for vaccine administration



- **Immunization Schedule (NIS) for Infants, Children and Pregnant Women**

Vaccine	When to give	Dose	Route	Site
For Pregnant Women				
TT-1	Early in pregnancy	0.5 ml	Intra-muscular	Upper Arm
TT-2	4 weeks after TT-1*	0.5 ml	Intra-muscular	Upper Arm
TT- Booster	If received 2 TT doses in a pregnancy within the last 3 yrs*	0.5 ml	Intra-muscular	Upper Arm
For Infants				
BCG	At birth or as early as possible till one year of age	0.1ml (0.05ml until 1 month age)	Intra-dermal	Left Upper Arm
Hepatitis B - Birth dose	At birth or as early as possible within 24 hours	0.5 ml	Intra-muscular	Antero-lateral side of mid-thigh
OPV-0	At birth or as early as possible within the first 15 days	2 drops	Oral	Oral
OPV 1, 2 & 3	At 6 weeks, 10 weeks & 14 weeks (OPV can be given till 5 years of age)	2 drops	Oral	Oral
DPT 1, 2 & 3	At 6 weeks, 10 weeks & 14 weeks (DPT can be given up to 7 yrs of age)	0.5 ml	Intra-muscular	Antero-lateral side of mid thigh
Hepatitis B 1, 2 & 3	At 6 weeks, 10 weeks & 14 weeks (can be given till one year of age)	0.5 ml	Intra-muscular	Antero-lateral side of mid-thigh
Pentavalent** **1, 2 & 3**	At 6 weeks, 10 weeks & 14 weeks (can be given till one year of age)	0.5 ml	Intra-muscular	Antero-lateral side of mid-thigh
Measles - 1	9 completed months-12 months. (Measles can be given till 5 years of age)	0.5 ml	Sub-cutaneous	Right upper Arm
JE - 1**	9 completed months-12 months.	0.5 ml	Sub-cutaneous	Left upper Arm
Vitamin A (1st dose)	At 9 completed months with measles	1 ml (1 lakh IU)	Oral	Oral
For Children				
DPT booster-1	16-24 months	0.5 ml	Intra-muscular	Antero-lateral side of mid-thigh
Measles 2nd dose	16-24 months	0.5 ml	Sub-cutaneous	Right upper Arm
OPV Booster	16-24 months	2 drops	Oral	Oral
Japanese Encephalitis**	16-24 months	0.5 ml	Sub-cutaneous	Left Upper Arm
Vitamin A* (2nd to 9th dose)**	16 months. Then, one dose every 6 months up to the age of 5 years.	2 ml (2 lakh IU)	Oral	Oral
DPT Booster-2	5-6 years	0.5 ml.	Intra-muscular	Upper Arm
TT	10 years & 16 years	0.5 ml	Intra-muscular	Upper Arm

- *Give TT-2 or Booster doses before 36 weeks of pregnancy. However, give these even if more than 36 weeks have passed.
- Give TT to a woman in labour, if she has not previously received TT.
- **JE Vaccine is introduced in select endemic districts after the campaign.
- *** The 2nd to 9th doses of Vitamin A can be administered to children 1-5 years old during biannual rounds, in collaboration with ICDS.

****Pentavalent vaccine is introduced in place of DPT and HepB 1, 2 and 3 in select states.

Micro-planning for immunization services

Learning objectives:

- Guide health workers to prepare sub-centre/urban health centre micro-plans including maps.
- Prepare microplan for Block/PHC/Urban PlanningUnit.
- Review and update the RI-micro-plans to ensure that all HRAs are included.

Micro-planning for immunization

Micro-planning aims to reach each and every child and pregnant woman with immunization services. Sub-centre/urban health centre is the basic unit for micro-planning of routine immunization services. The micro-plans from all subcentres/urban health centres are compiled and additional plans for alternate vaccine delivery; supervision; cold chain; waste disposal; training; communication and social mobilization are added to prepare the Block/PHC/Urban Planning Unit microplan. These plans are further compiled to prepare the district and state level plans. Microplans are prepared for one year period but need to be reviewed every quarter, to revise and update based on the monitoring findings

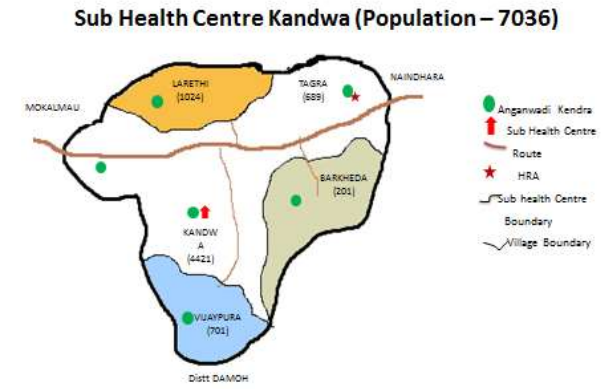
Level	Components of Immunization Microplan
SC/UHC Plan - HW is responsible for microplanning (HW covers 5,000 population in rural and 10,000 – 12,000 population in urban areas)	• Map of area under sub centre with name of village, urban area including all hamlets (tola), sub-villages, sub-wards, sector, mohalla, hard to reach areas, etc.) • An estimation of beneficiaries for each vaccine and no. of sessions • An estimation of vaccines and logistics • ANM work plan including mobilization plan
PHC/Urban Planning unit plan - Medical officer incharge of the PHC/Block/Urban Planning Unit is responsible for microplanning	• Map of PHC • Compiled SC plans • AVD plan and route chart • Supervision plan • Cold chain contingency plan • Waste disposal plan • IEC and social mobilization plan • Training plan • Budget
District Plan- DIO is responsible	• Map of district • Compiled microplans from PHCs • Supervision plan of district officials • Distribution and maintenance of Vaccines, Cold chain and logistics including contingency plan • District specific activities for intensification of RI • IEC and social mobilization plan • Training plan • Budget
State Plan	• Compiled District Plans • State specific activities

Ask the health workers to come to PHC with all the required data and guide them to prepare the SC/UHC micro-plans including maps.

Steps in preparation of a sub-centre/urban health centre micro plan

Sub-centre/UHC microplan format-1: Estimation of beneficiaries

1. Write name of each census village/ward in the catchment area of SC/UHC and the projected population of each census village/ward based on census 2011 in first 2 columns.
2. Consult polio micro-plan to list all sub-villages / sub-wards (sector/tola /mohalla /para /basa /housing society etc.) including all high risk areas in each census village/ward of the SC/UHC
3. Prepare **Map** showing all these areas.
4. Write the total population and annual target of pregnant women and infants based on either actual headcount carried out by the HWs or estimation from polio microplan/coverage reports.



5. For Pregnant Women, the headcount provides a point estimate for only 6 months (as pregnancies in the first trimester may be undetected). Hence, multiply the headcount by 2 to arrive at an estimate for 12 months.
6. In case of estimation from polio reports, divide under-five coverage by 5 to reach under one year population which may be taken as target for both infants and pregnant women.
7. Calculate and note monthly target of beneficiaries (pregnant women and infants). Divide the annual target of pregnant women and infants by 12 to get the monthly target.

What are High risk areas/populations?

The polio programme has identified population groups/areas that often miss routine and supplementary immunization and are a risk for polio and other vaccine preventable diseases. High risk areas are categorized as migratory and non-migratory (settled). Migratory high risk areas have been characterized as follows:

1. Slums with migration: Settlements in urban/periurban areas or slums situated close to industrial area including mining/ stone crushing sites or agriculture fields. These slums are typically found listed as slums with urban development or district authorities. These areas are densely populated with substandard housing, which may be Pucca or Kaccha (jhuggies), and invariably have poor sanitation. Some of these areas are unauthorized and /or are not recognized by urban development authorities. The socio economic status of the residents in these areas is low.
2. Nomads: Populations such as Mangtey, Kanjar, Fakirs, Natts, Banjara, Shah, Shahbali, Albi, Gadhia Luhar, Ghumantu etc. often moving from place to place for livelihood, usually setting up “dera” wherever they stop. They are normally found in between or at the end of big colonies, railway stations, along the rail tracks, open fields, market places and in urban/ periurban slums.
3. Brick kilns: Migrant labor camping in brick kilns and the “Pather” fields where raw bricks are prepared.
4. Construction sites: Migrant families live in jhuggies or brick sheds in and around the under-construction buildings. The number of families and children present in these sites vary according to the size of the construction site.
5. Others (fisherman villages, riverine areas with shifting populations etc.)
6. Non migratory: settled population with no migration and poor immunization coverage. These include hard to reach areas, and misinformed communities that refuse vaccination due to wrong beliefs

8. Calculate the **beneficiaries per month for each vaccine and Vitamin A**

For example, if the monthly target for a village is 1 infant and 1 pregnant woman, then the beneficiaries for each vaccine[1] and vitamin A (and injection load) for such a village can be calculated as follows:

- TT = Monthly target of pregnant women x 2 doses + infants x 2 doses for 10 and 16 year old children (4 injections)
- BCG = Monthly target of infants x 1 dose (1 injection)
- DPT = Monthly target of infants x 5 doses (including 2 booster doses) (5 injections)
- OPV = Monthly target of infants x 4 doses (including one booster dose)
- HepB = Monthly target of infants x 3 doses (3 injections)
- Pentavalent= Monthly target of infants x 3 doses (3 injections)
- Measles = Monthly target of infants x 2 doses (2 injections)
- JE = Monthly target of infants x 2 dose (2 injection)
- Vit A = Monthly target of infants x 9 doses

Therefore, a total of about 17 injections are required (14 in states with pentavalent vaccine) for a target of one infant per month. If the target is 2 infants then the injection load will be 34. This means that one session has to be held every month.

9. Calculate the **injection load** to decide on the number of sessions required. Vaccination sessions may be organized at an interval of one, two or three months, depending on the expected injection load per immunization session. The guidelines are as follows:
   - For a busy CHC/RH, plan daily sessions.
   - For every 25-70 injections, plan one session per month.
   - For more than 70 injections, plan two or more sessions per month.
   - For less than 25 injections:
     - Plan one session every 2-3 months or
     - Club areas wherever feasible as mentioned in points 10-13 below.
   - For hard to reach areas with population of less than 1000, plan minimum of 4 sessions in a year (one session every quarter)
10. Write distance from nearest ILR (cold chain) point (In kilometres)
11. Mention if at least one mobilizer is available for the area (Yes/No)
12. Write whether High Risk Area (HRA) or not. If HRA, write the category of HRA (1 to 6).
13. onsider other factors as terrain, refusal pockets, seasonal accessibility and availability of beneficiaries, and availability of site for conducting sessions.

[1] Based on the specific needs, add the calculations of beneficiaries for the following doses:
OPV-0 = Monthly target of infants x 1 dose

HepB-Birth = Monthly target of infants x 1 dose.

Sub-centre/UHC microplan format-2: Session planning

1. Decide the **location of session site and session frequency**based on points 9 to 13 as mentioned under Format-1. Ensure that each sub-village/sub-ward is adequately covered.
2. Decide the location of session site based on:
    a. Availability of place e.g. AWC, school/madrasa, panchayat bhawan, NGO office, house of community member etc.
    b. feasibility of mobilizationof beneficiaries to the session site
    c. Socio-cultural factors as cast and religion related considerations
    d. seasonality considerations e.g. floods and waterlogging, availability of beneficiaries at brick kilns
    e. Demand by the local community
    f. For HRAs, we may need to use Mobile Medical Units/Teeka Express to conduct the session.
3. Decide the convenient **day and time** in consultation with the AWW, ASHA, TBAs, PRI, the community and the Village Health and Nutrition Days being organized in the area.We may need to organize immunization sessions at flexible timing convenient to the community (e.g. evening sessions for working mothers in slum areas).

- **Remember to follow the "Fixed Day, Fixed Site" principle for RI services.**
- **If some isolated HRAs could not be included into the regular RI plan due to some extreme operational constraints, then those areas should be covered through special immunization weeks (SIWs). These should be mentioned in the session planning format.**

4. Write mode of vaccine delivery.
5. Write name and mobile number of the Alternate Vaccine Delivery person.
6. Write names of ASHA, AWW/mobilizer and key influencer with mobile number to ensure mobilization of beneficiaries.
7. Write the address and mobile number of AEFI management centre.
8. Write IPPI team number/s assigned to the area.
9. Write name of the IPPI supervisor with mobile number.

Village Health & Nutrition Day (VHND) is organized at the Anganwadi Centre in a village at least once every month to provide ante-natal/ post-partum care, immunization, family planning and nutrition services. The frequency of routine immunization services should be guided by the RI-microplan as prepared above and it may not tally with every VHND session.

Field validation of the microplan:

Supervisors should visit the new session sites and HRAs to field validate the proposed plan to ensure that:

- Number of estimated beneficiaries as per microplan is close to actual
- the sites are suitable for conducting sessions
- the beneficiaries will be able to reach the site easily
- vaccine and logistics can be reached in time
- local community is cooperative for organization of the session
- owners/managers of brick-kilns/stone-crushers are agreeable to allow labourers to avail services

Sub-centre/UHC microplan format-3: ANM work-plan/roster

Prepare the work-plan/Roster of each health worker for 3 months period to ensure that each area is covered.

Sub-centre/UHC microplan format-4: Estimation of vaccines and logistics

1. Calculate the requirement of **vaccine vials and Vitamin A for each session** as follows:
   - TT/BCG/DPT/HepB/Penta = $\frac{\text{Beneficiaries per session}}{10} \times 1.33^*$
   - OPV = $\frac{\text{Beneficiaries per session}}{20} \times 1.33^*$
   - Measles/JE = $\frac{\text{Beneficiaries per session}}{5} \times 1.33^*$
   - Vit A = {(monthly target of infants x 1 ml) + (monthly target of infants x 2 ml x 8)} x 1.11**

* Vaccines = 25% wastage rate or 1.33 WMF (Wastage Multiplication Factor)

* *Vit A = 10% wastage rate or 1.11 WMF

2. Calculate the requirement of **syringes for each session** as follows:
   - 0.1 ml ADS = Beneficiaries for BCG x 1.11*
   - 0.5 ml ADS = Beneficiaries for (TT+ DPT+ HepB+ Measles+ JE) x 1.11*
   - Reconstitution Syringes = (BCG + Measles +JE vials) X 1.11*

* Syringes = 10% wastage rate or 1.11 WMF (Wastage Multiplication Factor)

Ensure that:

- **minimum of one vial of each vaccine is available for every session**
- **Ampoules of diluents are equal to the required number of BCG, Measles and JE vials.**

3. Calculate the requirement of IFA tablets, Zinc, ORS and RI/MCP cards based on the number of expected beneficiaries.

Update the map of sub-centre/urban health centre showing:

- All sub villages, areas, hamlets and HRAs.
- All Anganwadi centers, session sites and session days.
- Distance from the ILR point and the mode of transport.
- Landmarks as Panchayat Bhavan, School, Roads etc.

उप स्वास्थ्य केन्द्र कंदवा जनसंख्या-5831

आगनवाडी केन्द्र
उप स्वास्थ्य केन्द्र
मार्ग
टीकाकरण सत्र स्थल
उप स्वा के न्द्र सीमा
HRA
शास. स्कूल

टीकाकरण सत्र स्थल एवं दिवस

1.कंदवा –प्रथम,चतुर्थ मंगलवार एवं द्वितीय शुक्रवार
2.टगरा –तृतीय शुक्रवार(4,6,8,10,12,2)
3.बरखेडा–प्रथम शुक्रवार(4,7,10,1)
4.लरेठी –द्वितीय मंगलवार(प्रत्येक माह)
5.विजयपुरा–तृतीय मंगलवार(प्रत्येक माह)

Learning objectives:

- Guide and supervise the Vaccine and Cold Chain Handler (VCCH) at the ILR point to maintain cold chain and manage the supplies of vaccines and logistics.
- Monitor maintenance and facilitate repair of cold chain equipment.
- Ensure regular and adequate supply of vaccines and other related logistics to ILR points.
- Supervise and ensure systematic distribution of vaccines and logistics to all session sites and use of open vial policy guidelines are being followed

What is Cold Chain?

Cold Chain is a system of storing and transporting vaccines at recommended temperatures from the point of manufacture to the point of use. The key elements of the cold chain are:

- Personnel: to manage vaccine storage and distribution (vaccine and cold chain handler at each point).
- Equipment: to store and transport vaccine and to monitor temperature.
- Procedures: to ensure that vaccines are stored and transported at appropriate temperatures.

As a medical officer you should ensure that cold chain equipment is functional, storage temperatures are correctly maintained and recorded, adequate stock of vaccines and logistics are available and issued. A vaccine and cold chain handler is trained and designated to maintain the cold chain.

Vaccine sensitivities

All vaccines are heat sensitive and are damaged by temperatures more than $+8^0$C, whether they are exposed to a lot of heat in a short time (e.g., as a result of keeping vaccine in a closed vehicle in the sun) or a small amount of heat over a long period (e.g., as a result of the frequent opening of lid of ILR).

Reconstituted BCG, measles and JE vaccines are the most heat and light sensitive. Since these live vaccines do not contain preservatives, there is risk of contamination with staphylococcus aureus leading to Toxic Shock Syndrome and, therefore, they should be used within 4 hours of reconstitution (2 hours for JE vaccine). These light sensitive vaccines are supplied in amber-coloured vials.

DPT, TT, HepB and Penta vaccines are freeze sensitive i.e. they lose their potency if frozen. BCG, Measles and JE vaccines are light sensitive. The physical appearance of the vaccine may remain unchanged even after it is damaged. However, the loss of potency due to either exposure to heat or cold is permanent and cannot be regained.

Table 4.1: Sensitivity of vaccines to heat, light and freezing		
Vaccine	**Exposure to heat/light**	**Exposure to cold**
Heat and light sensitive vaccines		
OPV	Sensitive to heat	Not damaged by freezing
Measles	Sensitive to heat and light	Not damaged by freezing
BCG and JE	Relatively heat stable, but sensitive to light	Not damaged by freezing.
Freeze sensitive vaccines		
HepB and Pentavalent	Relatively heat stable	Freezes at -0.5°C (Should not be frozen)
DPT and TT	Relatively heat stable	Freezes at -3°C (Should not be frozen)
At the PHC level, all vaccines are kept in the ILR for a period of one month at temperature of +2^{0}C to +8^{0}C		

Vaccines sensitive to heat	**Vaccines sensitive to freezing**
Most ▪ **BCG, JE (after reconstitution)** ▪ **OPV** ▪ **Measles** ▪ **DPT, Penta** ▪ **BCG, JE (before reconstitution)** ▪ **TT, HepB** Least	Most ▪ **HepB, Penta** ▪ **DPT** ▪ **TT** Least

How to check vaccines for correct maintenance of cold chain

Vaccines need to be checked both for damage from excessive heat as well as from freezing.

Checking vaccines for heat damage

Vaccine Vial Monitor (VVM) is a label containing a heat sensitive material to record cumulative heat exposure over time. The combined effect of time and temperature cause the inner square of the VVM to darken gradually and irreversibly. Before opening a vial, check the status of the VVM (Figure 4.1). If the VVM shows change in colour to the end point, then

Start point		Square lighter than circle. If the expiry date has not passed, USE the vaccine.
End point		Square matches the circle. Do NOT use the vaccine.
End point exceeded		Square darker than the circle. Do NOT use the vaccine.

discard the vaccines.

Checking vaccines for cold damage (freezing)

DPT, TT, HepB and Penta vaccines lose their potency if frozen. Freezing dissociates the antigen from the adjuvant alum thus interfering with the immunogenicity of the vaccine. Moreover, the risk of adverse events following immunization, such as sterile abscesses, may increase.

To check for damage due to freezing (which can also take place due to direct contact of these vaccine vials with the ice packs). Discard the vial if it is frozen or it contains floccules after shaking. Conduct the shake test (appendix 4.1) if you suspect that large number of vials at the cold chain point could have been frozen.

Do not keep in the cold chain, any vials that are expired, frozen or with VVMs beyond the end point, as they may be confused with those containing potent vaccines. Keep them in the red bag for disinfection and disposal.

ILR point or Cold Chain point

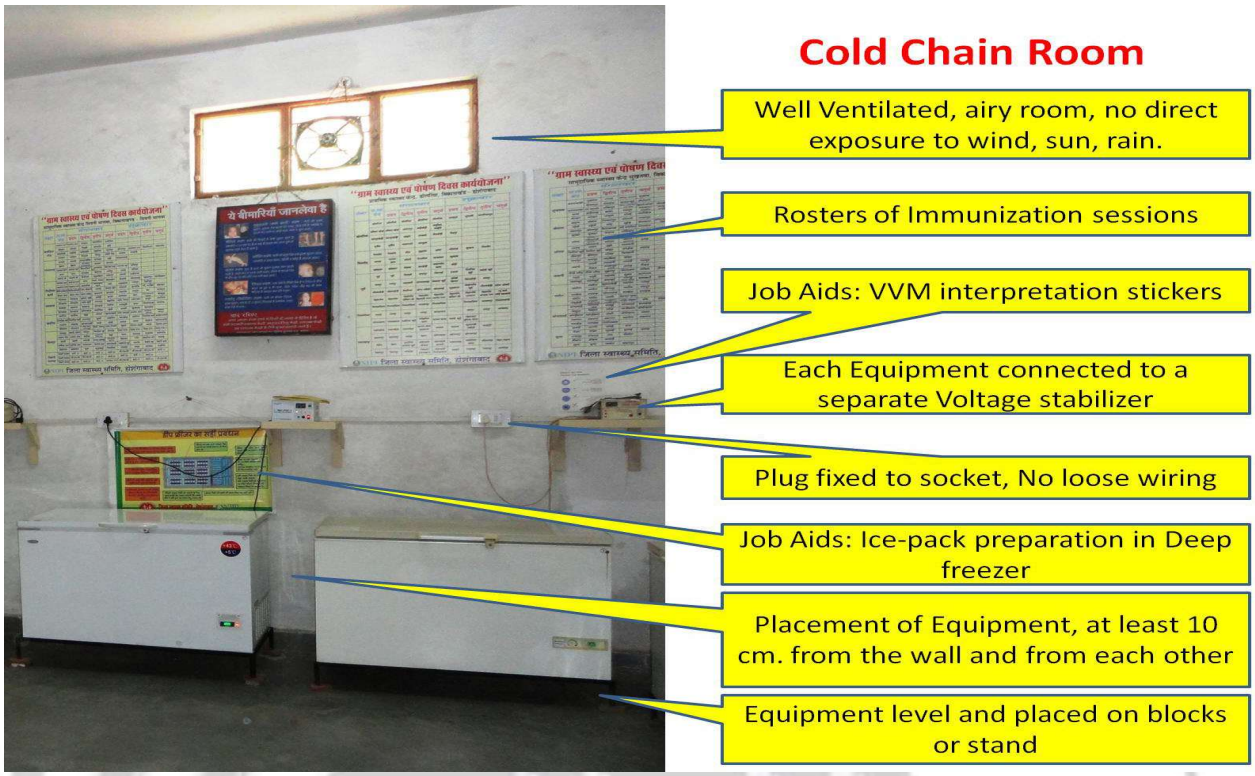
An ILR or cold chain point is a health centre (usually PHC and CHC) with an Ice Lined Refrigerator for storage of vaccines and a Deep Freezer for preparation of frozen ice packs. There is usually a generator as power back up. The function of the ILR point is to receive, store and further distribute vaccines, diluents and other logistics to another ILR point or directly to the session sites.

Vaccine and Cold Chain Handler

At every ILR point designate a senior male or female health worker (Pharmacist/staff nurse/ ANM/ LHV/ MPW/ Health Supervisor) as the Vaccine and Cold Chain Handler. He/she should be responsible for forecasting, indenting, receiving, storing and distributing vaccines and logistics; maintaining cold chain equipment and related records.

The Cold Chain Room

Keep all electrical cold chain equipment in a separate room with restricted entry to keep the vaccines and cold chain equipment safe and secure. Follow the guidelines as mentioned in Figure 4.2.



Cold chain equipment

Cold chain equipment, both electrical and non-electrical, is used for storing vaccines and/or transporting them at appropriate temperatures. Table 4.2summarizes the cold chain equipment supplied under the UIP.

Table 4.2: Summary of Cold Chain Equipment

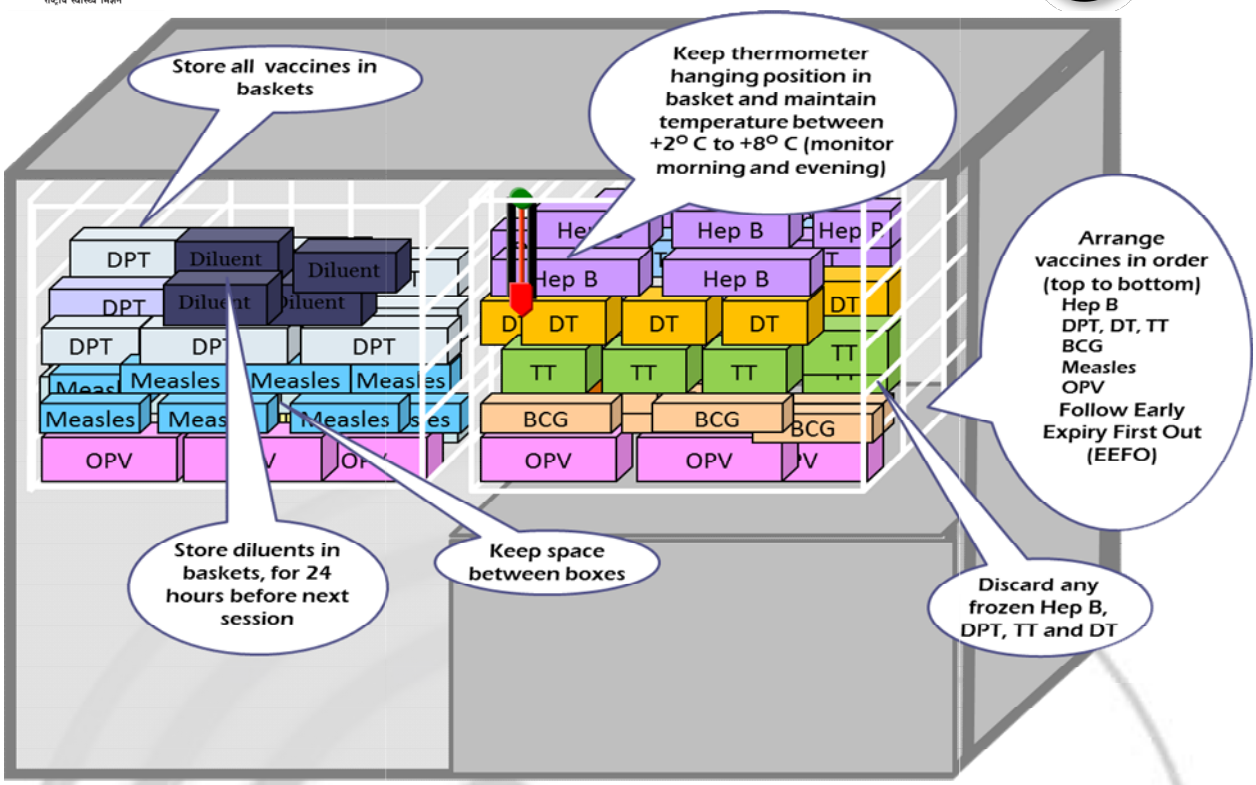
Equipment	Temperature	Storage Capacity	Holdover time*
Electrical			
Deep Freezer (Large)	-15^{0}C - -25 ^{0}C	200 ice packs or OPV stock for 3 months (120,000 – 180,000 doses)	43^{0}C for 18 Hrs 32^{0}C for 22 Hrs
ILR (Large)	+2^{0}C - +8^{0}C	BCG, DPT, DT, TT, Measles, Hep-B Vaccine stock for 3 months (60,000 doses)	At 43^{0}C for 62 Hrs At 32^{0}C for 78 Hrs
Deep Freezer (Small)	-15^{0}C - -25^{0}C	100 ice packs	At 43^{0}C for 18 Hrs At 32^{0}C for 22 Hrs
ILR (Small)	+2^{0}C - +8^{0}C	BCG, OPV, DT, DPT, TT, Measles, Hep-B vaccine stocks for one month (25,000 doses)	At 43^{0}C for 62 Hrs At 32^{0}C for 78 Hrs
Non-electrical			
Cold Box (Large)	+2^{0}C - +8^{0}C	All vaccines stored for transport or in case of power failure (6000 doses of mixed antigen with 50 ice-packs/ 72-96 icepacks)	At 43^{0}C for 6.5 days At 32^{0}C for 10 days

Cold Box (Small)	+2^{0}C - +8^{0}C	All vaccines stored for transport or in case of power failure. (1500 doses of mixed antigen with 24 ice-packs/36 icepacks)	At 43^{0}C for 6.5 days At 32^{0}C for 10 days
Vaccine carrier (1.7 litres)	+2^{0}C - +8^{0}C	All vaccines carried for 12 hours (4 Ice packs & 16-20 vials)	At 43^{0}C for 34 Hrs At 32^{0}C for 51 Hrs

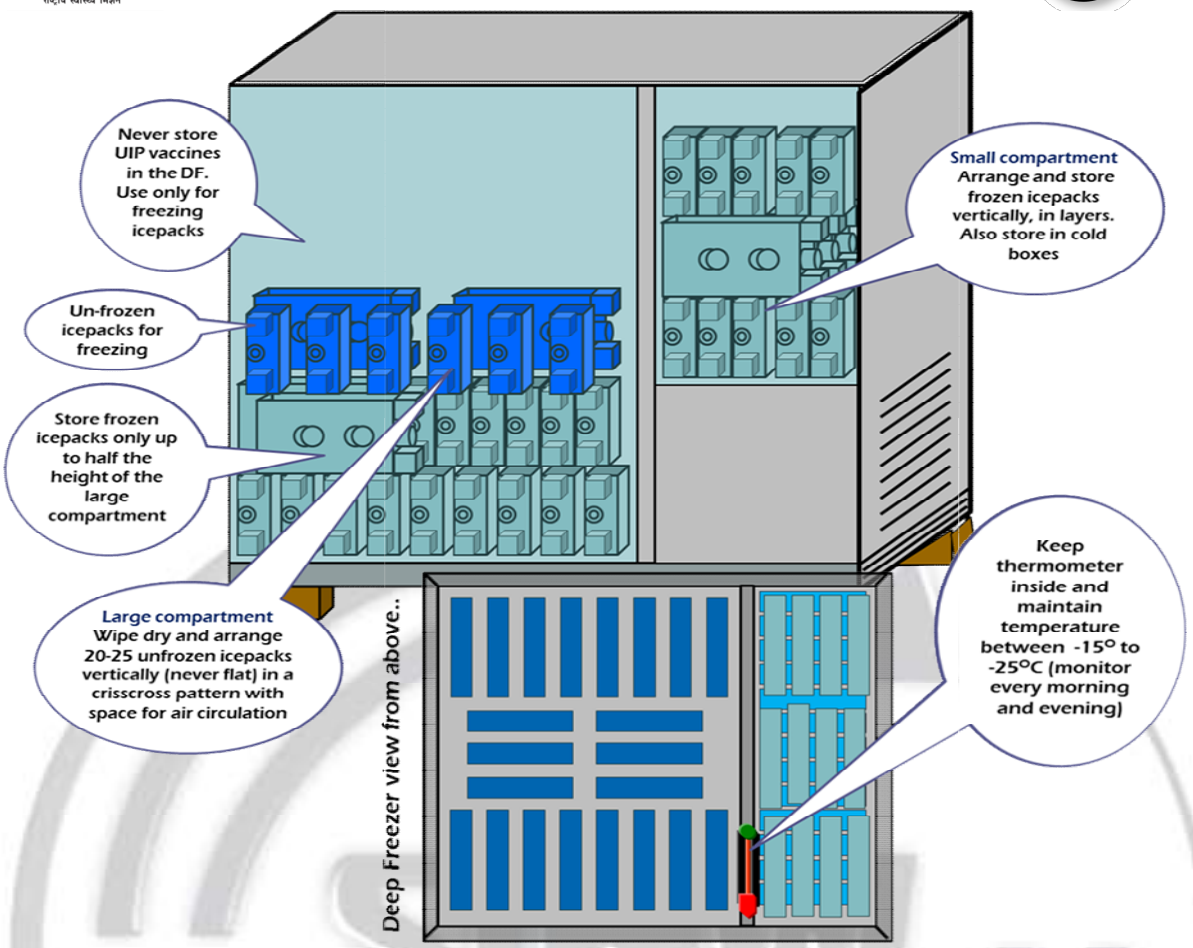
Holdover time: is the time taken by the equipment to raise inside cabinet temperature at the time of power failure from its minimum temperature to 8^{0}C, subject to the condition that the equipment is functioning well. Holdover time depends on the ambient temperature, frequency of opening the lid, the quantity of vaccines kept inside with adequate space between the boxes and, only in the case of non-electrical cold chain equipment, the condition of icepacks placed inside. Holdover Time varies from one manufacturer to the other.

Ice Lined Refrigerators(ILRs): maintain a cabinet temperature between +2^{o}C to +8^{o}C; and are used to store all UIP vaccines at the PHC level.No other drugs/Non-UIP vaccines should be stored.

ILRs are lined with tubes or ice packs filled with water which freezes and keeps the internal temperature at a safe level despite electricity failure. ILRs can keep vaccine safe with as little as 8 hours electricity supply in a 24-hour period. Since ILRs are top-opening, they can hold the cold air inside better than a front-opening refrigerators. ***Figure 4.3*** indicates correct placement of vaccines in the baskets of an ILR. If baskets are not available, store vaccines (other than OPV and Measles) over two rows of empty ice-packs kept on the platform of the ILR. Measles and OPV can be kept over two rows of empty ice-packs on the floor of the ILR.



Deep Freezers (DFs): maintain a cabinet temperature between -15°C to -25°C; and store OPV and prepare ice packs at the district level. ***At the PHC level, Deep freezers are used only for preparation of ice packs and are not to be used for storing UIP vaccines.*** About 20-25 icepacks can be prepared by a 140 Litre DF in 24 hours with at least 8 hours of electricity supply. *See**Figure 4.4***for correct



Placement of ice-packs in the DF

Domestic Refrigerators: also maintain a cabinet temperature between +2° to +8°C with a holdover time of only 4 hours. Therefore, they are ***not recommended for common use in the UIP***. However, they are used in urban dispensaries and by private practitioners in urban areas due to more assured power supply and non-availability of ILRs and DFs. No vaccine should be kept in the compartments of freezer, chiller, door and basket of the refrigerator. Follow the guidelines to store vaccines on the shelves of the refrigerator in the same order as used for ILR.

Voltage Stabilizers: electronic equipment which ensures a constant output voltage of 220 Volts, whatever the input voltage. This is suitable for the working of the ILRs and DFs.Each ILR or DF should be connected to the mains through its own independent voltage stabilizer.

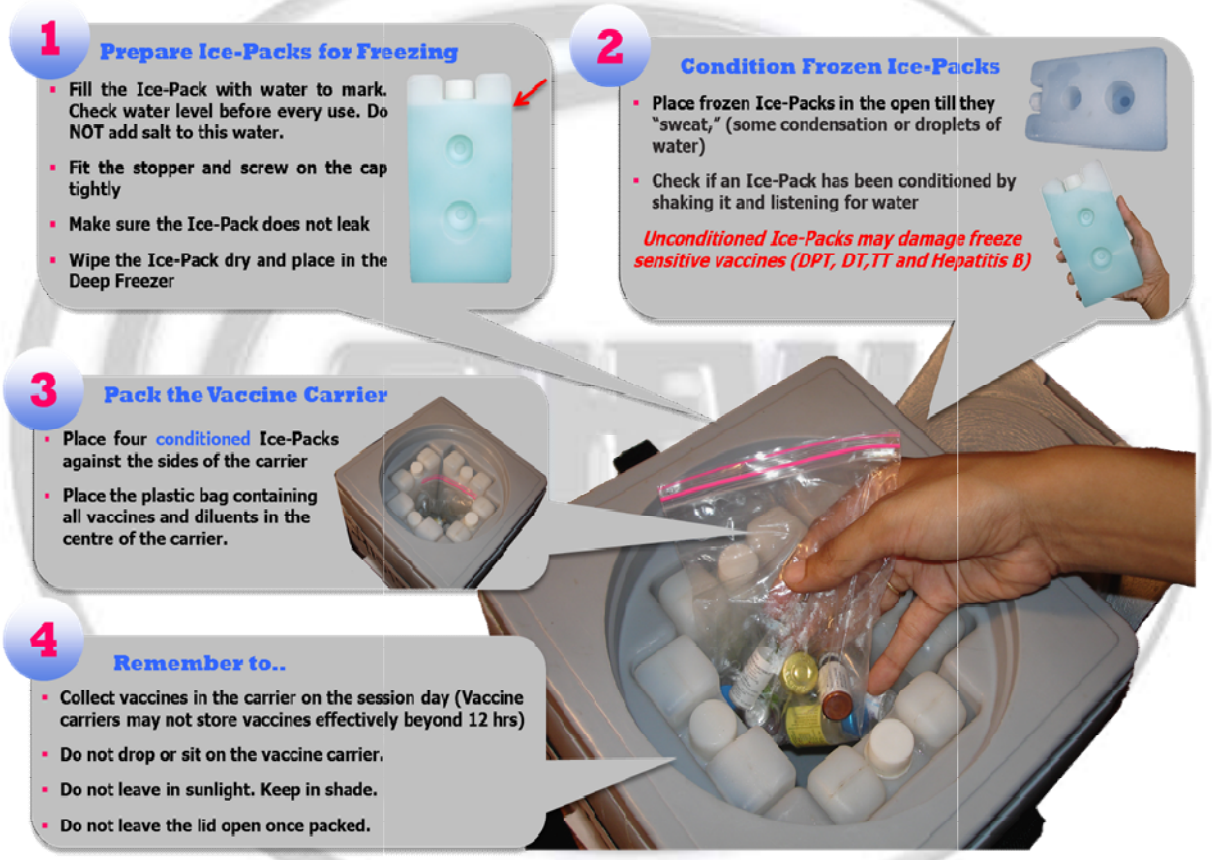
Vaccine Vans: are insulated vans used for the transporting vaccines in bulk. Vaccines should be transported only in Cold boxes with the desired number of conditioned ice packs. These cold boxes should be loaded in the vaccine van immediately after packing with vaccines and unloaded at the destination as soon it is reached. Vaccines should be removed from the cold boxes and placed in the ILR immediately after reaching the destination.

Cold Boxes: are insulated boxes, used for transportation and emergency storage of vaccines and icepacks. Place conditioned ice packs at the bottom and sides of the cold box before loading the vaccines in cartons or polythene bags. Then cover them with a layer of conditioned ice-packs and close the cold box. Always keep a thermometer inside the cold box.

Vaccine Carriers: (with 4 conditioned ice packs) maintain the inside temperature between $+2^0$C to $+8^0$C for 12 hours, if not opened frequently. They are used for carrying vaccines (16-20 vials) and diluents from PHCs to session sites. Vaccine carrier should be returned back from the session site to the cold-chain point on same day after session.

- Never use day carriers which contain 2 ice packs or thermos flasks for routine immunization.
- Never use any screw driver or any other sharp shaft to open the lid of vaccine carrier.

Follow the steps for correct packing of vaccine carriers as given in *Figure 4.6*



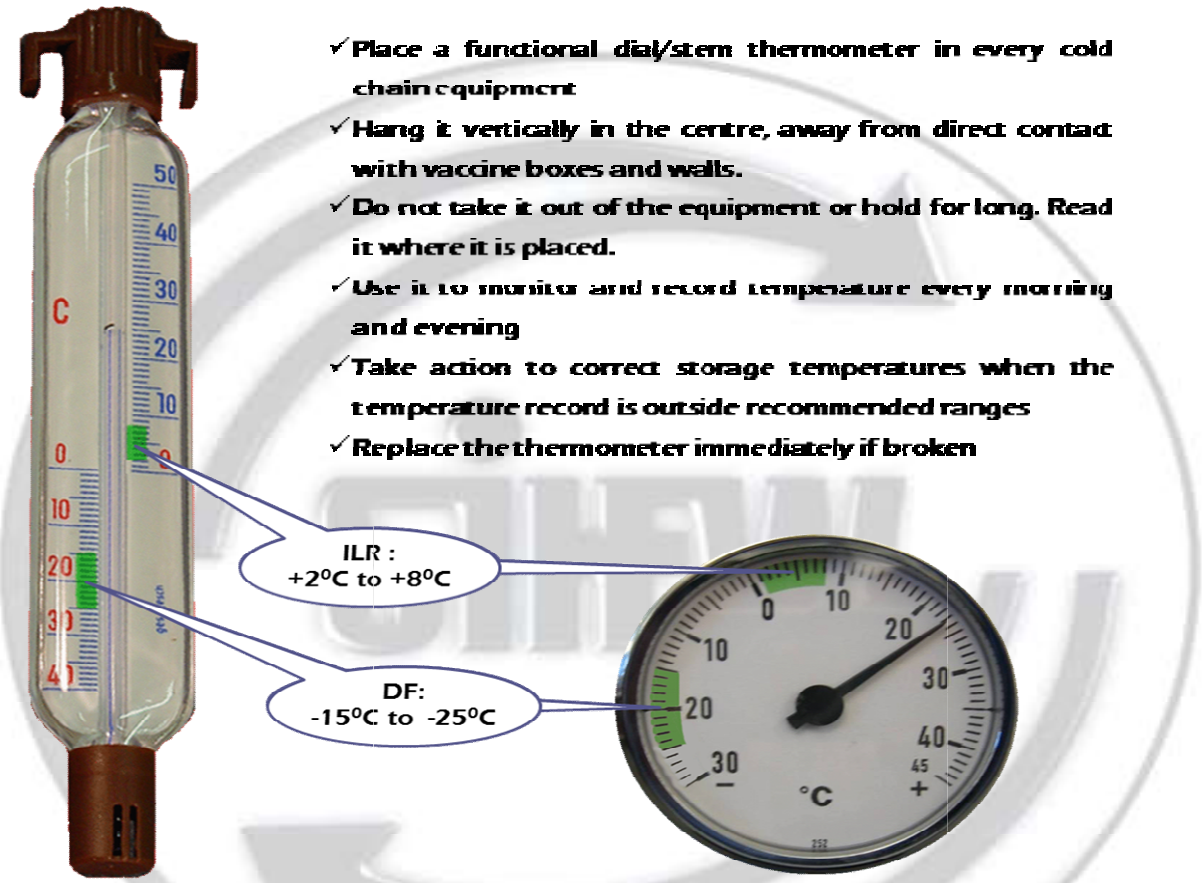
Ice-packs: are plastic containers filled with water. These are frozen in the deep freezer and when placed in non-electrical cold chain equipment such as vaccine carriers and cold boxes, help increase the holdover time.

Conditioning of Ice packs: Icepacks come out of the freezer at a temperature of about -20ºC. They need to be kept at room temperature for a period of time to allow the ice at the core of the icepack to rise to 0ºC. This takes up to one hour at +20ºC and rather less at higher temperatures. This process is called 'conditioning'.

Lay out icepacks, preferably in single rows but never in more than two rows. Leave a 5 cm space all round each icepack. Wait until there is a small amount of liquid water inside the icepacks. Shake one

of the icepacks every few minutes. The ice is conditioned as soon as it begins to move about slightly inside its container. This prevents freezing of vaccines that may come in contact with the ice-packs.

Thermometers: whether, dial or stem (alcohol) are used to measure the temperature during storage of vaccines. Alcohol thermometers are more sensitive and accurate as they can record temperatures from – 50^0C to + 50^0C and can be used for ILRs and deep freezers. *Figure 4.7*



Making an Inventory of equipment: An inventory or Equipment stock register should have details of cold chain equipment such as model number, serial number, company, capacity (volume), date or month of manufacture, received on, received from and by, document of receipt, bill and details of warranty. The dates of installation, repair and condemnation should also be mentioned for each equipment according to its condition.

Guidelines for use of open vaccine vials in immunization program

Use the DPT, TT, Hepatitis B, Oral Polio Vaccine (OPV) and Liquid Pentavalent (DPT+ HepB+ Hib) (where applicable) vaccines opened in a fixed or outreach session at more than one immunization session up to four weeks provided the following conditions are fulfilled:

a) The expiry date has not passed.
b) The vaccines are stored under appropriate cold chain conditions both during transportation and storage in cold chain storage point.
c) The vaccine vial septum has not been submerged in water or contaminated in any way.
d) Aseptic technique has been used to withdraw all doses.
e) The vaccine vial monitor (VVM), has not reached the discard point.

Discard vaccine vial in case any one of the following conditions is met:

a) If expiry date has passed.
b) VVM reached discard point (for freeze dried vaccine, before reconstitution only) or Vaccine vials without VVM or disfigured VVM.
c) There is no label or partially torn label or writing on label is not legible.
d) Any vial thought to be exposed to non-sterile procedure for withdrawal.
e) Open vials that have been under water or vials removed from a vaccine carrier that has water.
f) If vaccine vial is frozen or contains floccules.

This policy does not apply to Measles, BCG, Japanese Encephalitis (JE) vaccines.

COLD CHAIN MAINTENANCE AND VACCINE DISTRIBUTION

1. Maintain temperature of ILR between 2 to 8^0C for storage of vaccines & diluents and monitor temperature twice daily regularly.
2. Note the manufacturer, batch and expiry date of the vaccine and diluent in the stock register.
3. Proper recording and reporting of vaccine distribution and usage has to be ensured.
4. Keep stock up to date, don't over-stock or under-stock vaccines and diluents.
5. Multi-dose vials from which at least one dose has been removed may be at risk of contamination of the vial septum. These vials should therefore, never be allowed to be submerged in water (from melted ice for example) and the septum should remain clean and dry.
   NOTE: Well-sealed conditioned icepacks should be used in vaccine carriers and water should not be allowed to accumulate where the vials are stored. Vaccine vials must be transported in a plastic zipper bag.
6. Keep the "returned, partially used" vials in a separate box, and label it accordingly.
7. Observe earliest expiry first out (EEFO) policy for issuing vaccines. If the vaccines are of same expiry date, then partially used vaccine vials should be re-issued. The vial opened earlier, as recorded on the vial label, should be issued first.
8. Contingency plan has to be in place in case of any exigency like power failure, equipment breakdown, etc.

AT AND DURING THE IMMUNIZATION SESSION

1. Inspect for and discard vaccine vial with visible contamination (i.e. checking for any change in the appearance of vaccine or any floating particles) or breaches of integrity (e.g. cracks, leaks).
2. All vaccines vials must be marked with date & time of opening at first use.
3. Note the manufacturer, batch and expiry date of the vaccine and diluent in the tally sheet.

4. Always pierce the septum with a sterile needle for drawing vaccine from the multi-dose vials used. Except oral polio vaccine which is given 2 drops orally, cap needs to be closed after each use.

AFTER IMMUNIZATION SESSION IS OVER

1. Ensure that the vaccine vials are returned inside a vaccine carrier from the session site to cold chain point immediately after session ends, using the alternate vaccine delivery mechanism in the reverse cold chain.
2. Under no circumstance the vaccine carrier/vaccines will be kept in the field, in case of such an event, the vaccines in such vaccine carriers should be discarded and not used for subsequent sessions.
3. Storage of vaccines at any place other than a designated cold chain point will not be allowed. No vaccines should be stored at ANM/LHV or other health worker/ASHA house.

SPECIFIC ATTENTION WHILE IMPLEMENTING OPEN VIAL POLICY

1. This policy is NOT applicable to opened reconstituted vials of Measles, BCG and JE vaccine, which will be used as per following instructions and discarded immediately after use:
   a) Before reconstitution check that vaccine is within expiry date and the VVM has not reached the discard point. Reconstitute the vial ONLY with diluent provided by manufacturer for that batch of the vaccine.

   b) Date and time of reconstitution must be mentioned on the label vial at the beginning of session.

   c) Reconstituted vials will only be used for a single session; they will not be carried from one session to another, even if the session is close by. Take out one ice-pack from vaccine carrier to keep the reconstituted vials on it.

   d) BCG and Measles must be discarded within **four hours** of reconstitution or at end of session whichever is earlier.

   e) JE to be discarded after **two hours** of reconstitution or at end of session whichever is earlier.

2. All vaccines are supplied with VVM. Please note that the VVM has only three statuses i.e. (i) start point (ii) end point (iii) end point exceeded. The vaccine has to be used before reaching the end point.

Preventive Maintenance: Some types of equipment, (e.g. vaccine refrigerators) need daily, weekly, and monthly attention. Others (e.g. cold boxes and vaccine carriers) need maintenance after every use. (*See Table 4.3*). The cold chain technician should record regular preventive maintenance and minor repairs.

Table 4.3: Preventive Maintenance of Cold Chain Equipment

ILRs/DFs	Cold Boxes and Vaccine Carriers
Check Daily if ▪ Exterior is clean ▪ Temperature is within prescribed limits (twice daily) ▪ Seal is tight and door shuts	After every use ▪ Keep latches open and free from load and tension. ▪ Clean with detergent and dry

Check Weekly if ▪ Frost is less than 0.5 cm thick (if more than 0.5 cm, then defrost)[2]	▪ Examine inside and outside surface for cracks ▪ Check that the rubber seal around the lid is not broken (if so, replace immediately) ▪ Hinges and locks are lubricated with machine oil.
Check Monthly ▪ If Equipment is defrosted and cleaned (adjust thermostat if necessary).	

Repair: When equipment break down they need to be repaired. Cold chain technician (refrigerator mechanic) at the district headquarters needs to be informed directly by telephone followed by written communication with copy to the DIO as soon as there is a breakdown.

Cold Chain Sickness Rateis the proportion of cold chain equipment out of order at any point of time. It should be kept to the minimum acceptable level of less than 2% e.g. if there are 100 ILRs/Freezers in a district and 4 are out of order, the cold chain sickness rate on that day is 4%).

Down Time is the time between breakdown of equipment and its repair or the period for which an equipment remains out of service (e.g. if an ILR is out of order on 5th May, and is functional again on 10th May, the down time is 5 days). The down time should be less than two weeks for plains and three weeks for hilly terrain.

Response Time is the period between sending information regarding breakdown to actually attending (e.g. if information about the breakdown of an ILR is sent on 5th May and it is attended to on 7th May by a mechanic, the response time is 2 days). It should be less than 48 hours for plains and 72 hours for hilly terrain.

A float assembly is a stock of spare units of cold chain equipment (at district/state headquarters) for immediate replacement of defective units (brought from the Primary Health Centers). The defective units once repaired go into the float assembly.

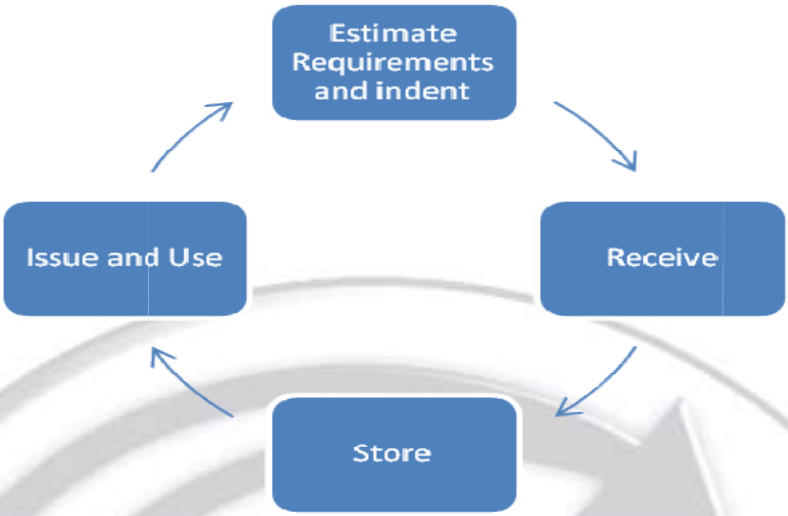
Condemnation of Cold Chain Equipment: Cold chain equipment which is obsolete or unserviceable should be condemned according to State Government rules by state/district level committees. In the absence of state-specific rules for condemnation, follow the Rule 124 of General Financial Rules (GFR) and Government of India decisions read with Schedule VII of Delegation of Financial Power Rules.

Managing Logistics of Vaccines and Other Supplies

[2]If you need to defrost your refrigerator more than once a month:

- you may be opening it too often (more than three times daily); or
- the door may not be closing properly; or
- the door seal may need to be replaced.

Logistics management is a cyclical process and involves several steps, namely demand estimation, indenting, receipt, storage and distribution of vaccines and other supplies to health facilities in a timely fashion and at an optimum cost.



Three commonly encountered problems in vaccine and logistics management are;

- **Stock-out:** A condition when no stock is available of a vaccine or other supply.
- **Inadequate Stock:** less than the buffer stock (i.e. less than 25% for vaccines and 10% for syringes)
- **Excess Stock:** more than the requirement for one month, including the buffer stock (i.e. more than 125% for vaccines and 110% for syringes).

Following are the steps involved in logistics management related to vaccines, diluents and AD syringes:

Step 1: Estimate requirements and indent

Compile the microplans of all the sub-centers at the PHC level and estimate the requirement of vaccines and other supplies. UIP requires that at the:

- PHC: 1 month of vaccines and supplies are stored
- District: 3 months of vaccines and supplies are stored

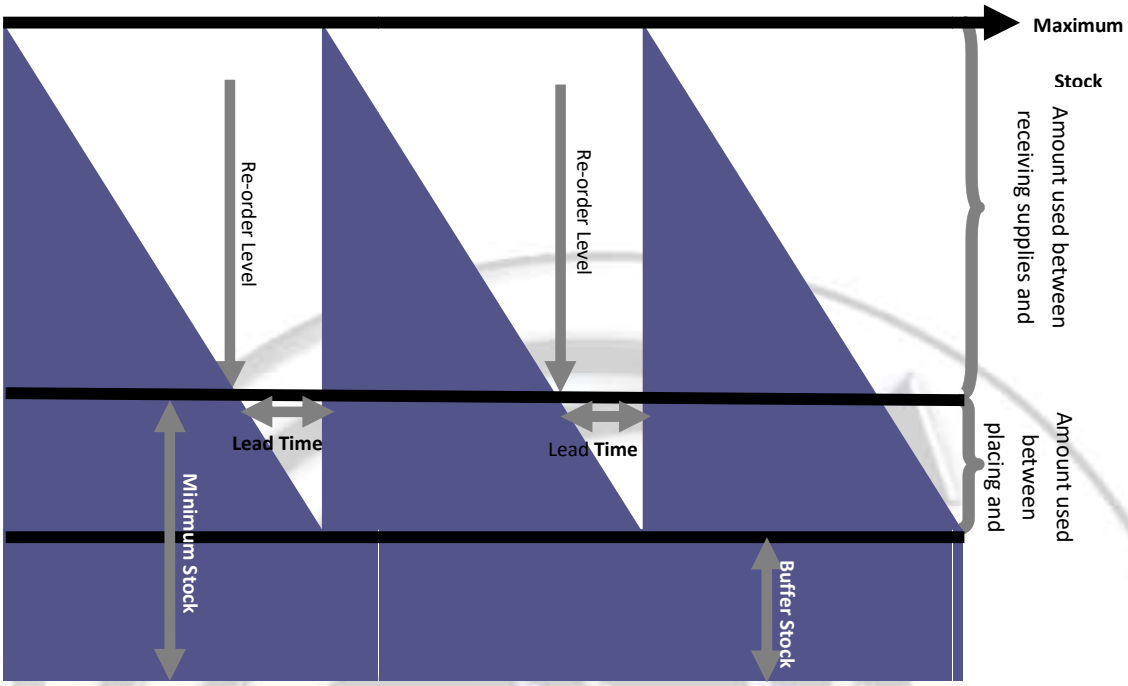
Furthermore, ensure that the overall estimate includes **a buffer or safety stock** (25% for vaccines and 10% for syringes). The ***buffer*** stock serves as a cushion or buffer against emergencies, major fluctuations in vaccine demands or unexpected transport delays.

The problems of stock-out, inadequate or excess stock can be avoided if a ***minimum/maximum inventory control system*** is implemented. This system ensures that the quantity in hand is always more than the buffer stock and less than the maximum stock.

The ***Minimum stock level*** (also known as the re-order level) implies the least amount that you should have in stock or the level which, when reached, initiates a re-order; usually expressed as the number of weeks/months of supply. It is the amount of stock you will use in the time between placing and receiving an order (lead time stock) plus the buffer stock.

The minimum stock level is the level below which stocks should never drop without having placed an order.

The relation between minimum, maximum and buffer stocks



The ***Maximum stock level*** implies the largest amount of stock that you should have, usually expressed as the number of weeks/months of supply. It is the buffer stock plus the amount of stock used between orders. The maximum stock level is set to guard against excess stock which results in losing vaccines to expiration before use.

The ***Lead time*** refers to the time between ordering of new stock and its receipt. The lead time varies, depending on the speed of deliveries, availability and reliability of transport, and sometimes the weather. For instance, if a PHC's monthly requirement of DPT is 280 doses, the Buffer Stock will be 70 doses (or 25% or one week's supply). Additionally, if the Lead Time is one week, then the Minimum Stock (or Re-order) Level is the lead time stock and the Buffer Stock (70 doses + 70 doses= 140 doses). The Maximum Stock Level, therefore, will be the Buffer Stock and the stock used between orders (70 doses + 4 weeks stock of 280 doses = 350 doses).

If the stock level falls to the re-order level, inform the district vaccine stores for replenishment and place an indent (*See Appendix 4.1*) to avoid any shortage or stock-out.

Step 2: Receive

During receipt, check and record the details of vaccines, diluents and other supplies and sign in the vaccine and logistics supply voucher. (*See Appendix 4.2*)

When the supplies reach the PHC, also enter the details in the vaccine and logistic stock register each time they arrive at the storage point, including Batch numbers, Expiry dates, VVM status, etc. (*See Appendix 4.3*)

Step 3: Store

Systematically arrange vaccines and supplies to facilitate issue of stocks whose expiry date is the closest i.e. distribute vaccine with the shortest shelf-life first, even if it arrived last. This system, commonly known as **EEFO (Earliest- Expiry-First-Out) is preferable to FIFO (First-In-First-Out) handling**.

While in storage, periodically conduct a **physical inventory of all vaccines once every month** and other supplies at least once every three months. Check number of diluents mandatorily during physical verification and then only sign with comments at the bottom of the stock register.

Include only vaccine stocks that are suitable for use and kept in the cold chain**. Any expired vials, freeze-damaged vials or vials with VVMs beyond the discard point should not appear in the available stock balance and also should not be kept in the cold chain.**

Step 4: Issue and Use

Follow the **earliest expiry, first out (EEFO) procedure** during distribution. Follow the FIFO principle if all the vaccines and supplies are of the same shelf-life.

Check that the types and amount of vaccine, diluent and dropper are the same, as per microplan for that session site.

Check the status of randomly selected vials for intact **labels, expiry date, VVM and freezing**.

Check and **record details, in the stock register**, of vaccines and supplies every time they leave the storage point for distribution to session sites and, eventually, the user. Calculate and record the end balance of the stock.

Ensure that the health worker is present to receive the stocks at the expected time of delivery and to record the receipt and status of vaccines and supplies in the Vaccine and Logistics Issue Register (*See Appendix 4.4*) with the date, signature of delivery person, and signature of PHC official.

At the PHC level, ensure that doses used, discarded and returned to the PHC at the end of the session are recorded in the stock register.

Since provision of immunization services depends on the simultaneous availability of a number of related supplies, shortage or stock-out of any of these negatively impact the program. "***Bundling***" ensures that vaccines are always supplied with diluents, droppers, AD syringes and reconstitution syringes, in corresponding quantities, at each level of the supply chain. Also supply other related items (e.g. Tablet IFA, ORS) required for the conduct of Village Health and Nutrition Day.

And then re-start with Step 1: Estimate Requirements…

Before you indent the next batch of vaccine, conduct a physical inventory to make sure that the ledger is accurate, i.e. all supplies issued to sessions are accounted for. Before indenting additional supplies for the next month, subtract your End Balance from next month's stock requirements and include a 25% buffer stock.

Estimating Vaccine wastage rates

Vaccine wastage rate = 100 – Vaccine usage rate (Doses administered x100)

Doses issued

The goal is to immunize the maximum number of infants and pregnant women. Encourage HWs to not hesitate in opening a new vial of vaccine for even one beneficiary. They may not have another opportunity to provide a dose to that infant or pregnant woman.

Safe Injections and Waste Disposal

Learning objectives:

- Describe the importance of safe injections and ways to improve injection safety.
- List steps to achieve safe injections and safe disposal of immunization waste according to existing GoI guidelines.

Safe Injections

A safe injection is one that -

- Does not harm the recipient
- Does not expose the health workers to any avoidable risks
- Does not result in waste, which is dangerous for the community

The most common, serious infections transmitted by unsafe injections are Hepatitis B, Hepatitis C, and HIV (the virus that causes AIDS). Poorly administered injections can also cause injuries or drug toxicity when the wrong injection site, vaccine, diluent, or dose is used. It is important to prevent the risks of accidental needle-stick injury, and necessary to dispose of used syringes and needles safely to prevent risks to the community at large.

Route of Transmission from Unsafe Injections

Reused Needles and/or Syringes ➡ Unsafe Collection of Sharps Waste ➡ Unsafe Disposal of Sharps Waste

↓ Beneficiaries ↓ Health Workers ↓ Community

The provision of auto disable syringes by the Government of India and the implementation of Central Pollution Control Board (CPCB) outlined waste management procedures are attempts to improve injection safety in the immunization program.

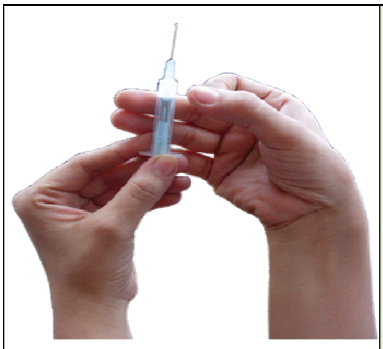
Simple ways to improve injection safety

- **Keep hands clean before giving injections**
  - Wash or disinfect hands prior to preparing injection material.
  - Avoid giving injections if the skin at the site of injection of the recipient is infected or compromised by local

infection (such as a skin lesion, cut, or weeping dermatitis).
    - Cover any small cuts on the service provider's skin.
- **Use sterile injection equipment, every time**
    - Always use ADS for each injection and a new disposable syringe to reconstitute each vial of BCG and measles.
- **Prevent the contamination of vaccine and injection equipment**
    - Prepare each injection in a designated clean area where contamination from blood or body fluid is unlikely.
    - If the injection site is dirty, wash with clean water
    - Always pierce the rubber cap of the vial with a sterile needle.
    - Follow product-specific recommendations for use, storage, and handling of a vaccine.
    - Do not touch the needle or rubber cap of vial with your finger.
    - Discard any needle that has touched any non-sterile surface.
- **Assume all used equipment is contaminated**
    - Cut the used syringe at the hub immediately after use**.**
- **Practice safe disposal of all medical sharps waste**
    - Used sharps (needles) must be collected in a hub cutter and then carried to the PHC for safe disposal.
- **Prevent needle-stick injuries**
    - Do not recap or bend needles.
    - Collect sharps in a puncture proof container (Hub cutter).
    - Anticipate sudden movement of the child.

Figure 5A: Correct use of AD syringes

	1. Select the correct syringe for the vaccine to be administered. BCG 0.1ml and all others 0.5ml.
	2. Check the packaging. Don't use if the package is damaged, opened, or expired.
	3. Peel open or tear the package from the plunger side and remove the syringe by holding the barrel. Discard the packaging into a **black** plastic bag.
	4. Remove needle cover/ cap and discard it into the **black** plastic bag. 5. Do not move the plunger until you are ready to fill the syringe with the vaccine and **do not inject air into the vial as this will lock the syringe.**
	6. Take the appropriate vaccine vial, invert the vial, and insert the needle into the vial through the rubber cap. Insert the needle such that the tip is within the level of the vaccine. If inserted beyond you may draw air bubble which is very difficult to expel. 7. **Do not touch the needle or the rubber cap (septum) of the vial**.

	8. Pull the plunger back slowly to fill the syringe. The plunger will automatically stop when the necessary dose of the vaccine has been drawn (0.1 or 0.5 ml). 9. **Do not draw air into the syringe.** In case air accidentally enters the syringe, remove the needle from the vial. Holding the syringe upright, tap the barrel to bring the bubbles towards the tip of syringe. Then carefully push the plunger to the dose mark (0.5 or 0.1 ml) thus expelling the air bubble. 10. Clean the injection site (if dirty) with a clean water swab.
	11. Administer the vaccine. (BCG: Left upper arm; DPT and Hep B: Antero-lateral aspect (outer side) of mid thigh Measles: Right upper arm; TT: Upper arm; JE: Left upper arm) 12. Push the plunger completely to deliver the dose.**Do not rub the injection site after vaccine is given.**
	13. **Do not recap the needle.** Cut the hub of the syringe immediately after use with a hub-cutter that collects the sharps in a translucent plastic container.
	14. Then collect the plastic portion of the cut syringes in a **red** plastic bag.
	Follow the guidelines for waste disposal as given under 5.5

Steps to ensure safe disposal of immunization waste

The CPCB outlines the following guidelines for disposal of biomedical waste generated during immunization under UIP. The concerned CMO or the officer responsible for implementation of UIP in the respective area, as decided by the MoHFW, will obtain authorization from the "Prescribed Authority", notified under the Bio-medical Waste (Management & Handling) Rules[3] for generating, collecting, receiving, storing, transporting, treating, disposing and/or handling bio-medical waste in any other manner.

Disposal of bio-medical waste generated at Outreach Points/PHCs/ CHCs/ District Hospitals etc.

Step 1: At the session site, cut the needle of the AD syringe immediately after administering the injection, using the Hub cutter that cuts the plastic hub of the syringe and not the metal part of needle. The cut needles will get collected in the puncture-proof translucent container of the hub-cutter.

Step 2: Store the broken vials in a separate white translucent sturdy and puncture proof container or in the same hub-cutter, in case its capacity is also able to accommodate broken vials.

[3] i.e. State Pollution Control Board/ Committee

Step 3: Segregate and store the plastic portion of the cut syringes and unbroken (but discarded) vials in the red bag or container. Both the containers should bear the biohazard symbol as stipulated in the Schedule III of the BMW Rules.

Step 4: Send the red bag and the hub cutter to PHC for disinfection and disposal by designated person at the PHC and dispose of the black bag as general waste. PHC may send the collected materials to the Common Bio-medical Waste Treatment Facilities (CBWTF). If the CBWTF doesn't exist, go to step 5.

Step 5: Treat the collected material in an autoclave. If unable to impart autoclaving, boil the waste in water for at least 10 minutes or provide chemical treatment (using at least 1% solution of sodium hypochlorite for 30 minutes). Ensure that this results in disinfection. However, the District Hospital/CHC/PHC etc. will ultimately make the necessary arrangements to autoclave on a regular basis.

Step 6: Dispose the autoclaved (or boiled/chemically disinfected) waste as follows:

- Dispose the needles and broken vials in a safety pit/tank
- Send the syringes and unbroken vials for recycling or landfill.

Step 7: Wash the hub cutters properly for reuse.

Step 8: Maintain a proper record of generation, treatment and disposal of waste at the District Hospitals/CHC/PHC/etc. in order to assess that waste (needles/syringes/vials) reported back matches with the stock issued to Health Workers at the beginning of the session day. Match by weighing rather than counting to avoid occupational and safety hazards. This helps to prepare annual reports, submitted to the "Prescribed Authority" by 31st January of every year.

Figure 5B: Safe disposal of immunization waste

Correct use of Hub cutters

Disinfect in 1% Hypochlorite Solution (for 30 minutes)

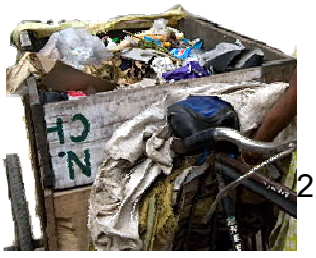
Disinfect in 1% Hypochlorite Solution (for 30 minutes)

Dispose in Safety Pit

Recycle

Dispose as Municipal Waste

Safe disposal of immunization waste



To prepare **1% Hypochlorite solution,** dissolve 10-15g or 1 tablespoonful of bleaching powder in 1 liter of water, in a well-ventilated area. Chlorine solutions gradually lose strength; therefore prepare freshly diluted solutions daily. Use clear water, because organic matter destroys chlorine. Since this bleach solution is also caustic, avoid direct contact with skin and eyes. Use plastic containers as metal containers are corroded rapidly and also affect the bleach.

30 Lt. (24" x 28") **Red/ Black Plastic Bags** (Biodegradable) HDPE/LLDPE/PP made with virgin, non-chlorinated polymer material with minimum thickness of 55 micron, with easy to hold collar tie/knot arrangement and preprinted as per requirements of Bio Medical Waste Management Rules.

APPENDIX: 5.1 DESIGN OF THE PIT/TANK FOR DISPOSAL OF TREATED NEEDLES AND BROKEN VIALS (SHARPS)

The treated needles/broken vials should be disposed in a circular or rectangular pit as shown below. Such a rectangular or circular pit can be dug and lined with brick, masonry or concrete rings. The pit should be covered with a heavy concrete slab, which is penetrated by a galvanized steel pipe projecting for about 1 meter above the slab, with an internal diameter of up to 50 millimeters or 1.5 times the length of vials, whichever is more. The top opening of the steel pipe shall have a provision of locking after the treated waste sharps has been disposed in. When the pit is full it can be sealed completely, after another has been prepared. For high water table regions where water table is less than 6 meters beneath bottom of the pit, a tank with above mentioned arrangements shall be made above the ground.

Inactivated Polio Vaccine (IPV)

आई.पी.वी. मॉड्यूल

Inactivated Polio Vaccine Module (IPV)

प्रशिक्षण सम्भागी – टीकाकरणकर्मी, अधिकारी, प्रबंधक, और सभी स्तर के पर्यवेक्षक

सीखने के बिन्दु – प्रशिक्षण के अन्त में सभी सहभागी जानेंगें –

- आई.पी.वी. इन्जेक्शन लगाने के सही तकनीक के बारे में।
- आई.पी.वी. वेक्सीन का आई.एल.आर. में भण्डारण।
- वेक्सीन केरियर में आई.पी.वी. वेक्सीन का रख रखाव।
- आई.पी.वी. वेक्सीन उपयोग पर Open Vial Policy का पालन ।
- ममता कार्ड में आई.पी.वी. को प्रविष्टि का कॉलम ।
- पूर्ण टीकाकरण के लिये आई.पी.वी. टीके की गणना।
- वैक्सीन का उपयोग रिकॉर्डिंग और रिपोर्टिंग के बारे में चर्चा।

आवश्यक सामग्री –

- ए डी सिरिन्ज और सूई एवं काटन स्वाब
- तरल रूप (Liquid form) में प्राप्त आई.पी.वी. वैक्सीन ।
- लाल बैग, काला बैग व हब कटर (Hub cutter)
- स्वास्थ्य कार्यकर्त्ताओं के लिए तैयार निर्देशिका।

अनुमानित समय : 60 मिनिट

प्रशिक्षक के लिए दिशा निर्देश –

- सुरक्षित इन्जेक्शन लगाने के सही तकनीक के माड्यूल 15 के गृहकार्य के बारे में चर्चा करें।
- तीन सहभागियों से सुरक्षित इन्जेक्शन माड्यूल 14 प्रशिक्षण के अनुभव के बारे में पूछें।
- तीन सहभागियों से पूछें कि सुरक्षित इन्जेक्शन माड्यूल 14 से कौनसी बीमारियों से बचाव होता है।
- अब आई.पी.वी. इन्जेक्शन माड्यूल 16 के बारे में चर्चा की शुरुआत करें।

चर्चा के विषय (Discussion) : टीकाकरण कार्यक्रम में गत वर्षों में काफी प्रगति हुई है। पूरे विश्व मे पोलियो उन्मूलन की शुरूआत वर्ष 1988 में की गई थी। भारत देश में वर्ष 1995 में पल्स पोलियो कार्यक्रम की शुरूआत हुई, उस समय देश में लगभग 50,000 पोलियो के केसेज प्रतिवर्ष हो रहे थे। पोलियो उन्मूलन से संबंधित विभिन्न कार्यक्रमों के सफलतापूर्वक क्रियान्वयन के फलस्वरूप पोलियो के केसेज में निरन्तर कमी होती गयी। वर्ष 2009 मे देश में पोलियो के केसेज की संख्या 741 थी तथा भारत देश मे अंतिम पोलियो का रोगी 13 जनवरी, 2011 को पश्चिम बंगाल में पाया गया। राजस्थान मे पोलियो के अंतिम रोगी नवम्बर, 2009 मे दौसा एवं भरतपुर जिले में पाये गये थे।

इन सफलताओं के बावजूद भी पोलियो संक्रमण का खतरा लगातार बना हुआ है। वर्ष 2014 मे विश्व के 9 देशों में 359 पोलियो के केसेज पाये गये। विश्व स्वास्थ्य संगठन विश्व से पोलियो उन्मूलन के लिये दृढ–संकल्प है तथा इसके लिये "Polio End Game Strategy" कार्यक्रम बनाया गया है जिसके तहत शनैः शनैः ओरल पोलियो वेक्सीन को नियमित टीकाकरण कार्यक्रम से हटाना है साथ ही यह भी सुनिश्चित करना

है कि किसी भी बच्चे को पोलियो संक्रमण ना हो। इसी के मद्धेनजर आई.पी.वी. (Inactivated Polio Vaccine) का समावेश नियमित टीकाकरण कार्यक्रम में पूरे देश में किया जा रहा है।

आपको जानकारी है कि ओरल पोलियो वेक्सीन में पोलियो के जीवित वायरस होते हैं। जबकि आई.पी. वी. (Inactivated Polio Vaccine) में पोलियों के निष्क्रिय वायरस होते हैं।

Inactivated Polio Vaccine (IPV) :-

आई.पी.वी. (Inactivated Polio Vaccine) एक महंगा वेक्सीन है। सरकार को एक खुराक की कीमत लगभग 120/– रूपये की पड़ती है। इस वेक्सीन का भण्डारण एंव उपयोग निम्न प्रकार किया जायेगा।

- यह टीका तरल रूप (Liquid form) में प्राप्त होगा।
- आई.पी.वी की एक वॉयल में 5 या 10 खुराकें होंगी।
- इस वेक्सीन का भण्डारण आई.एल.आर. में +2 से +8°C के तापमान पर किया जायेगा तथा आई.एल. आर. में इसे टिटनस टॉक्सॉइड (TT) वेक्सीन के ऊपर तथा पेन्टावेलेन्ट टीके के नीचे रखा जायेगा।
- इस वेक्सीन को वेक्सीन केरियर में कण्डीशंड आईस पैक के साथ सत्र स्थल तक ले जाया जावेगा।
- यह वेक्सीन Freeze Sensitive है, अर्थात् जमने पर खराब हो जायेगा इसलिये इस वेक्सीन को कभी भी डीप फ्रीजर में ना रखें।
- इस वेक्सीन की सिर्फ एक खुराक को दाहिनी जांघ के मध्य भाग में मांसपेशियों (Intra Muscular) में 0.5 ml की मात्रा में एडी सिंरिज से ही की जावेगी ।
- यह वेक्सीन शिशु को 14 सप्ताह की आयु पूर्ण होने पर ओपीवी की तीसरी खुराक के साथ लगाया जायेगा।
- यह वेक्सीन अधिकतम 1 वर्ष की उम्र तक दिया जा सकता है अर्थात् बच्चे की उम्र 1 वर्ष पूर्ण होने के बाद यह वेक्सीन नही दिया जायेगा।
- चूंकि आई.पी.वी. शिशुओं को दायी जांघ मे लगाया जायेगा, इसलिये इसके साथ दिये जाने वाले पेन्टावेलेन्ट के टीके को बायी जांघ में लगाया जावे। इस प्रकार पेन्टावेलेन्ट के टीके को शिशुओं को हमेशा बायी जांघ में लगाया जावे।
- इस वेक्सीन पर Open Vial Policy लागू होगी अर्थात् आई.पी.वी. की वॉयल पर खुलने की तारीख लिखी जावे एंव 28 दिन तक निर्धारित शर्तों का पालन करते हुये उपयोग में लिया जावे।
- यह वेक्सीन बहुत ज्यादा Heat Sensitive है, अतः आई.पी.वी. की खुली वॉयल को यथा संभव शीघ्रातिशीघ्र काम में लिया जावे। यह आवश्यक नही है कि आई.पी.वी. की खुली वॉयल को उसी एएनएम को दिया जावे जिसने पूर्व में इसे काम में लिया था।

रिकोर्ड (Recording) :-

1. **ममता कार्ड** :– नवीन ममता कार्डों में जोकि गत वर्ष वितरित किये गये थे, में आई.पी.वी. को प्रविष्ट करने का कॉलम कार्ड में एंव उसकी काउण्टर फॉयल में पूर्व से ही उपलब्ध है। यदि कार्ड बहुत पुराना हो, तथा उसमें आई.पी.वी. का कॉलम नहीं हो तो ऐसी स्थिति में पोलियो की तीसरी खुराक के कॉलम में दाहिनी ओर नया कॉलम बनाकर उसमें आई.पी.वी. लिखकर उसकी तिथि अंकित करें।
2. **एसडीआर/आरसीएच रजिस्टर** :– हाल ही में वितरित किये गये आरसीएच रजिस्टर में आई.पी.वी. का कॉलम उपलब्ध नही है। इसलिये इन रजिस्टरों में हेपेटाइटिस–बी की तीसरी खुराक के कॉलम को संशोधित कर उसमें आई.पी.वी. लिखा जावे एंव आई.पी.वी. की प्रविष्टि इस कॉलम में की जावे।

रिपोर्ट (Reporting) :-

1. फार्म नम्बर 6, 7 एंव 8 में आई.पी.वी. का कॉलम नही है, नवीन फॉर्म प्राप्त होने तक ओ.पी.वी. की तीसरी खुराक के नीचे एक नया कॉलम बनाकर उसमें आई.पी.वी. लिखकर उसकी प्रविष्टि करें।
2. पीसीटीएस में आई.पी.वी. का कॉलम माह ऑक्टूबर 2015 में उपलब्ध हो जायेगा।
3. पूर्ण टीकाकरण के लिये इस टीके की गणना की जायेगी अर्थात् आशा को पूर्ण टीकाकरण का भुगतान करते समय आई.पी.वी. के टीकाकरण का स्तर भी जाना जायेगा।

गृहकार्य के लिए सूचना –

दो तरह की सूचना जिसमे से प्रथम प्रत्येक स्तर पर पर्यवेक्षक एवं स्वास्थ्य कार्यकर्ताओं, आशा व आंगनवाडी कार्यकर्त्ता को ये अवलोकन करना चाहिए कि क्या आई.पी.वी. वैक्सीन को कंडीशन्ड आइस पैक के साथ लाया गया या नहीं, कितने सत्रों के दौरान आई.पी.वी. वैक्सीन सही अवस्था में थी, जैसे वैक्सीन जमी हुई तो नही थीं, वीवीएम खराब तो नहीं था, एक्सपायरी दिनांक की तो नहीं थी। कहें कि जब अगली बैठक में आवें तो कितने सत्र सुपरवाइज किये और आप द्वारा क्या देखा गया रिर्पोट लाये।

फील्ड मे सपोर्टिव पर्यवेक्षण के लिए निर्देश –

अगले माह के दौरान या भविष्य में जब आप टीकाकरण सत्र के अवलोकन के लिए जायें तो देखें – टीकाकर्मी को अवलोकन करें, आई.पी.वी. इन्जेक्शन लगाने के तकनीक देखें, एसेप्सिस की प्रक्रिया देखें, इन्जेक्शन साइट की तैयारी को देखें, हाथ धोने की प्रकिया देखें, इन्जेक्शन साइट का चयन, इन्जेक्शन लगाने के तरीके, ये भी देखें कि सत्र के अन्त में कचरे का निस्तारण सही ढंग से किया जा रहा है या नहीं। यदि आवश्यक हो तो हेण्डस ऑन प्रशिक्षण देकर सपोर्टिव सुपरविजन करे। मोनीटरिंग (Monitoring) के दौरान मुख्य समस्याओ और बिन्दूओ को नोट करें।

आगामी बैठक में समीक्षा –

प्रथम पांच मिनिट सहभागी समूह को दो दो के समूह मे बांटकर उनके अनुभवों पर चर्चा की जा सकती है। उसके बाद 3 विभिन्न सहभागियों से सवाल किये जा सकते हैं। सुपरवाइजर्स से पूछे कि आपने क्या अवलोकन किया और प्रशिक्षण के दौरान क्या अतिरिक्त आवश्यक था यदि है तो पुनः प्रदर्शन के लिए तैयार होंगें। फील्ड विजिट के दौरान निरन्तर समीक्षा करें।

कार्य के लिए सूचना –

1. यदि कोई समस्या मिली है तो चर्चा करें और सूची बनायें और उनके निराकरण के लिए कार्य योजना बनायें और फोलोअप करें–

- सत्रों के निरीक्षण के दौरान कितने स्थानों पर आई.पी.वी. इन्जेक्शन का निरिक्षण किया था।
- क्या कोई प्रक्रिया/चरण अपनाया नहीं जा रहा था ? तो इसके क्या कारण थे ? क्या किया था अनुपयोगी वैक्सीन, सूई, टूटे हुए कांच और उपयोग मे ली हुई वैक्सीन वायल का।
- क्या सभी आवश्यक सामग्री लेकर गये थे जो सुरक्षित इन्जेक्शन अभ्यास के लिए जरूरी था।

2. सेक्टर स्तर पर दर्ज करें कि जो सत्र निरिक्षण किये गये उनमें से कितने प्रतिशत में सुरक्षित इन्जेक्शन अभ्यास के सही तरीके अपनाये गये एवं कितने में क्या समस्या थी। सभी समस्याओं को नोट कर ब्लॉक स्तर की बैठक में चर्चा करे। और इसी तरह जिला स्तर पर राज्य स्तर पर भी चर्चा कर फीडबैक शेयर करें।
3. सभी स्तर पर समीक्षा बैठक में हुई चर्चाओ को फोलोअप के लिए मिनट के रूप में लिखें। ताकि जब निरिक्षण इन्जेक्शन अभ्यास के तरीकों पर समीक्षा हो तो उनकी समस्याओ को समझकर सुलझाया जा सके।

Oral poliovirus vaccine (OPV)

Globally many manufacturers produce the trivalent OPV using Sabin vaccine seeds provided by the World Health Organization except for the Pfizer polio Sabin type 3. Most manufacturers grow the viruses in cultures containing monkey kidney cells and continuous cell lines (Vero or diploid cells). POLIO SABIN (oral) vaccine is a magnesium chloride stabilised preparation of live attenuated polio viruses of the Sabin strains type 1 (LS-c, 2ab), type 2 (P712, Ch, 2ab) and type 3 (Leon 12ab). Each dose of OPV contains residual amounts (less than 25 µg) of antibiotics including streptomycin and neomycin. No adjuvants or preservatives are used (Sutter et al., 1999).

Inactivated poliovirus vaccine (IPV)

Like OPV, inactivated poliovirus vaccine contains three poliovirus strains, Mahoney type 1, MEF-1 (Middle East Forces) type 2 and Saukett type 3. The vaccine is administered via the injectable route. The viruses are grown either in Vero cells or human diploid (MRC-5) cells and then concentrated, purified and inactivated with formaldehyde (Plotkin, 1999).

Types of vaccines

Route	Vaccine antigens	Excipients
Oral	Sabin polio strains - type 1, 2 and 3. The vaccine contains 10 5.9 + 0.5 TCID 50 type1, 10 5.0 + 0.5 TCID 50 type 2 and 10 5.7 + 0.5 TCID 50 type 3	Streptomycin and neomycin, MgCl2 No adjuvants or preservatives are used
Parenteral	Polio strains (1, 2 and 3)- Each dose of vaccine contains 40 D antigen units of type 1, eight D antigen units of type 2 and 32 D antigen units of type 3	Trace amounts of antibiotics (neomycin, streptomycin and polymyxin B). Some vaccines contain 2-phenoxyethanol as a preservative. Thiomersal cannot be used for IPV.

Health Sector Reforms and Initiatives in Rajasthan

Session- Health Sector Reforms and Initiatives in Rajasthan

Sessions Objective-

- Orient the participants about Key **Health Sector Reforms and Initiatives in Rajasthan** its objectives, key Strategies and Practices
- Provide clarity on role and responsibilities of different stakeholders to make the success of these initiatives

Contents-

- Mukhyamantri Nshulk Dava Yojna,
- Mukhaya Mantri Nishulk Janch Yojna,
- Mukhay Mantri Jeevan Rakshaya Kosh
- Mukhay Mantri Shubhlaxmi Kosh
- Bhamashah Health Inssurence Scheme
- I08 Emergency (National Embulence Services)
- 04 Janni Express
- MukhayMantri Badhi Sandesh

`Methodology

Group Exercise, Presentation, Brain storming

Duration -1.30 Hours

Note for Trainer's

- Session may be begin with discussions on Sector reforms in health sector –past and present
- Participants may be asked following questions
    - ❖ What are the sector reforms?
    - ❖ Why they have been initiated by state.
    - ❖ Various programs in health sector initiated but discontinued
    - ❖ Impect of Health Sector reforms on overall quality of life of people

Activity -1

Facilitator should develop the PPT or brief not on each scheme and program initited as sector reform in the state. Obejctives key strategies, structure implementation framework supervision and monitoring and over all impact of the program should be covered in the each scheme and program in the PPts

At last 10 minutes may be kept for discussion on questions of participants may have.

INITIATIVES OF RAJSATHAN

1. Mukhyamantri Nishulk Dava Yojna (MNDY)

'Mukhyamantri Nishulk Dava Yojna' (MNDY) has been started across the state since 02 Oct., 2011 in order to distribute most commonly used drugs free of cost to all patients visiting Govt. Hospital.

Under this scheme all patients who come in all state hospitals, most essential medicines will be provided free of charge. Free medicines for patients with Thalassemia and haemophilia will also be provided for free.

For the successful implementation of a CM Free drug plan at district drug warehouse will be started district level, and medicine will be distributed through Drug Distribution Center.

District Drug Warehouse (DDW): -

Infrastructure Rquirement

Staff room
Quarantine room
Cold storage room
Computer room
Loading - unloading area
Convenient route for the movement of vehicles

Human Resource

The officer in charge (District Project Coordinator)
Stores charge / senior pharmacist
Junior pharmacists
Computer / data entry operator
Helper / sweeper

District Drug Distribution Centre (DDC):

District Drug Distribution Centre are set up in all medical colleges attached hospitals, district hospitals, satellite and sub-level hospitals, community health centers, primary health centers, urban Dispensaries, maternal and child health centers, etc. for distribution of free medicine.

Rajasthan Medical Services Corporation - Establishment

"Rajasthan Medical Services Corporation Limited" (RMSC) has been established under Company's Act, 1956. The Corporation will be the public enterprises and be owned by Government of Rajasthan. The primary objectives of corporation are to efficiently manage procurement of drugs for distribution to Medical, Health and FW Department, Medical Education Department, Ayurved Department, Medical Relief Societies and Common Public.

Following are the Board members of Corporation:

1	Principal Secretary, Medical and Health	Chairman
2	Principal Secretary (Medical Education)	Director
3	Principal Secretary (Ayurved)	Director
4	Secretary(Finance- Expenditure)	Director
5	Mission Director, NRHM	Director
6	Director, IEC Bureau	Director
7	Director, Public Health	Director
8	Director, RCH	Director
9	Director, Aids/Hospital Administration	Director
10	Financial Advisor, Directorate of Medical and Health	Director
11	Financial Advisor, National Rural Health Mission	Director
12	Drugs Controller , Rajasthan	Director
13	Managing Director, RMSC	Secretary

MAIN OBJECTIVES:

RMSC shall effect the procurement and distribution of Drugs and Medicines, Surgical and Suture items to the Government Medical Institutions in the state of Rajasthan. Main objectives of Corporation are:

- Executing procurement of good quality Drugs, Surgical & Sutures at reasonable prices in the State of Rajasthan to meet the requirements of Government Medical and Health Institutions allowing healthy competition among pharmaceutical manufacturers.
- Streamlining the distribution of drugs to institutions and ensuring availability of drugs at all times.
- Strengthening the system of Quality Control over drugs procurement and distribution to make quality an essential attribute of the Corporation and promoting rational use of drugs.
- To achieve the objectives, procurement policy is being enunciated

Availability of Drugs at Health Facilities			
Category of Healthcare Institutions	Drugs	Surgical Items	Sutures
Medical College Hospitals	612	73	77
District / Sub-dist / Satellite Hospitals	532	69	37
CHCs	456	51	11
PHCs/Dispensaries	239	34	2
Sub Centers	30	8	0

2. MUKHYAMANTRI NISHULK JANCH YOJNA

To provide comprehensive health care another important component of treatment i.e. basic diagnostic services is required. Thus scheme for providing "Basic Investigation Services" is being planned. These services will be made available free of cost at all govt. institutions. This will help reduce the treatment cost to patients & decrease the out of pocket expenditure to the extent possible.

Vision
To provide quality essential diagnostic services in all the government health care institutions and contribute to fundamental right to health.

Mission
To strengthen the existing laboratories and other diagnostic facilities (and to create additional facilities if required) in all the public health institutions so as to provide the essential diagnostic services free of cost to all patients visiting government hospitals.

The following advantages of scheme are envisaged:

1. Essential diagnostic services will be available to the patients.
2. Patients who are not able to afford cost of diagnostic tests are able to undergo treatment.
3. Reducing out of pocket expenditure on investigations.
4. Making available holistic healthcare services under one roof.
5. Scheme will be helpful in early diagnosis and contribute to reduction in morbidity and mortality trends.
6. IMR, Under 5 mortality rates and MMR are expected to come down.
7. Longevity is enhanced which is the ultimate aim of state's health services.
8. Increase in access to quality public health care services
9. Health seeking behavior is promoted.
10. Enhancing credibility of public health care institutions and health care providers.
11. The scheme will be a forbearer towards provision of "Right to Treatment" for the people of Rajasthan.

LIST OF FREE INVESTIGATIONS

(FOR Primary Health Centres)

S. N	Name of Test	जाँच का उद्देश्य
	Clinical Pathology	
1	Hemoglobin Estimation (Hb)	खून की कमी की जाँच
2	Total Leukocyte Count (TLC)	खून में संक्रमण की जाँच
3	Differential Leukocyte Count (DLC)	खून में संक्रमण की जाँच
4	MP (Slide Method)	मलेरिया की जाँच
5	ESR	खून में संक्रमण की जाँच
6	Bleeding Time (BT) & Clotting Time (CT)	रक्त प्रवाह का समय एवं रक्त का थक्का बनने का समय
7	Blood Group (ABO-RH typing)	रक्त समूह की जाँच
	Bio Chemistry	
8	Blood sugar	मधुमेह रोग की जाँच
	Microbiology	
9	Widal SlideTest	टायफायड की जाँच
10	VDRL Rapid Test	सीफलिस रोग की जाँच
11	HIV Rapid Test	एड्स रोग की जाँच
12	Sputum for AFB	टी.बी. हेतु थूक की जाँच
	Urine Analysis	
13	Urine Sugar / Albumin	मूत्र में एल्ब्यूमिन /शुगर की जाँच
14	Urine Pregnancy test (UPT)	मूत्र से गर्भधारण की जाँच
	Stool Analysis	
15	Stool for OVA and cyst	मल की जाँच

LIST OF FREE INVESTIGATIONS

(FOR Community Health Centres)

S. N	Name of Test	जाँच का उद्देश्य
	Clinical Pathology	
1	Hemoglobin Estimation (Hb)	खून की कमी की जाँच
2	Total Leukocyte Count (TLC)	खून में संक्रमण की जाँच
3	Differential Leukocyte Count (DLC)	खून में संक्रमण की जाँच
4	MP (Slide Method)	मलेरिया की जाँच
5	ESR	खून में संक्रमण की जाँच
6	Bleeding Time (BT)	रक्त प्रवाह का समय
7	Clotting Time (CT)	रक्त का थक्का बनने का समय
8	CBC	रक्त में संक्रमण की जाँच
9	Blood Group (ABO-RH typing)	रक्त समूह की जाँच
10	Total Red Blood Cell Count	खून की कमी की जांच
11	Platelet count by cell counter	रक्त प्रवाह संबंधित रोगो की जांच
12	Packed cell volume (PCV)	खून की कमी की जांच
	Bio Chemistry	
13	Blood sugar	मधुमेह रोग की जाँच
14	Blood Urea	गुर्दे की जाँच
15	S. Creatinine	गुर्दे की जाँच
16	S. Bilirubin (T)	लीवर की जाँच
17	S. Bilirubin (D)	लीवर की जाँच
18	SGOT	लीवर की जाँच
19	SGPT	लीवर की जाँच
20	S. Alkaline Phosphates	लीवर की जाँच
21	S. Total Protein	लीवर की जाँच
22	S. Albumin	लीवर की जाँच
23	S. Total Cholesterol	खून में कोलेस्ट्रॉल की जांच
24	S. Triglyceride	खून में वसा की जाँच
25	S. VLDL	हृदय रोग की जाँच
26	S. HDL	हृदय रोग की जाँच
	Microbiology	
27	VDRL Rapid Test	सीफलिस रोग की जाँच
28	HIV Rapid Test	एड्स रोग की जाँच
29	Sputum for AFB	टीबी हेतु थूक की जाँच
30	Widal SlideTest	टायफायड की जाँच
	Urine Analysis	
31	Urine Sugar / Albumin	मूत्र में एल्ब्यूमिन /शुगर की जाँच
32	Urine Pregnancy test (UPT)	मूत्र स गर्भधारण की जाँच
33	Urine Microscopy	मूत्र की सूक्ष्मदर्शी द्वारा जाँच
34	Urine Complete by strip method (Bile Salts, Bi	सम्पूर्ण मूत्र जाँच
	Stool Analysis	
35	Stool for OVA and cyst	मल की जाँच
	Radiology	
36	X-Ray	एक्सरे की जाँच
	Cardiology	
37	ECG	हृदय की जाँच

LIST OF FREE INVESTIGATIONS

(FOR DISTRICT/SUB DISTRICT/SATELLITE HOSPITALS)

S. N	Name of Test	जाँच का उद्देश्य
	Clinical Pathology	
1	Hemoglobin Estimation (Hb)	खून की कमी की जाँच
2	Total Leukocyte Count (TLC)	खून में संक्रमण की जाँच
3	Differential Leukocyte Count (DLC)	खून में संक्रमण की जाँच
4	MP (Slide Method)	मलेरिया की जाँच
5	ESR	खून में संक्रमण की जाँच
6	Bleeding Time (BT)	रक्त प्रवाह का समय
7	Clotting Time (CT)	रक्त का थक्का बनने का समय
8	PBF	रक्त कोशिकाओं में विकार
9	CBC	रक्त में संक्रमण की जाँच
10	Blood Group (ABO-RH typing)	रक्त समूह की जाँच
11	Total Eosinophilic Count (TEC)	खून में एलर्जी की जाँच
12	Total Red Blood Cell Count	खून की कमी की जांच
13	Platelet count by cell counter	रक्त प्रवाह संबंधित रोगो की जांच
14	Packed cell volume (PCV)	खून की कमी की जांच
15	Coomb's test-Direct	रक्त में रोग प्रतिकारको की जांच
16	Coomb's test-Indirect	रक्त में रोग प्रतिकारको की जांच
17	Prothrombin time test INR	शल्य चिकित्सा से पूर्व रक्त की जाँच
18	Cell Count and Bio-chemistry (CSF, Pleural and Ascitic fluid)	रीड की हड्डी, फेफड़े के पलूड, उदर के पलूड में संक्रमण की जांच
19	Semen Analysis sperm count (Manual)	पुरूषत्व की जांच
	Bio Chemistry	
20	Blood sugar	मधुमेह रोग की जाँच
21	Blood Urea	गुर्दे की जाँच
22	S. Creatinine	गुर्दे की जाँच
23	S. Bilirubin (T)	लीवर की जाँच
24	S. Bilirubin (D)	लीवर की जाँच
25	SGOT	लीवर की जाँच
26	SGPT	लीवर की जाँच
27	S. Alkaline Phosphates	लीवर की जाँच
28	S. Total Protein	लीवर की जाँच
29	S. Albumin	लीवर की जाँच
30	S. Calcium	कैल्शियम कमी की जाँच
31	S. CK - NAC	हृदय रोग की जाँच
32	S. CK - MB	हृदय रोग की जाँच
33	S. LDH	हृदय रोग की जाँच
34	S. Amylase	अग्नाशय की जाँच
35	S. Uric Acid	जोड़ों में दर्द की जाँच
36	S. Total Cholesterol	खून में कोलेस्ट्रॉल की जांच
37	S. Triglyceride	खून में वसा की जाँच
38	S. VLDL	हृदय रोग की जाँच
39	S. HDL	हृदय रोग की जाँच

Microbiology		
40	VDRL Rapid Test	सीफलिस रोग की जाँच
41	HIV Rapid Test	एड्स रोग की जाँच
42	Sputum for AFB	टी.वी. हेतु थूक की जाँच
43	Widal SlideTest	टायफायड की जाँच
44	Dengue (Rapid) Test	डेंगू बुखार की जाँच
45	Malaria by Card Test	मलेरिया की जाँच
46	Rheumatoid Factor (RA)	जोड़ों के दर्द व गठियाबाय जोड़ों में दर्द
47	ASLO	जोड़ो में दर्द की जाँच
48	HBsAg (Rapid) test	लीवर में सक्रंमण की जांच
49	S. CRP	संक्रमण स्तर की जांच
Urine Analysis		
50	Urine Complete	मूत्र की सामान्य जाँच
51	Urine Pregnancy test (UPT)	मूत्र से गर्भधारण की जाँच
52	Urine Microscopy	मूत्र की सूक्ष्मदर्शी द्वारा जाँच
Stool Analysis		
53	Stool for OVA and cyst	मल की जाँच
Radiology		
54	X-Ray	एक्सरे की जाँच
55	USG	सोनोग्राफी की जाँच
Cardiology		
56	ECG	हृदय की जाँच

LIST OF FREE INVESTIGATIONS

(FOR MEDICAL COLLEGE & ATTACHED HOSPITALS)

S. N	Name of Test	जाँच का उद्देश्य
	Clinical Pathology	
1	Hemoglobin Estimation (Hb)	खून की कमी की जाँच
2	Total Leukocyte Count (TLC)	खून में संक्रमण की जाँच
3	Differential Leukocyte Count (DLC)	खून में संक्रमण की जाँच
4	MP (Slide Method)	मलेरिया की जाँच
5	ESR	खून में संक्रमण की जाँच
6	Bleeding Time (BT)	रक्त प्रवाह का समय
7	Clotting Time (CT)	रक्त का थक्का बनने का समय
8	PBF	रक्त कोशिकाओं में विकार
9	CBC	रक्त में संक्रमण की जाँच
10	Total Red Blood Cell Count	खून की कमी की जांच
11	Platelet count by cell counter	रक्त प्रवाह संबंधित रोगो की जांच
12	Packed cell volume (PCV)	खून की कमी की जांच
13	Total Eosinophilic Count (TEC)	खून में एलर्जी की जाँच
14	Blood Group (ABO-RH typing)	रक्त समूह की जाँच
15	Coomb's test-Direct	रक्त में रोग प्रतिकारको की जांच
16	Coomb's test-Indirect	रक्त में रोग प्रतिकारको की जांच
17	Prothrombin time test INR	शल्य चिकित्सा से पूर्व रक्त की जाँच
18	Pleural fluid cell count	फेफड़ों के पलुड की जाँच
19	Ascitic fluid cell count	उदर के पलुड की जाँच
20	Semen Analysis sperm count (Manual)	पुरूषत्व की जांच
	Bio Chemistry	
21	Blood sugar	मधुमेह रोग की जाँच
22	Blood Urea	गुर्दे की जाँच
23	S. Creatinine	गुर्दे की जाँच
24	S. Bilirubin (T)	लीवर की जाँच
25	S. Bilirubin (D)	लीवर की जाँच
26	SGOT	लीवर की जाँच
27	SGPT	लीवर की जाँच
28	S. Alkaline Phosphates	लीवर की जाँच
29	S. Total Protein	लीवर की जाँच
30	S. Albumin	लीवर की जाँच
31	S. Calcium	कैल्शियम कमी की जाँच
32	S. Phosphorous	फास्फोरस की जाँच
33	S. CK - NAC	हृदय रोग की जाँच
34	S. CK - MB	हृदय रोग की जाँच
35	S. LDH	हृदय रोग की जाँच
36	S. Amylase	अग्नाशय की जाँच
37	S. Uric Acid	जोड़ों में दर्द की जाँच
38	Total Lipid Profile	हृदय रोग एवं खून में वसा की जांच
39	S. Total Cholesterol	खून में कोलेस्ट्रॉल की जांच
40	S. Triglyceride	खून में वसा की जाँच
41	S. VLDL	हृदय रोग की जाँच
42	S. HDL	हृदय रोग की जाँच
43	S. Electrolyte	खून में नमक, पोटेशियम की जाँच

44	S. Amylase	अग्नाशय की जाँच
45	S. Lipase	अग्नाशय की जाँच
46	S.GGT	लीवर की जाँच
47	CSF Protein Chloride & Sugar	रीड़ की हड्डी के पलुड की जाँच
48	Bio-chemistry of body fluids pleural, pericardial, ascetic, synovial	फेफड़े / हृदय झिल्ली / उदर / जोड़ों के पलूड की जांच
Microbiology		
49	VDRL Rapid Test	सीफलिस रोग की जाँच
50	HIV Rapid Test	एड्स रोग की जाँच
51	Sputum for AFB	टी.वी. हेतु थूक की जाँच
52	Widal SlideTest	टायफायड की जाँच
53	Dengue (Rapid) Test	डेंगू बुखार की जाँच
54	Malaria by Card Test	मलेरिया की जाँच
55	Rheumatoid Factor (RA)	जोड़ों के दर्द व गठियाबाय जोड़ों में दर्द
56	ASLO	जोड़ो में दर्द की जाँच
57	HBsAg (Rapid) test	लीवर में सक्रंमण की जांच
58	S. CRP	संक्रमण स्तर की जांच
59	Gram staining	जीवाणुओं की जाँच
60	Anti HCV Antibody by Rapid test	लीवर में सक्रंमण की जांच
61	Urine Culture & Sensitivity	मूत्र में संक्रमण की जांच
62	Blood Culture & Sensitivity	खून में संक्रमण की जांच
63	CSF Culture & Sensitivity	रीड की हड्डी के पलूड में संक्रमण की जांच
Urine Analysis		
64	Urine Complete	मूत्र की सामान्य जाँच
65	Urine Pregnancy test (UPT)	मूत्र से गर्भधारण की जाँच
66	Urine Microscopy	मूत्र की सूक्ष्मदर्शी द्वारा जाँच
Stool Analysis		
67	Stool for OVA and cyst	मल की जाँच
Radiology		
68	X-Ray	एक्सरे की जाँच
69	USG	सोनोग्राफी की जाँच
Cardiology		
70	ECG	हृदय की जाँच

3. Bhamashah Swasthya Bima Yojna

Bhamashah Swasthya Bima Yojana will benefit around 4.5 crore people in the state. Under the programme, e-health cards will be issued under Arogya Rajasthan Campaign and this card will help in providing quick and effective healthcare facilities.
The Health Insurance Scheme is designed to cover 1,718 ailments, which are highest in the country. The insurance cover for general illness has been set as Rs 30,000, while Rs 3 lakh has been set for critical illness.

4. Mukhymantri Shub-Laxmi Yojna (MSLY)

Mukhymantri Shub-Laxmi Yojna (MSLY) on *April 1, 2013,* to promote birth of girl child and to ensure their survival up till 5 years of the age, with full immunization and school enrollment. Under the scheme a female gets entitled to get cash (beside JSY Scheme) incentives on fulfilling following conditions-

- At the time of live birth of a girl child, delivered at Govt. or accredited Health care facility
- On completion of One Year of age of that girl child with full immunization
- On completion of 5 Years of age with enrollment in school

Payment mechanism under this scheme is as follows:-

S.No	Terms & condition for payment	Amount to be Paid	Due Dates	Payment from
1	At the time of live birth of a girl child	2100/-	April 1, 2013 Onwards	Govt./Accredited Health care facility where delivery is conducted
2	Completion of one year and full immunization schedule	2100/-	April 1, 2014 Onwards	Nearest Health Facility (CHC/PHC/SC/ANM)
3	Completion of 5 yrs and admission into school	3100/-	April 1, 2018	Nearest Health Facility (CHC/PHC/SC/ANM)

5. MUKHYAMANTRI JEEVAN RAKSHA KOSH

Overview of the MMJRK scheme:

"Mukhya Mantri BPL Jeevan Raksha Kosh Yojana" was launched on 1st Jan 2009. The scheme provides a safety net to the BPL population by ensuring their excess to an extensive network of quality health care through a technology driven platform. The scheme would provide protection to BPL households against financial liabilities arising out of health shocks involving hospitalisation.

- Facilities Provided:

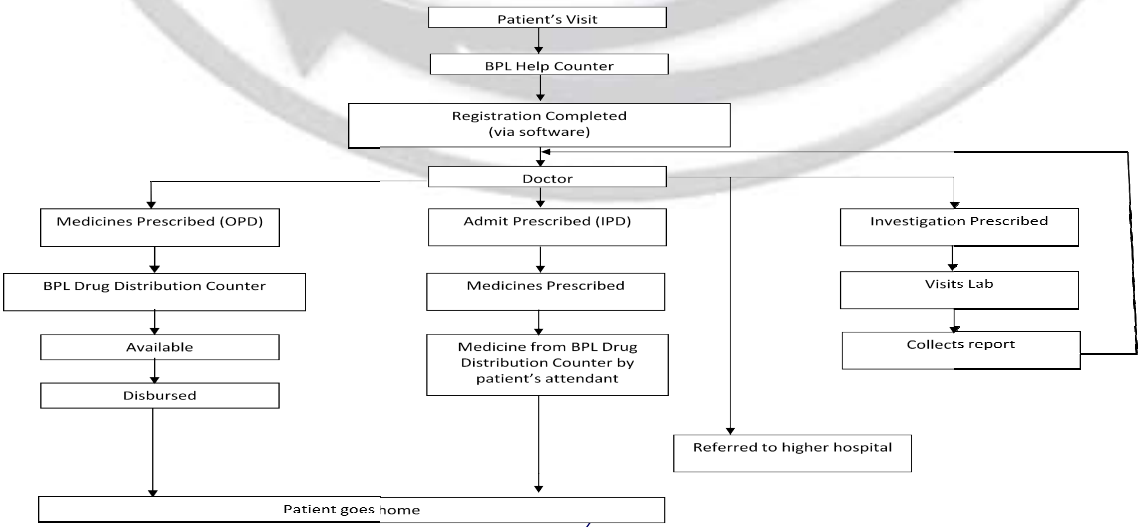
1. Free OPD services
2. Free IPD treatment
3. Free Investigations
4. Free Referral transport Cases
5. Free treatment at higher centers
6. Free implants/ appliances

i.e. treatment required is provided free of cost through a totally cashless process

MMJRK Web Portal

- A web portal http://cmbpljrk.raj.nic.in has been developed by NIC for computerization of MMJRK activities.
- The system is intended to capture all services provided to the patients.
- The online system is presently functional from Medical College & associated Hospital(MCH) up to CHC level (445).
- The health facilities have been provided with the required
  - infrastructure (electronics, internet connection, furniture & office set up) and
  - manpower (computer operator, pharmacist & accountant) to record the details in the system.
- The system also allocates a unique Identification number to each registered patient, which helps to maintain the medical history of the patient throughout the State.

Patient Flow



Beneficiaries of the Scheme

- BPL Families(Urban & Rural)
- State BPL Families(Urban & Rural)
- ASTHA Card Holder Families
- HIV/AIDS Patients
- Old age/ Widow/ Handicapped Pensioners
- Navjeevan Yojna(4 basties of Jodhpur City)
- Anntyodaya Ann Yojna (APL Sahariya Baran District)
- Annpurna Yojna (Senior Citizens)
- Kathodi JanJati
- Meherangarh Durg Casualty, Jodhpur

All categories cover nearly 35% of the State's population

Network Hospitals

AIIMS, Delhi & PGI, Chandigarh along with all Government Hospitals in the State (1917 Facilities)

Treatment of 5 BPL patients per Hospital per month in 32 Super Specialized private Hospitals

Head	Mukhya Mantri BPL Jeevan Raksha Kosh Yojana (MMJRK)
Disease Coverage	All disease covered (no exclusions)
Expenditure Limit	No limit of expenditure on treatment Treatment totally cashless
Family members Coverage	No limit of family size
Facility Covered	IPD/OPD health care, including the diagnostic and referral services
Transportation Facility	Free transportation facility for referred cases (within & outside State) to empanelled Hospitals
Beneficiaries Contribution	No charges
Follow Up treatment	All kind of follow up services available
Package rates	No provision of packages. Rates as per • standard treatment guide line of State and • actual

Ambulance Service in Rajasthan

S. NO.	Type of Vehicle /Service	Nos	Operator
1	108 Ambulances	741	PPP GVKEMRI
2	104 Janani Express	600	Govt. operated DHS/RMRS
3	Base Ambulances	More than 550	Govt. Operated RMRS
4	Toll Free 104 Medical Advice Service	20 seater	PPP HMRI

- **Two separate call centers 108 and 104 are running for 108 ambulances and 104 Janani Express respectively.**
- **108 call center dispatches 108 ambulances.**
- **104 call center provides Medical Advice Service and Dispatches 104 Janani Express.**
- **Base Ambulances runs at the level of CHC through respective institution.**
    - **108 Ambulances (Free Service):-**
        - Cater to emergencies related to medical, police and fire.
        - Accidents, pregnancy related emergencies and all other medical emergencies.
    - **104 Janani Express (Free Service):-**
        - Cater to pregnancy related emergencies.
        - Free referral transport to pregnant ladies and children upto age of 0ne year.
        - Free referral transport to children upto age of 18 years identified under RBSK program.
        - Mobilization of Severe Malnourished children (SAM) to treatment center.
    - **Base Ambulances (Paid Service):-**
        - Provides transport to the needy patients at the institution on “on payment basis”

108 Services

- Started on 20th Sept., 2008 (today only seven years back).
- Started with five ambulances and gradually scaled up year by year. Now we have 741 ambulances across state.
- The service is being operated on PPP mode through a private single service provider.
- 24X7 service.
- Operated through a centralised call center situated at SIHFW.
- It works for Medical, Police and Fire related emergencies.

Medical Emergencies	Police Emergencies	Fire Emergencies
Pregnancy	Robbery / Theft / Burglary	Burns
Serious Injuries	Street Fights	Fire breakouts
Cardiac arrests	Property Conflicts	Industrial fire hazards
Stroke/ Diabetics	Self - inflicted injuries / Attempted suicides	
Respiratory	Theft	
Road Accidents	Fighting	
Maternal/Neonatal/Pediatric	Public Nuisance	
Epilepsy		
Unconsciousness	Kidnappings	
Animal bites	Traffic Problems (Traffic Jams or Rallies, raasta rokos etc)	
High Fever		

Golden Hour Concept

- **The 108 Service works on Golden Hour Concept.**
  - **Golden Hour:- If any emergency is given proper medical care in a period of one hour of occurrence of emergency; chances of saving the life of the patient can be increased many times.**

104 Janani Express

- Started in 2012 to provide referral transport to pregnant mothers, sick new bornes with an objective to reduce IMR and MMR.
- Started with 400 ambulances.
- Later on scaled up with another 200 ambulances in 2014-15.
- It is a 24X7 Service
- Being operated through RMRS of respective Health Institutions.

- Provides transport to referrals under RBSK program, malnourished children, FW cases (hospital to home) in addition to categories mentioned above.

Toll Free 104 Medical Advice Service

104 Medical Advice Service has been started in the State in November, 2011. The service is being provided by a centralized 104 Call Center (24 x 7) established at State Headquarter. This Medical Advice Service help the people to get all information related to health by dialing a toll free number "104".

Through this helpline following services may be provided to the general public of State:-

- Medical advice using Triage (classifying the caller's condition into "Critical", "Serious" or "Stable" states).
- Counseling :
- Rehab counseling (Alcohol, Drugs, Smoking,)
- Psychological counseling (Anxiety, Depression, suicidal tendencies, chronic diseases like cancer etc.)
- Family planning counseling
- Counseling about stigmatized diseases (HIV, AIDS, Leprosy)
- First level medical advice and suggestive medication
- Complaint Registration against institution or person of Government
- First aid advice
- Information Directories Services:
- Through 104, citizens can have access to the details of various facilities in their area like medical facilities- hospitals, pharmacies, independent practitioners, diagnostic services, rehabilitation centers and other health care services.
- Women and child health care information
- Information regarding alternate medication (AYUSH)
- Nutrition and hygiene Information
- Health alerts and warnings
- Submission of any department related grievances
- Advisory services to adolescents
- Two new advice services have been started recently - complaint of non compliance of PCPNDT act
- Information and Knowledge regarding Malnutrition treatment Center

Badhai Sandesh

To promote the birth of girl child it is necessary to be celebrated as a festival, therefore a signed Badhai Sandesh from Hon'ble Chief Minister is given to the family on birth of girl child in Government health institutions. The programme has been started at Zonal district headquarter from 11th Oct 2014 and in all districts of the State from 14th November 2014. Till now, Badhai Sandesh have been given up to Oct. 2015 approximately 331742 Families.

E-INITIATIVES under NHM in Rajasthan

Session- E-INITIATIVES under NHM in Rajasthan

Sessions Objective-

1. To develop understating of E-Initiatives under NHM in Rajasthan
2. To gain knowledge about interventions under E- initiatives

    a. PCTS
    b. E-Aushadhi
    c. OJAS
    d. ASHA Soft
    e. E-UPKRAN
    f. IMPACT

To understand the use of E-INITIATIVES and outcome impact of the same on servicedelivery and access of health services

Contents-

E Initiatives of NHM in Rajasthan, Cocept, objective, farmats userguide, reporting mechanism of varius e-Initiatives line- PCTS, E-Aushadhi, OJAS, ASHA Soft,E-UPKRAN, IMPACT

Methodology

Group Exercise, Presentation, Brain storming

Note for Trainer's

Session shoud be begin with brief introduction of various e-initiatives under NHM in rajasthan

Activity -1

Facilitator should develop the PPTs and make presentation. Handson practice may be done to fill ups the formats and entry process involved in various initiatives

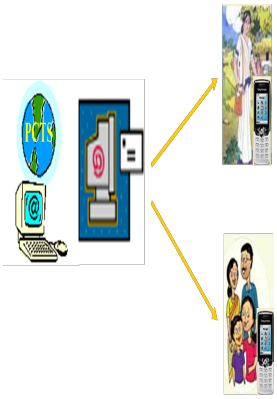
At last 10 minutes may be kept for discussion on questions of participants may have.

E-INITIATIVES

1. **Pregnancy, Child Tracking & Health Services Management System (PCTS)**
   2. Implemented through out the state since 2008.
   3. All 16500+ health institutions and all 44000+ villages are covered.
   4. Data capturing directly from PHC/CHC/Block and hospitals.
   5. Directly connects the citizen with the government as the government can reach individual citizen through Swasthya Sandesh Sewa.
   6. Integrated with other portals.
      a. PCTS exports data to MCTS of GoI on daily basis.
      b. PCTS provides data to HMIS of GoI on monthly basis.
      c. Has been integrated with ASHA soft for online payment to ASHAs.

PCTS - Services

- Tracking every Pregnant woman by name till safe delivery.
- Tracking of every new born child for complete immunisation.
- Alerts on mobile to the citizen through Swasthya Sandesh Sewa for Vaccination.
- Periodic Work plans on mobile phones of ANM to help her schedule the services properly.
- Date wise ANC schedule for individual pregnant woman.
- Date wise Vaccination Card of the child for the parents.
- Demand Forecasting for vaccines is useful in conducting immunisation sessions effectively.
- Location wise surveillance of Sex Ratio at birth to help in minimizing female foeticide.
- Online stocks of vaccines and essential medicines at all the health institutions.
- Alert reports for Health Institutions not having ANMs.
- Dissemination of necessary information to the health workers, to counsel the target citizen for institutional delivery.
- Monthly Performance Appraisal card for every health facility to keep the health workers on toes.
- Online directory of Government Health Institutions & Anganwadis.
- Online Directory of Health Workers (ANM, ASHA, etc.).



PCTS स्वास्थ्य सन्देश सेवा

ANM को आगामी 15 दिवस की अवधि में सम्भावित प्रसवों हेतु पाक्षिक सूचना

ANM को आगामी माह में बच्चों के टीकाकरण की सूचना

2. E-Aushadhi

The e-Aushadhi is a web based application which deals with the management of stock of various drugs, sutures and surgical items required by different district drug warehouses of Rajasthan state. "e-Aushadhi" helps in ascertaining the needs of various district drug warehouses such that all the required materials/ drugs are constantly available to be supplied to the user district drug warehouses without delay. This includes classification/categorization of items, codification of items, etc. The prime objective of a District Drug Warehouse is to supply drugs to the various medical institutes that are associated with the given district drug warehouse.

Key features of the Software "e-Aushadhi"

- Store, Maintain, Update, Search & Display information related to drugs.
- Ability to define the items into groups, sub groups, categories, codification of drugs.
- Provision to maintain expiry date / shelf life for an item wherever applicable.
- Alert with different colour for to be expired item will be generated well before its expiry date
- Indent generation
- Condemnation Requests
- Compilation of Indents 91
- Ability to generate indents automatically based on reorder, minimum, maximum planning
- Ability to define and maintain various levels of stores and that will allow maintenance and keeps transaction history.
- Ability to maintain control (such as quantity tracking) on stocks and their replenishment.
- Ability to reserve items within the district ware house.
- Ability to search items using a number of search criteria like identification id, item specification, equivalent / related item etc
- There is provision to link all drug warehouses hierarchically to understand their physical as well as functional structure
- Transfer of Drugs between Drug Warehouses
  There is provision to record transactions while moving items from one location to another.

Benefits of Software based Inventory Management System

- Better Planning, executing and controlling
- Online Tracking of Drug Inventory
- Streamlining of Inter-Drug warehouse Transfer
- Efficient control of Inventory
- Multi user, Multi location storage
  Comprehensive Help
  Customizable Reports
-

DRUG WARE HOUSE INVENTORY SERVICES OPTIONS

Drug Inventory:

This option will be used to add physically counted quantity of the items in stock on Current financial year/at the time of initializing the system.
This option will also allow the user to update the existing item details according to the batch no, item name and serial number of the items.

Issue to Hospital / Institutes

This process is used for issuing (offline) drugs to Institutes by DDW Passbook of drugs will be issued to each Store Store personnel will fill the passbook. Store incharge from District Institutions will go to respective Drug warehouse to collect medicines. The data entry operator will fill in the drugs details in the following form

Drug Transfer

This Interface is used to transfer the Drug from a store to another store of the similar hierarchy level through RMSC.

Breakage / Lost Drug Details

This Option will be used to maintain breakage/damaged item details.

Miscellaneous Consumption
This process will be used to maintain miscellaneous consumption details at drug warehouse based on the following parameters- drug warehouse, item category, group name, item name, batch number, available quantity, consumption quantity, consumption unit and remarks.

Supplier Return Desk

This desk will be used to maintain the supplier return details by the drug ware house The reason for return may be not suitable items are supplied by the supplier.

Physical Stock Verification
This desk is used to verify the stock position at any given date. By matching the physically counted quantity of the items with the stock ledger.

Condemnation Register Desk
This process will be used to mark the items for condemnation.

Quality Control Desk
This desk will be used to maintain the details of the quality check control performed on items provided by concerned drug ware house or supplier.

Sample Register

This desk will be used to maintain the sample details received from the different sources. The following activities will be controlled through this desk-

oReceiving of the sample,

o Returning of the sample and

o Disposing of the sample.

Drug Locator – This is used to locate a particular drug in various Drug warehouses.

Responsibilities of DDW

- To be well acquainted With the e- Aushadhi application.
- Hardware Maintenance (Desktop Computers, Printers, UPS etc.
- Availability of Broadband Internet Connection Co-ordination with respective vendor
- Manpower/ Operators for Operationalization of application

3. Online JSY and Shubh laxmi payment (OJAS)

Introduction:

OJAS has been implemented all over the state from 1 August 2015 at CHC and higher govt. health institutions. OJAS is an online system which facilitates the user to capture beneficiary wise details of payment for JSY scheme and Shubhlaxmi Yojna, after due eligibility at CHC & above government health institutions. Online payment of JSY scheme and Shubhlaxmi

Yojna to beneficiaries bank accounts and generate various kind of reports to monitor the progress of the programme and various health information's.

Salient Features

- "OJAS Software" is a web based system.
- This is the password protected system and run by the authorized user only.
- This system has been integrated with PCTS software. The master data base and users have been used for this system.

Objectives

- To monitor the performance of each delivery including female child every day/ month.
- On line payments in JSY and SLY
- To identify the Gap area and need assessment at facility level as well as at community level.
- Timely and transparent payment for beneficiaries and system.

  JSY and Shubhlaxmi payment was paid by bearer cheque to the beneficiaries. The introduction of the online payment system all over the state from 1 August 2015 at CHC and higher govt. health institutions has ensured timely and seamless online payment for JSY and Shubhlaxmi beneficiaries and transparent payment system in these schemes where financial transaction is involved. Beneficiary directly gets benefits of the schemes in their bank accounts. It was introduced to monitor the performance of each delivery including female child every day/ month.

Advantage

- Now it is possible to monitor the physical and financial progress under the programme.
- Simplification of payment system; no more multi-channel payment.
- Assessment of the health services provided at community level is easier.
- Various kinds of reports can be generated to monitor the progress of the programme and health information.

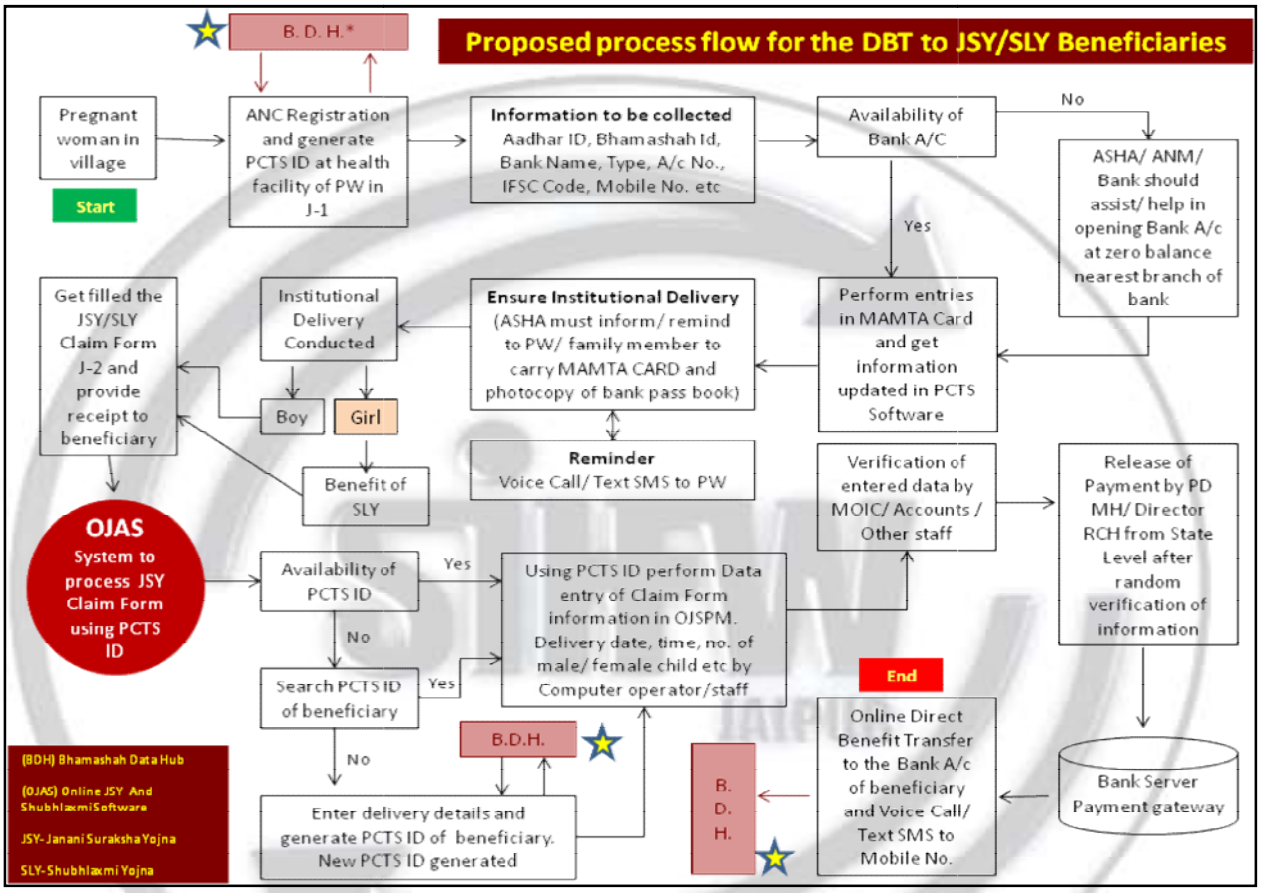
Following is the number of JSY & Shubhlaxmi Beneficiaries that have been paid through OJAS:

Reports now possible from OJAS

- Thus, Rajasthan is the first state to start online payments of JSY and Shubhlaxmi scheme.
- Assessment of daily status of delivery at health institutes is possible.
- Weight of baby can be watch at state level so to ensure follow up on LBWs babies.
- Hospital stay of delivered women can be watched.
- Daily ratio of birth of girl child can be watched at every institutes and district and state level.
- Modalities of referral transport can be watched.

Death of women can be watched at stay in institutes.

- **Results on costs/ cost effectiveness**: "OJAS Software" is a web based system. The software has been developed by NIC, Rajasthan state unit and NHM, Rajasthan. For online payment, Bank of Baroda has been selected, which provides service without any additional charges.
- Results of Independent evaluation:
- Target population/ Beneficiary: Beneficiaries under JSY & Shubhlaxmi schemes
- Process Flow



4. ASHA Soft- The Online Payment and Monitoring System for ASHAs

Introduction

Since the inception of National Rural Health Mission (2005), Accredited Social Health Activist (ASHA) component has played an important and critical role in the implementation of NRHM activities. ASHA is a community level worker, whose role is to generate awareness on health issue and also is an interface between community and health services. In Rajasthan ASHA is known as ASHA Sahyogini, because she is a joint worker between Department of Medical Health and Department of Women and Child Development.

The ASHA programme was introduced as a key component of the community process intervention, this programme has emerged as the largest community health worker programme in the world and is

critically important in enabling people's participation in health. ASHA is selected by Gram Panchayats and works with the help of Anganwadi Centres.

To reduce the MMR and IMR and other health services, approximately 47000 ASHA (Accredited Social Health Activist) Sahyoginis are functional in the state. ASHA Sahyoginis are paid incentives against providing various health services to pregnant mother and child and for providing health services to the community. Besides ASHA Sahyogini also renders important services under National Disease Control Programme, such as Malaria, TB, Leprosy, Cataract and many more health provisions.

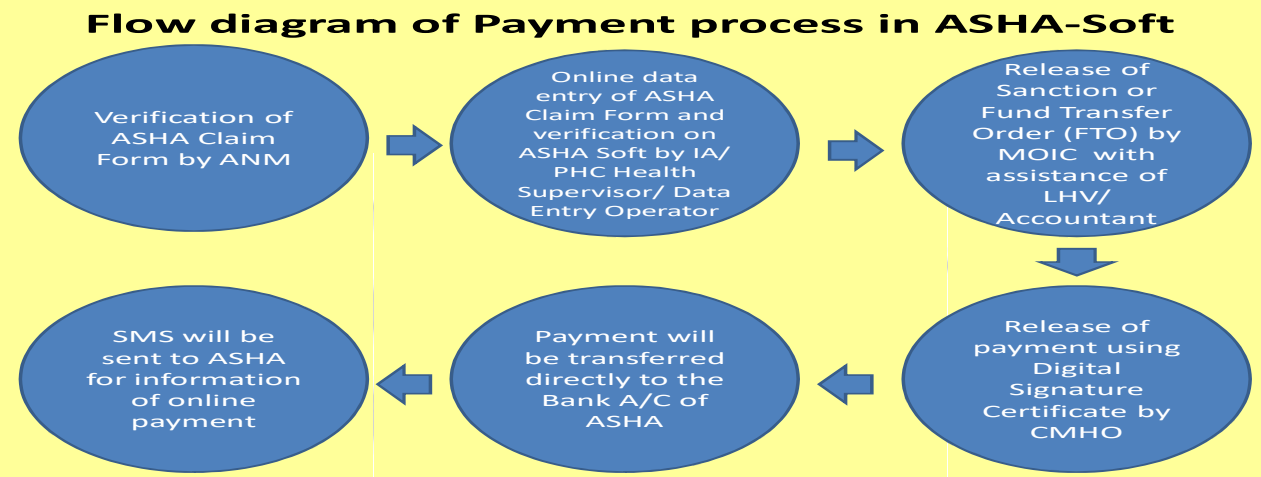
ASHA are paid incentives against 26 types of activities and that also at different time period and from various channels. These complexities in their payment system cause various problems for ASHA's payments. Because of not being paid on time, ASHA's were getting de-motivated to render proper services to the community. Getting payment for every activity on time is a challenge.

To ensure their timely and seamless online payment, ASHA software popularly known "ASHA Soft" has been conceptualized. It is an unique initiative by the NHM, Rajasthan.ASHA Soft is an online system which facilitates the user to capture beneficiary wise details of services given by ASHA to the community, online payment of ASHA to their bank accounts and generate various kinds of reports to monitor the progress of the programme

It is an online system which facilitates the department:

- To capture beneficiary wise details of services given by ASHA to the community.
- Online payment of ASHA to their bank accounts.
- Generate various reports to monitor the progress of the programme.

The process of payment:-



Important Timelines

SNo.	Activity	Responsibility	Date
1.	Verification of ASHA Claim Form	ANM	Between 26th – 30th of the month
2.	Online data entry of ASHA Claim Form and its verification on ASHA Soft	IA/ PHC Health Supervisor/ Data Entry Operator	
3.	Release of sanction or fund transfer order	MOIC with assistance of LHV/ Accountant	By 4th of the next month
4.	Release of payment (using DSC)	CMHO	Between 5th to 7th of the next month

Claim under ASHA Soft

- ASHA Soft has been simplified the process significantly, which has introduced standardized claim forms for ASHA for all 26 activities.
- The forms are submitted by ASHA at her Sub centre where the ANM verifies them. The Claim forms for all 26 activities in a month are submitted at the end of the month by the ASHA and once verified by the ANM, the forms are sent to the concerned PHC, CHC and Block PHC for data entry.

- All claim forms are entered into the system as per predefined schedule of data entry and verification (generally 26th of every month to 2nd day of next month).
- As the next step, sanctions for each of the service category are generated by the MOIC (Medical Officer in Charge) for all ASHAs in his/ her jurisdiction and all these sanctions are generated as per predefined schedule (generally 3rd day of next month to 5th day).
- Sanction letters are generated accordingly, with the system and maintained online in pdf format for later reference and finally the Fund Transfer Order is generated at the district level by concerned CMHO using DSC.

Advantages of ASHA Soft

- It would be possible to monitor the physical and financial progress under the programme.
- Simplification of payment system No more multi-channel payment.
- To keep the motivation level high of each and every ASHA by timely and simplified payment process.
- Assessment of the health services provided at community level would be easier.

Report now possible from ASHA Soft

- ASHA's monthly payment status report as per requirement of A/c division/Bank etc.
- ASHA Performance report (For their Appraisal)
- Activity wise performance report of ASHA.
- Head wise budget utilization report.
- Training status report of ASHA.
- Village wise/SC wise/PHC wise/CHC wise number of in place ASHA.
- ASHA Profile - A tool to discover human resource pool in health sector. Every month there would be updated information about this human resource pool such as:-
    i. Register ASHA with her demographic & other details
    ii. Updated Training Details and Skill Details
    iii. Identify Training Needs

Thus the online payments are transferred by 7th of next month. The time taken to make the payment has drastically been reduced, from about 2 months to 7 days. The process of payment is very transparent and has almost eliminated the requirement of repetitive manual work which was also prone to many errors.

4. E- Upkaran

e-Upkaran (EMMS) is a comprehensive software solution to improve the Inventory Management & Maintenance Services of Equipments in Hospital's across the Rajasthan.

Requirements from the system

- Inventory mapping
- User manual
- EPM Cell at state and zonal level
- Helpline to take grievances from public
- Software or program
- Training to concerned staff
- RFP for empanelment of R & M agency
- Establishment of Complaint Redressal Cell at the state & district levels to cut break-down of services.

Key features

- ❑ Centralized Equipment Inventory Management
- ❑ Comprehensive Details of Equipment including Commissioning, Decommissioning, vendor details, AMC details etc
- ❑ Complaint Monitoring
- ❑ Equipment Status Monitoring
- ❑ Equipment Usage Monitoring
- ❑ Preventive Maintenance Service Monitoring
- ❑ Breakdown Details of the Equipments
- ❑ Equipment service History and would be help in decision making for repair, service, spare or condemnation of equipment.
- ❑ Ascertain of new needs
- ❑ Customizable Report

Defined and possible Outcomes

- Improved Health services
- Centralized monitoring for optimum utilizations
- Regular updated information and reporting
- Ascertain the new needs and need base rationalization
- Established biomedical equipment repair and maintenance system
- Reduced equipments breakdown time
- Quick win response with better coordination in health programs

5. IMPACT (Integrated System for Monitoring of PCPNDT Act)

It is a web based initiative launched on October 1, 2012 by the Medical Health & Family Welfare department Government of Rajasthan to streamline the PCPNDT activities. It provides the online form F for r registered centres to report to Appropriate Authority. Form F of every woman whose sonography test is conducted is being reported online by every centre. All sonography centres in the state have been enrolled with the Medical, Health & Family Welfare department and details are available in the software. It also provides online surveillance system of government for prevention of sex determination to save girl child. The project has won the SKOCH Award in 33rd SKOCH Summit for Smart Governance on 3rd Sep,2013.