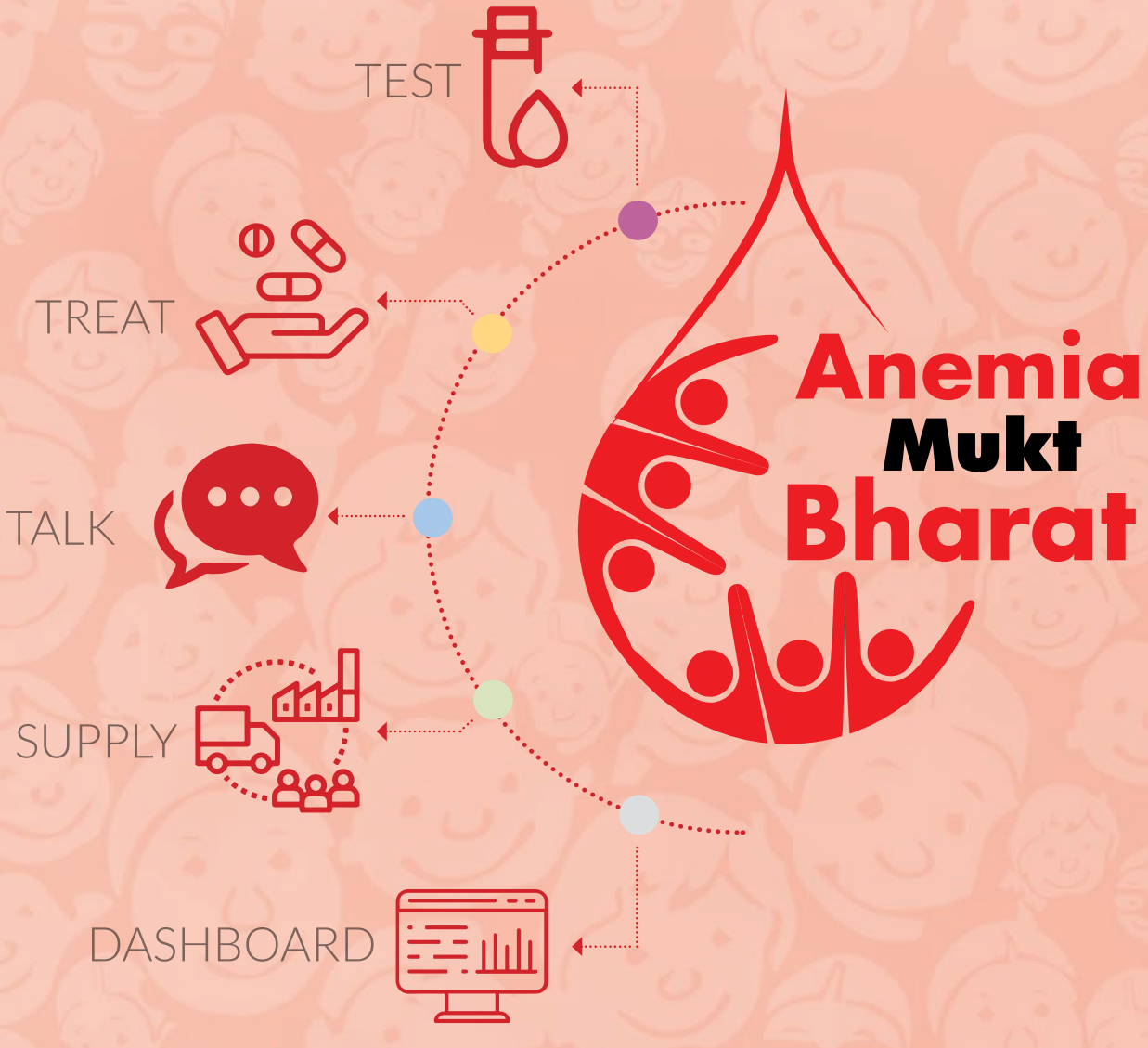
NATIONAL HEALTH MISSION
राष्ट्रीय स्वास्थ्य मिशन

सत्यमेव जयते

POSHAN Abhiyaan
PM's Overarching Scheme for Holistic Nourishment
सही पोषण - देश रोशन

ANEMIA MUKT BHARAT
TRAINING TOOL KIT



Reproductive and Child Health Division
Ministry of Health and Family Welfare
Government of India
November 2019

ANEMIA MUKT BHARAT

TRAINING TOOL KIT

INTRODUCTION

The Ministry of Health and Family Welfare (MoH&FW) has launched Anemia Mukt Bharat Programme with special focus on the health and nutrition needs of children, adolescents, women of reproductive age group and pregnant mothers and lactating mothers.

This will be achieved through six interventions, implementation of which will be facilitated by six robust institutional mechanisms. To facilitate seamless implementation of the interventions, a training tool kit has been developed which will be used to orient and train different stakeholders at various levels for effective implementation of Anemia Mukt Bharat (AMB) strategy.

Guiding principles:

i. Beneficiary centred approach: Commitment to improve health outcomes and reduce anemia prevalence among the target age groups

ii. Inclusive partnerships: Facilitate participation of all stakeholders to achieve the common goal

iii. Accountability: Commitment to inculcate accountability for service delivery among all service providers

iv. Minimizing duplication: Leverage existing institutional mechanisms for capacity building processes

Contents of the training tool kit:

Unit 1: Anemia- An Introduction

Unit 2: Test and Treat Anemia

Unit 3: Talk Anemia

Unit 4: IFA Supply Chain Management

Unit 5: AMB Dashboard Portal

Purpose of AMB training tool kit:

The training tool kit is developed for diverse set of stakeholders (programme managers, medical officers, staff nurse, ANM, procurement managers, data entry operators, teachers, ASHAs and AWWs) to enable them to function effectively and understand their role for effective implementation of various components under AMB. All the stakeholders have been categorized under three groups according to capacity development requirement.

- **Group 1–Managers:** Programme and Process Managers (Procurement, Distribution, Reporting, Pharmacist etc.), Data Entry Operators
- **Group 2–Service providers:** Medical Officers, Staff Nurse, ANM
- **Group 3–Field functionaries:** ASHA, AWW, Teachers

Group	Training requirement on tool kit
Group 1–Managers	Anemia-Introduction, AMB Dashboard, IFA Supply Chain Management (Planning- forecasting- Indent- procurement- Storage and Distribution- Reporting)
Group 2–Service Providers	Anemia-Introduction, Test-Treat Anemia, Talk Anemia: Solid Body, Smart Mind Campaign, IFA Supply Chain Management (Indent, Reporting)
Group 3–Field functionaries	Anemia-Introduction, Talk Anemia: Solid Body, Smart Mind Campaign, IFA Supply Chain Management (Indent, Reporting)

Plan of training:

A one-day training/orientation of the National trainers (resource persons) will be organized by the National Centre of Excellence and Advanced Research on Anemia Control (NCEAR-A), AIIMS, New Delhi. The National trainers will then train the master trainers at the State and further training of the district- block- field-level functionaries at the States will be planned by the State in a cascade mode.

CONTENT

ANEMIA:
AN INTRODUCTION

UNIT
1

Activity 1: Identifying anemia

Activity 2: Introduction to Anemia Mukt Bharat

Activity 1: Identifying anemia

Duration: 15 minutes

Objectives:

After the session, the participants will be able to:

- describe anemia and its importance
- identify the signs and symptoms of anemia

Methodology:

Case study, Question Answer Discussion

Materials Required:

Chart papers, Markers, Board, Board markers/Flipcharts, Case study "Reena's story", LCD projector, PowerPoint slides on various signs of anemia

Step 1: Project the case study **"Reena's story"** and ask a participant to read it.

Reena's story

Reena is a 13-year-old girl. She lives with her parents, two brothers and a younger sister in Rampur, a town in Uttar Pradesh Reena goes to school and also helps her mother with all the household work. Her normal diet is rice and watery dal twice a day, and vegetables once a while. She is very fond of noodles and burgers which she frequently enjoys in the school canteen during recess. She feels very weak and is always exhausted. Her grades are falling as she cannot concentrate in the class. She feels irritable and does not like playing as she starts panting even on slight effort.

Step 2: Lead a discussion by asking:

- What has happened to Reena?
- What other signs and symptoms might Reena be having?

Step 3: Add to the discussion using the **Facilitator's Guide 1.1**

Facilitator's Guide 1.1

Signs and symptoms of anemia

Definitive diagnosis of anemia is made by estimation of hemoglobin (Hb) levels in the blood. However, there are some signs and symptoms that may assist in identifying anemia. They include:

- Paleness or pallor in the inner rims of the lower eyelid (lower palpebral conjunctiva)
- Tongue
- Overall skin
- Nails and palms of the hand
- Soreness of the tongue
- Cracks at the corners of lips
- Brittle and spoon shaped nails
- Dizziness, tiredness, fatigue and low energy
- Unusually rapid heartbeat, particularly during exercise
- Shortness of breath
- Frequent headaches, particularly with exercise
- Lethargy, lack of interest in playing and studies
- Difficulty or inability to concentrate
- Leg cramps
- Lowered resistance to infections and frequent illness

Step 4: Project the following PowerPoint slides (without the headings) on various clinical signs of anemia and ask the participants to identify them.

[Alternatively, a short (10 Min) video can be shown]

Step 5: Conclude by emphasizing "The signs and symptoms of anemia may not be clinically visible until anemia status is severe. However, negative health consequences occur even before the onset of severe anemia."

Activity 2: Introduction to Anemia Mukt Bharat

Duration: 20 minutes

Objectives:

After the session, the participants will be able to:

- list the strategies under Anemia Mukt Bharat

Methodology:

PowerPoint presentation, Discussion

Materials Required:

LCD projector, PowerPoint slides on various signs of anemia

Slide 1

ANEMIA MUKT BHARAT

Intensified National Iron Plus Initiative Program

Target for accelerating the annual rate of decline of anemia from one to three percentage points.

6x6x6 strategy

6 Beneficiaries:

1. Children 6-59 months
2. Children 5-9 years
3. Adolescent girls and boys (10-19 years)
4. Women of reproductive age (15-49 years)
5. Pregnant women
6. Lactating mothers

6 Interventions:

- Prophylactic Iron Folic Acid Supplementation
- Deworming

- Intensified year-round Behaviour Change Communication Campaign including assured delayed cord clamping
- Testing of anemia using hospital digital methods and point of care treatment
- Mandatory provision of iron folic acid fortified food in public health programmes
- Addressing non-nutritional causes of anemia in endemic pockets, with special focus on malaria, hemoglobinopathies and fluorosis

6 Institutional mechanisms:

- Intra-ministerial coordination
- National Centre of Excellence and Advanced Research on Anemia Control
- Strengthening supply chain and logistics
- National Anemia Mukt Bharat Unit
- Convergence with other Ministries
- Anemia Mukt Bharat Dashboard and digital portal—one-stop shop for anemia

What is new?

1. Routine Testing and Treating for adolescent girls and boys in government and government-aided schools (through RBSK) and pregnant women (ANC clinics)
2. Delayed cord clamping
3. Switch from 100 mg to 60 mg elemental iron in prophylactic dose of elemental iron for women and adolescents. The IFA tablets will be sugar coated.
4. Mandating use of fortified food in public health programmes
5. Special focus on use of double fortified salt –iodine and iron
6. Use of invasive digital methods of hemoglobin estimation and point of care treatment.
7. Using Intra venous Iron Sucrose/Ferric Carboxy Maltose for management of moderate/ severe anemia.
8. Special focus on newly-wed women 20–24 years.
9. Covering private schools in addition to government/government aided schools
10. Setting up Programme Management Units for Anemia Mukt Bharat at National and State levels
11. Denominator and HMIS based quarterly progress reports and awards
12. Dedicated AMB dashboard and portal (www.anemiamuktbharat.info)
13. Strengthening programmes to address non-nutritional causes of anemia with special focus on linkage with malaria, fluorosis and haemoglobinopathies
14. Establishment of National Centre of Excellence and Advanced Research on Anemia Control at All India Institute of Medical Sciences (AIIMS), New Delhi
15. State Institutes of Excellence and Advanced Research on Anemia Control
16. Creating a Jan Andolan through intensive communication and newly developed communication material and communication activities

Step 6: Conclude the activity by saying that the Anemia Mukt Bharat campaign envisages the detailed guidelines for prevention and treatment of anemia as Intensified National Iron Plus Initiative Program.

Points to remember:

- ☑ Anemia is present when there is less haemoglobin levels as per age and sex
- ☑ Anemia leads to poor health, economic loss and social burden
- ☑ Anemia can be diagnosed by estimation of hemoglobin (Hb) levels in the blood and clinical signs and symptoms
- ☑ Anemia is caused by nutritional deficiency, infections and genetic illnesses leading to poor production, more destruction of red blood cells or blood loss
- ☑ The signs and symptoms of anemia may not be clinically visible until anemia status is severe. However, negative health consequences occur even before the onset of severe anemia
- ☑ The prevalence of anemia across all ages has been more than 50% amongst the vulnerable groups in India and in the last 10 years, the percentage point reduction of anemia prevalence has been extremely low in most age groups
- ☑ Anemia control programme in India started in 1970 as National Nutritional Anemia Prophylaxis Program (NNAPP) and evolved in 2018 as Anemia Mukt Bharat.

TEST AND TREAT
ANEMIA

UNIT 2

DIAGNOSIS AND TESTING FOR ANEMIA

Session 1: Diagnosis of Anemia
Activity 1: Diagnosing anemia

Session 2: Testing for Anemia
Activity 1: Why to use point of care devices
Activity 2: Hemoglobin estimation using digital hemoglobinometer

PROPHYLAXIS OF ANEMIA

Session 1: Prophylactic Iron and Folic Acid (IFA) Supplementation
Activity 1: Iron and folic acid supplementation prevents anemia

Session 2: Deworming
Activity 1: Deworming: Why and how

TREATMENT OF ANEMIA

Session 1: Oral Iron Folic Acid Therapy
Activity 1: Service delivery platform for testing and treatment of anemia
Activity 2: Treatment of anemia using iron folic acid (IFA) tablets

Session 2: Parenteral Iron Therapy
Activity 1: Parenteral iron therapy: An introduction
Activity 2: Parenteral iron therapy in pregnancy

DIAGNOSIS AND TESTING FOR ANEMIA

Session 1: Diagnosis of Anemia

Activity 1: Diagnosing anemia

Duration: **15 minutes**

Objectives:

After the session, the participants will be able to:

- State the hemoglobin levels as criteria for diagnosis of anemia in various age groups
- Assess the severity of anemia based upon the diagnostic criteria in various age groups

Methodology:

PowerPoint presentation Discussion

Materials Required:

LCD projector, PowerPoint slides

Step 1: Welcome the participants and remind them about Module 1 wherein they have learnt about identification of anemia

Step 2: Ask the participants:

What are the ways to assess whether a person is anemic?

Note down the responses on the board/flipchart. The responses may be:

- ... by identification of signs and symptoms
- ... by estimation of hemoglobin

Step 3: Thank the participants and say,"the diagnosis of anemia has to be based upon some criterion. Also, the identification of signs and symptoms helps to identify anemia, it does not accurately help to assess the severity of anemia.

Step 4: Project the PowerPoint Slide 1

Population	No Anemia (gm/dL)	Mild Anemia (gm/dL)	Moderate Anemia (gm/dL)	Severe Anemia (gm/dL)
Children 6-59 months of age	≥11.0	10-10.9	7.0-9.9	<7.0
Children 5-11 years of age	≥11.5	11.0-11.4	8.0-10.9	<8.0
Children 12-14 years of age	≥12.0	11.0-11.9	8.0-10.9	<8.0
Non-pregnant women (15 years of age and above)	≥12.0	11.0-11.9	8.0-10.9	<8.0
Pregnant women	≥11.0	10.0-10.9	7.0- 9.9	<7.0
Men (15 years of age and above)	≥13.0	11.0-12.9	8.0-10.9	<8.0

Source: (WHO 2011)

Step 5: Let a volunteer read the criteria for diagnosing anemia and assessing its severity for a particular age group. Continue the process till all age groups are covered. Answer the questions, if any.

Step 6: Summarize the activity by saying the diagnosis of anemia and its severity is decided by World Health Organization (WHO) criteria for diagnosis and assessment of anemia based upon the haemoglobin levels for various age groups.

Session 2: Testing for Anemia

Activity 1: Why to use point of care devices

Duration: 10 minutes

Objectives:

After the session, the participants will be able to:

- Measure hemoglobin level by using digital hemoglobinometer

Methodology:

Discussion

Materials Required:

LCD projector, AV Film on using digital hemoglobinometer

Step 1: Remind the participants about the six interventions in "Anemia Mukt Bharat" campaign

Step 2: Tell them "testing of hemoglobin using digital hemoglobinometers and Point of Care treatment of anemia" is a new intervention under Anemia Mukt Bharat campaign. Mass screening for anemia amongst the vulnerable age groups is imperative for initiation of appropriate treatment as per the severity of anemia.

Step 3: Tell them the devices for testing of anemia at facility level and field level are as follows:

1. At the facility level (block level and above):
   - Hemoglobin level estimation will by using Semi-Auto Analysers.
2. At the health facilities below block level (where haematology analysers are not available) and field level:
   - Digital hemoglobinometer will be used for testing of hemoglobin level. The digital hemoglobinometers are point of care testing devices, as they can be used for estimation of hemoglobin, near the beneficiary (for example, at his/her home) outside the hospital.

Discuss the advantages of using Point of Care devices using **Facilitator's Guide 2.1**

Facilitator's Guide 2.1

Advantages of using Point of Care devices

- Faster access to test results which helps in rapid clinical decision making and treatment, ultimately leading to improved health outcome
- Relative ease of obtaining the blood samples compared to venepuncture, especially in children. Capillary sampling can be done from finger, heel or ear lobe
- Less volume of blood sample is required
- Larger number of beneficiaries can be served in a defined period of time
- Overcomes operational limitation of visiting the health facility by the beneficiaries
- No loss to follow up

Step 4: Conclude the activity by saying that Point of Care digital hemoglobinometer devices have great advantages over traditional Sahli's haemoglobinometer and hence they are used for mass screening of anemia.

Activity 2: Hemoglobin estimation using digital hemoglobinometer

Duration: 40 minutes

Objectives:

After the session, the participants will be able to:

- Measure hemoglobin level by using digital hemoglobinometer

Methodology:

Discussion AV Show /Demonstration using checklist

Materials Required:

LCD projector, AV Film on using digital hemoglobinometer

Step 1: Inform them in the present activity, they will be learning how to use a digital hemoglobinometer for estimating the hemoglobin levels.

Emphasize the use digital hemoglobinometer for estimation of hemoglobin is approved by WHO and Indian Council of Medical Research (ICMR). The digital hemoglobinometer devices provided by the manufacturer should be approved for clinical use by a reputed regulatory authority, e.g. FDA, European CE and other relevant Indian regulatory authority.

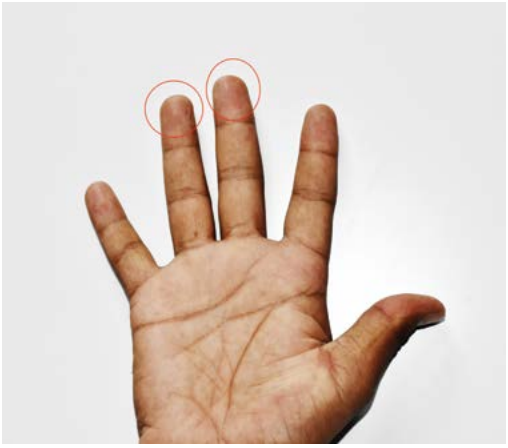
Step 2: Start audio-visual show and discuss the various steps in using a digital hemoglobinometer.

Checklist for estimation of hemoglobin using digital hemoglobinometers:

1. Digital hemoglobinometers with batteries or charger
2. Microcuvettes or strips
3. Lancets
4. Alcohol swab/ spirit cotton
5. Unsterile gloves
6. Tissue paper
7. Biohazard container to dispose the used lancets, microcuvettes/strips

I. Choose the third (middle) or fourth (ring) finger of the non-dominant hand for the finger prick

Figure 1: Fingers for blood collection – 3rd or 4th finger of the non-dominant hand



Precautions:

- Avoid the thumb and little finger
- Avoid fingers with thick calluses
- Avoid fingers with tight rings as they may constrict blood flow

II. Ask the subject to rub their hands to promote blood flow

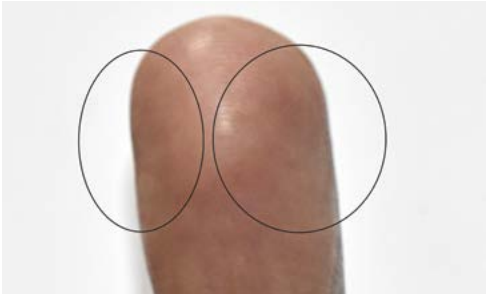
III. Wipe the fingertip with the alcohol pad and let it air dry completely

Figure 2: Choose finger and swab with alcohol

Precautions:

- Do not blow on the finger to dry the alcohol
- Do not wipe off the alcohol
- Do not perform the finger prick until alcohol is completely evaporated

Figure 3: Puncture sites on the finger



IV. Hold the finger firmly just below the centre of the fingertip

Figure 4: Place the lancet firmly on the finger and push the trigger

V. Press and trigger the lancet flat and firmly against the finger at the puncture sites away from the midline as shown in the figure 4

VI. Discard lancet in biohazard container

VII. Release pressure and allow a full drop of blood to collect on finger

VIII. Once a drop of blood has collected on the finger, use the cotton or tissue to wipe away the first drop of blood

IX. Use the second or third drop of blood for estimation of hemoglobin

Select the type of testing device used:

a. Testing haemoglobin using microcuvette

1. Turn "ON" the meter. After the monitor shows three dashes, pull the cuvette holder in its loading position

Figure 5: Cuvette holder in loading position

2. Fill the microcuvette in one continuous process. The correct amount of blood (10 µl) is drawn into the microcuvette. The microcuvette should be completely filled
3. Wipe away any excess blood on the outside of the microcuvette tip
4. Check for air bubbles in the filled microcuvette. If present, use a new microcuvette

Figure 6: Filling of the microcuvette

5. Place the filled microcuvette in the cuvette holder (within 40 seconds after filling the cuvette)
6. Push the cuvette holder to its measuring position
7. Read and record the result. Remove and discard the microcuvette in the appropriate bio-hazard container. Push the cuvette holder back into the instrument

Figure 7: Cuvette holder in measuring position

Precautions in using Microcuvette

1. Use the microcuvettes prior to its expiry date.
2. Store the microcuvettes at 10^0C - 40^0C. Do NOT refrigerate.
3. An unopened box is stable till the date of expiry (printed on the package) at the temperature 10^0C to 40^0C.
4. An opened box is stable for a period 3 months from the date of opening the box or the date of expiry, whichever is earlier.
5. However, at temperature <10^0C or >40^0C both opened and unopened boxes are stable only for a period of 6 weeks.
6. Store the analyser at 0^0C to 50^0C. Operate the analyser at 10^0C to 40^0C, 5 to 90% non-condensing relative humidity.

b) Testing of hemoglobin level using strip

1. Turn ON the meter. The system undergoes an autocheck and auto-calibration after which the battery level, date, time and strip's batch code are displayed within 2 seconds.
2. Enter the code mentioned on the strip bottle.
3. The meter will flash a 'strip' symbol on the display. Insert a fresh test strip into the meter with the arrows on the strip facing up and pointing towards the display.
4. Ensure the correct positioning of the strip with the guiding V notch.

Precautions: Do not allow fingers or other foreign objects to come in contact with the white test area of the test strip.

5. The meter will flash a 'drop' symbol on the display. Allow the second drop of the blood to fall to completely cover the white-coloured test area.
6. Read and record the result.
7. Remove the used test strip from the meter and dispose in appropriate biohazard container.

Step 3: Summarize the activity by saying that hemoglobin estimation by a digital hemoglobinometer can be done either using microcuvette method or strip method. However, one should prick only the middle or ring finger and follow the steps laid down for microcuvette method or strip method, correctly.

Points to remember:

- ☑ "Testing of hemoglobin using digital hemoglobinometers and Point of Care treatment of anemia" is a new intervention under Anemia Mukt Bharat campaign.
- ☑ Point of Care devices have great advantages over traditional Sahli's hemoglobinometer and hence they are used for mass screening of anemia.
- ☑ Point of care devices should be approved for clinical use by reputed regulatory authority e.g. FDA, European CE and other relevant Indian Regulatory Authority.
- ☑ A digital hemoglobinometer is a Point of Care device which can be used to estimate hemoglobin level using microcuvette or strip method.

PROPHYLAXIS OF ANEMIA

Session 1: Prophylactic Iron and Folic Acid (IFA) Supplementation

Activity 1: Iron and folic acid supplementation prevents anemia

Duration: 30 minutes

Objectives:

After the session, the participants will be able to:

- prescribe the dosage for prophylactic iron and folic acid supplementation in various age groups

Methodology:

Pairing exercise PowerPoint presentation Discussion

Materials Required:

Flipchart/White board, Markers, Pre-prepared Red and Blue Slips, LCD projector, PowerPoint slides

Step 1: Lead the discussion by asking the participants:

- Why prophylaxis is needed for anemia? Note down the responses on the flipchart/ board.

Step 2: Say,"Prophylaxis of anemia is important for prevention of anemia. It has two components:

- Iron and Folic Acid (IFA) supplementation which helps to replenish the body iron and folic acid stores and meets the iron and folic acid needs of the body at all ages, irrespective of anemia status.
- Deworming which helps to kill worms which cause loss of iron and protein leading to anemia

Step 3: Inform the participants that they will participate in an exercise.

Step 4: Take a bowl containing the following Red and Blue slips:

Red slips

Children 6-59 months of age	Children 5-9 years of age	School-going adolescent girls and boys (10-19 years) and out-of-school adolescent girls 10-19 years of age
Women of reproductive age (non-pregnant, non- lactating) 20-49 years	Pregnant women	Lactating mothers (0-6 months child)

Blue slips

Bi-weekly, 1 ml of iron and folic acid syrup. Each ml of iron and folic acid syrup containing 20 mg of elemental iron +100 mcg of folic acid	Weekly, 1 iron and folic acid tablet. Each tablet containing 45 mg of elemental iron + 400 mcg of folic acid	Weekly, 1 iron and folic acid tablet. Each tablet containing 60 mg of elemental iron + 500 mcg of folic acid
Weekly, 1 iron and folic acid tablet. Each tablet containing 60 mg of elemental iron + 500 mcg of folic acid	Daily, 1 iron and folic acid tablet starting from the fourth month of pregnancy (that is from the second trimester), Continued throughout pregnancy (minimum 180 days) Each tablet containing 60 mg of elemental iron + 500 mcg of folic acid	Daily, 1 iron and folic acid tablet To be continued for 180 days, postpartum Each tablet containing 60 mg of elemental iron + 500 mcg of folic acid

Mix both the slips.

Step 5: Ask 12 volunteers to come out of the group and pick up one slip each. Let them go and sit on their seats

Step 6: Tell them each "Red slip" represents a population group and the "Blue slip" contains the prophylactic dose and dosage of iron and folic acid corresponding to the population group

Step 7: Let both the groups of the volunteers interact for 5 minutes.

Ask each volunteer having "Red slip" to make a pair with the volunteer having "Blue slip" containing the correct dose and dosage of iron and folic acid.

Step 8: After 5 minutes, ask one pair to come forward and read the red slip followed by blue slip.

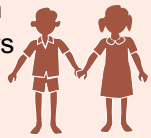
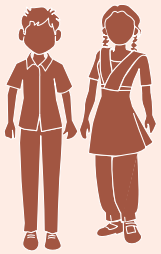
Ask the larger group whether the dose and dosage of iron and folic acid in "Blue slip" correspond to the population in "Red slip."

Let the process continue till the last pair.

Step 9: Project PowerPoint Slide 1 and answer questions, if any.

Slide 1

Prophylactic dosage for iron and folic acid supplementation

Population	Prophylactic dosage for iron and folic acid supplementation
Children 6-59 months of age 	Bi-weekly, 1 ml of iron and folic acid syrup. Each ml of iron and folic acid syrup containing 20 mg of elemental iron + 100 mcg of folic acid. Bottle (50 ml) to have an 'auto-dispenser' and information leaflet as per MoHFW guidelines in the mono-carton. Prophylaxis with iron and folic acid should be withheld in case of acute illnesses (fever, diarrhoea, pneumonia, etc.), and in a known case of thalassemia major/ history of repeated blood transfusion. In case of severe acute malnutrition (SAM) children, IFA supplementation should be continued as per SAM management protocol.
Children 5-9 years of age 	Weekly, 1 iron and folic acid tablet. Each tablet containing 45 mg of elemental iron + 400 mcg of folic acid sugar-coated, pink-colour.
School-going adolescent girls and boys (10-19 years of age) and out-of-school adolescent girls, 10-19 years of age 	Weekly, 1 iron and folic acid tablet. Each tablet containing 60 mg of elemental iron + 500 mcg of folic acid sugar-coated, blue-colour All women in the reproductive age group (15-49 years) are advised to have 400 mcg of folic acid tablets, daily during the period of pre-conception up to the first trimester of the pregnancy, to reduce the incidence of neural tube defects in the foetus.
Women of reproductive age (non-pregnant, non- lactating) 20-49 years 	Weekly, 1 iron and folic acid tablet. Each tablet containing 60 mg of elemental iron + 500 mcg of folic acid Sugar-coated, red-colour All women in the reproductive age group (15-49 years) are advised to have 400 mcg of Folic Acid tablets, daily during the period of pre-conception up to the first trimester of the pregnancy, to reduce the incidence of neural tube defects in the foetus.
Pregnant women 	Daily, one iron and folic acid tablet starting from the fourth month of pregnancy (that is from the second trimester) Continued throughout pregnancy (minimum 180 days during pregnancy). Each tablet containing 60 mg of elemental iron + 500 mcg of folic acid, sugar-coated, red-colour

Lactating mothers (with 0-6 months child) 	• Daily, one iron and folic acid tablet • To be continued for 180 days, postpartum • Each tablet containing 60 mg of elemental iron+ 500 mcg of folic acid • Sugar-coated, red-colour

Prophylactic IFA service delivery platform

Age group	Service delivery platform
Children 6- 59 months 	• ASHA will receive required number of IFA bottles from PHC/SC • For each child ASHA will provide biweekly dose of IFA syrup for 1st week • ASHA will train mother to administer IFA syrup and also recording/ marking in the IFA compliance card • From 2nd week onwards up to the month end (remaining six doses of the month), mother will administer IFA syrup to the child under ASHA supervision. ASHA will undertake fortnightly home visits and encourage mothers to administer IFA syrup in her presence • Thereafter mother will administer biweekly IFA syrup to her child on her own and mark the same on IFA compliance card • ASHA will supervise the mothers time-to-time
Children 5-9 years 	**In school children** • Weekly once Pink IFA tablets will be provided through Spot feeding approach • In Government and aided schools - IFA tablets will be provided after mid-day meal • In Private schools - IFA tablets will be provided after lunch break **Out of school children:** • ASHA will provide IFA tablets during home visits
Adolescents 10-19 years 	• School going adolescent 10-19 years: • Weekly one blue IFA tablet will be given by school teachers • Out-of-school adolescent girls 10-19 years • Blue IFA tablet will be provided through quarterly Adolescent Health Day of Rashtriya Kishore Swasthya Karyakram (RKSK) at Anganwadi centres

Women of reproductive age group 	• States are encouraged to integrate provision of IFA tablets, folic acid tablets and deworming to WRA through immunization day/VHND platform wherever feasible • To begin, 20-24 years WRA will be provided IFA tablet in Nayi Pehal Kit using Mission Parivar Vikas platform • States should ensure preparation of eligible couple register • ASHA will mobilize target beneficiaries (WRA) to VHNDs – ANM will counsel them on IFA consumption and deworming (albendazole) to prevent anemia • If the WRA is planning for pregnancy, she should be counselled to stop IFA supplementation and initiate Folic acid supplementation and continue till 12 weeks of pregnancy (first trimester) • Folic acid tablets will be provided at VHNDs/SCs by ANM.
Pregnant women 	IFA tablets will be provided through antenatal care contacts (ANC clinics/ VHND/PMSMA)
Lactating women 	IFA tablets through VHND platform when they bring their child for immunization

Step 10: With the help of **Facilitator's Guide 2.2,** explain the important information while consuming IFA supplementation

Facilitator's Guide 2.2

Consumption of IFA supplementation: Things to remember

IFA tablets to be taken preferably about one hour after major meals to prevent side effects such as nausea.

Beneficiaries complaining of side effects are advised to take the IFA supplements after dinner and before sleeping.

IFA supplement should be consumed along with foods rich in vitamin C such as lemon in the form of *nimbu-paani, amla* (Indian gooseberry) etc. for improving the absorption of iron.

Drinking of tea or coffee within an hour of consuming IFA should be discouraged, as it may reduce the iron absorption.

Iron and calcium tablets should **not** be consumed together, as calcium interferes in iron absorption. At least two hours of interval should be there between calcium and iron tablet consumption.

Session 2: Deworming

Activity 1: Deworming: Why and how

Duration: 30 minutes

Objectives:

After the session, the participants will be: Sensitized on the importance of deworming in prevention and treatment of anemia

- Deworm various population groups following correct dose and regime

Methodology:

PowerPoint presentation discussion

Materials Required:

LCD projector, PowerPoint slides

Step 1: Lead the discussion by asking:

1. Why deworming is important for prevention and treatment of anemia?
2. Add the missing information using **Facilitator's Guide 2.3**

Facilitator's Guide 2.3

Deworming

Soil-transmitted helminths – which include roundworms (*Ascaris lumbricoides*), whipworms (*Trichuris trichiura*) and hookworms (*Necator americanus and Ancylostoma duodenale*) – are among the common causes of infestation in people who live in the developing world.

Soil-transmitted helminths impair the nutritional status of an individual by multiple ways including:

- Feeding on host tissues, including blood, which leads to a loss of iron and protein
- Internal bleeding which can lead to loss of iron, intestinal inflammation and obstruction
- Diarrhoea
- Impairment of nutrient intake, digestion and absorption

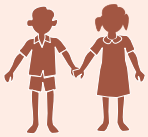
Due to poor hygiene and open defecation practices, worm infestation has a high prevalence in our country across all ages.

Worm infestation (particularly hookworm infestation) along with nutritional deficiency is an important cause of anemia and thus deworming is an important intervention for prophylaxis for anemia.

Step 2: Discuss the dose and regime for deworming in various population groups using PowerPoint Slide 2

Slide 2

Dose and regime for deworming

	Population group	Dose and regime for deworming
	Children 12-59 months of age	Bi-annual dose of 400 mg albendazole (½ tablet to children 12–24 months and 1 tablet to children 24–59 months)
	Children 5-9 years of age	Bi-annual dose of 400 mg albendazole (1 tablet)
	School-going adolescent girls and boys (10-19 years) and out-of-school adolescent girls 10-19 years of age	Bi-annual dose of 400 mg albendazole (1 tablet)
	Women of reproductive age (non-pregnant, non-lactating) 20-49 years	Biannual dose of 400 mg albendazole (1 tablet)
	Pregnant women	One dose of 400 mg albendazole (1 tablet), after the first trimester, preferably during the second trimester

Step 3: Conclude the activity by saying that deworming is an important step towards prevention of anemia along with iron and folic acid prophylaxis. However, correct dose and regime needs to be followed for effective deworming.

Points to remember:

- ☑ IFA supplementation helps to replenish the body stores and meets the needs of the body at all ages, irrespective of anemia status
- ☑ IFA supplement should be consumed along with foods rich in vitamin C for better absorption
- ☑ Worm infestation (particularly hookworm infestation) along with nutritional deficiencies is an important cause of anemia
- ☑ Bi-annual dose of 400 mg albendazole (1 tablet) is given for deworming in all the age groups except children of 12 months to 24 months, wherein half the dose (Tablet Albendazole 200 mg) is given
- ☑ In pregnant women, one dose of 400 mg albendazole (1 tablet), after the first trimester, preferably during the second trimester
- ☑ It is important taking iron-rich foods viz. meat, fish, egg, poultry, green leafy vegetables (mustard, fenugreek (methi), bathua, amaranth leaves, radish leaves), whole pulses (Bengal gram whole, horse gram whole, etc.) and cereals (whole wheat flour, bajra, ragi, jowar). Inclusion of vitamin C rich foods like fruits (gooseberry, guava, lemon, orange, raw mango), vegetables (drumstick leaves, amaranth leaves, capsicum) and sprouts help in improving iron absorption. This helps in prevention of anemia.

TREATMENT OF ANEMIA

Session 1: Oral Iron Folic Acid Therapy

Activity 1: Service delivery platform for testing and treatment of anemia

Duration: 30 minutes

Objectives:

After the session, the participants will be able to:

- describe the service delivery platforms for testing and treatment of anemia
- discuss the guidelines for oral iron folic acid therapy of anemia in various population groups

Methodology:

PowerPoint presentation discussion

Materials Required:

Board, Markers, LCD projector, PowerPoint slides

Step 1: Welcome the participants. Remind them about module 1 wherein they learnt about Anemia Mukt Bharat campaign.

Step 2: Ask, "What are the service delivery platforms for IFA supplementation for various population groups?" Note down the responses on the board.

Step 3: Tell that Anemia Mukt Bharat campaign service delivery platforms for IFA supplementation have been identified for various population (beneficiary) groups.

Step 4: Project the power point **Slide 3** on service delivery platforms for IFA supplementation. Answer the questions, if any.

Step 5: **Conclude** the activity by saying that all the members of the health team must be aware about service delivery platforms for IFA supplementation and the target population should be made aware about the same for screening and treatment of anemia.

Slide 3

Service delivery platforms for testing and treatment of anemia

Target group A	**Children 6–59 months**
Who will screen and place of screening	• ANM: VHND/sub-centre/session site • RSBK team: AWC/ school • Medical officer: health facility
Periodicity	• RBSK/ANM: as per scheduled microplan • Medical officer: opportunistic
Target group B	**Children 5–9 years**
Who will screen and place of screening	• RSBK teams will screen in-school and out-of-school children for anemia • All children with clinical signs and symptoms of anemia will be referred to SC/PHC for Hb estimation and further management
Periodicity	• Once a year • Opportunistic screening, e.g., routine Hb assessment of sick children presenting to health facility
Target group C	**All school going adolescents 10–19 years in government/ government-aided schools**
Who will screen and place of screening	In school premises by RBSK team
Periodicity	Annual
Target group D	**Pregnant women registered for antenatal care**
Who will screen and place of screening	Health service provider at any ANC contact, including Pradhan Mantri Surakshit Matritva Abhiyaan (PMSMA) **All pregnant women will be tested for anemia using digital hemoglobinometers at any ANC contact point**
Periodicity	At every ANC contact

The AMB strategy proposes that adolescent girls and boys will be tested for anemia using digital hemoglobinometers, in schools by RBSK team, annually. Similarly, pregnant women will be tested for anemia using digital hemoglobinometers at all ANC contact points. At all high case load facilities at the block level and above, hemoglobin estimation will be done using Semi-Auto Analysers.

Activity 2: Treatment of anemia using IFA tablets

Duration: 45 minutes

Objectives:

After the session, the participants will be able to:

- describe the service delivery platforms for iron folic acid supplementation
- discuss the guidelines for oral iron folic acid therapy of anemia in various population groups

Methodology:

PowerPoint presentation discussion

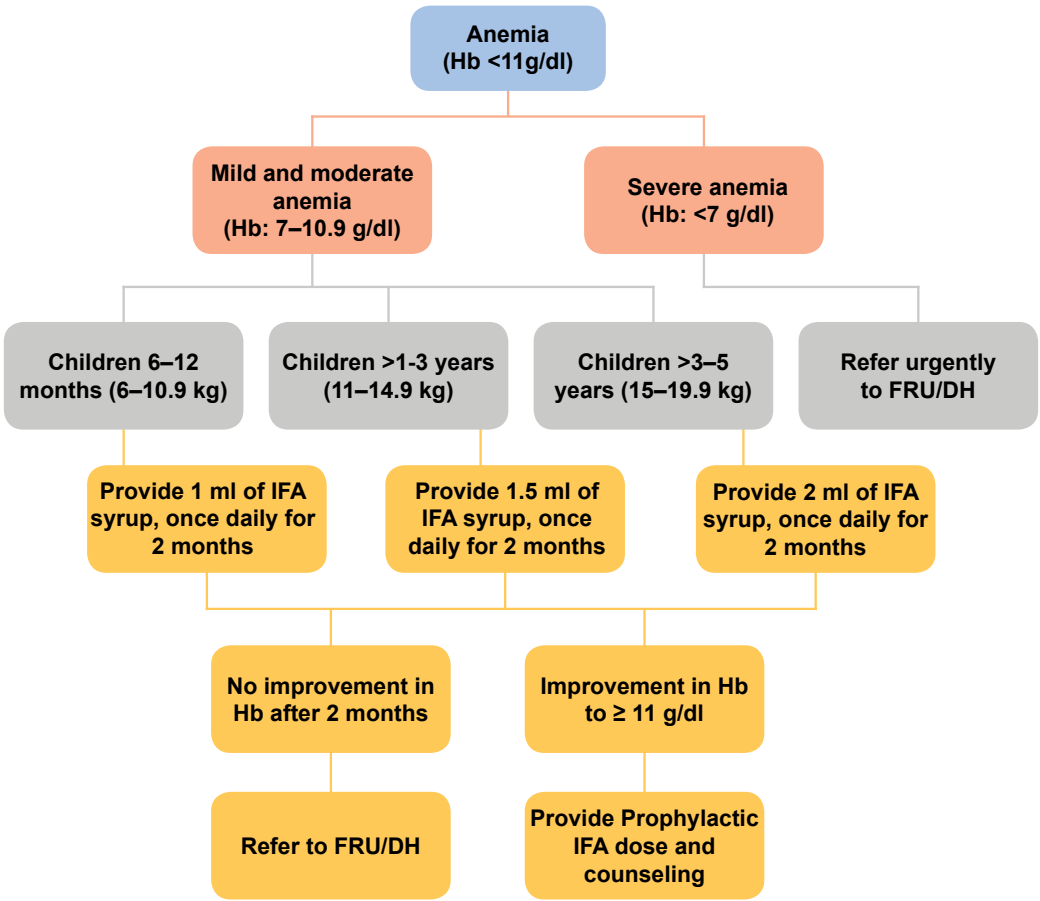
Materials Required:

Board, Markers, LCD projector, PowerPoint slides

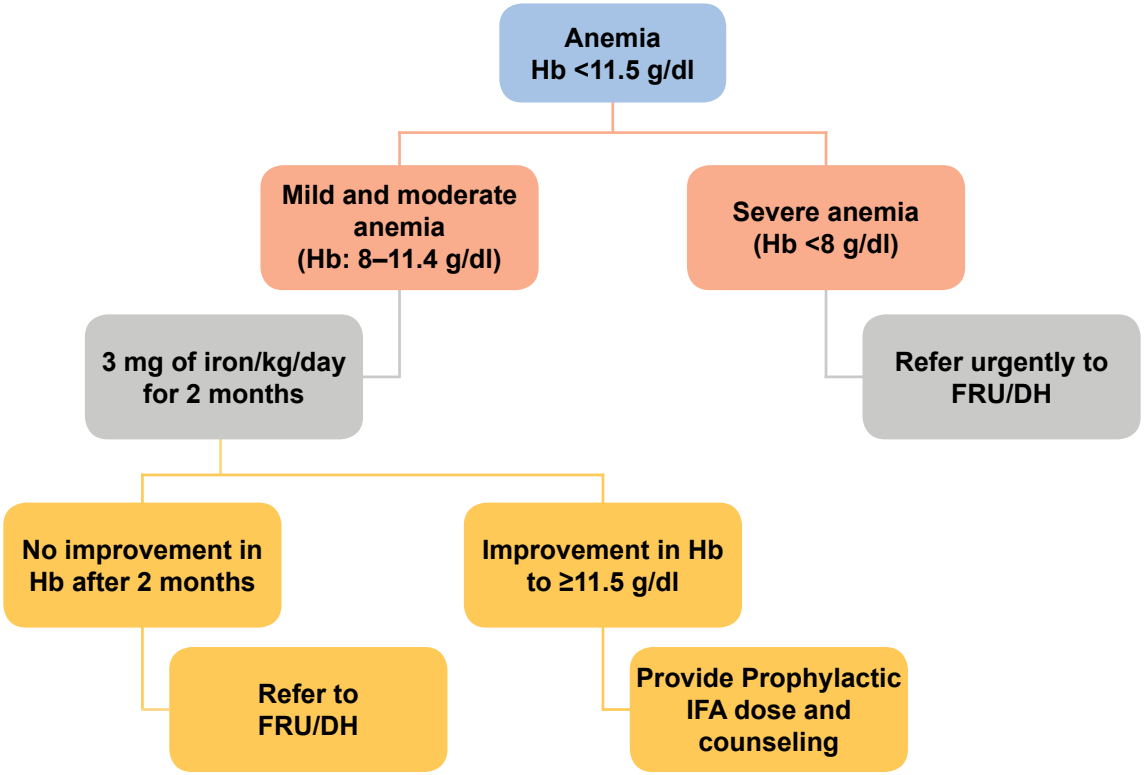
Step 1: Inform the participants that in the present activity they will be learning about the guidelines for treatment of anemia using IFA tablets

Step 2: Project the slides containing the flow charts for treatment of anemia in different age groups. Answer the questions, if any.

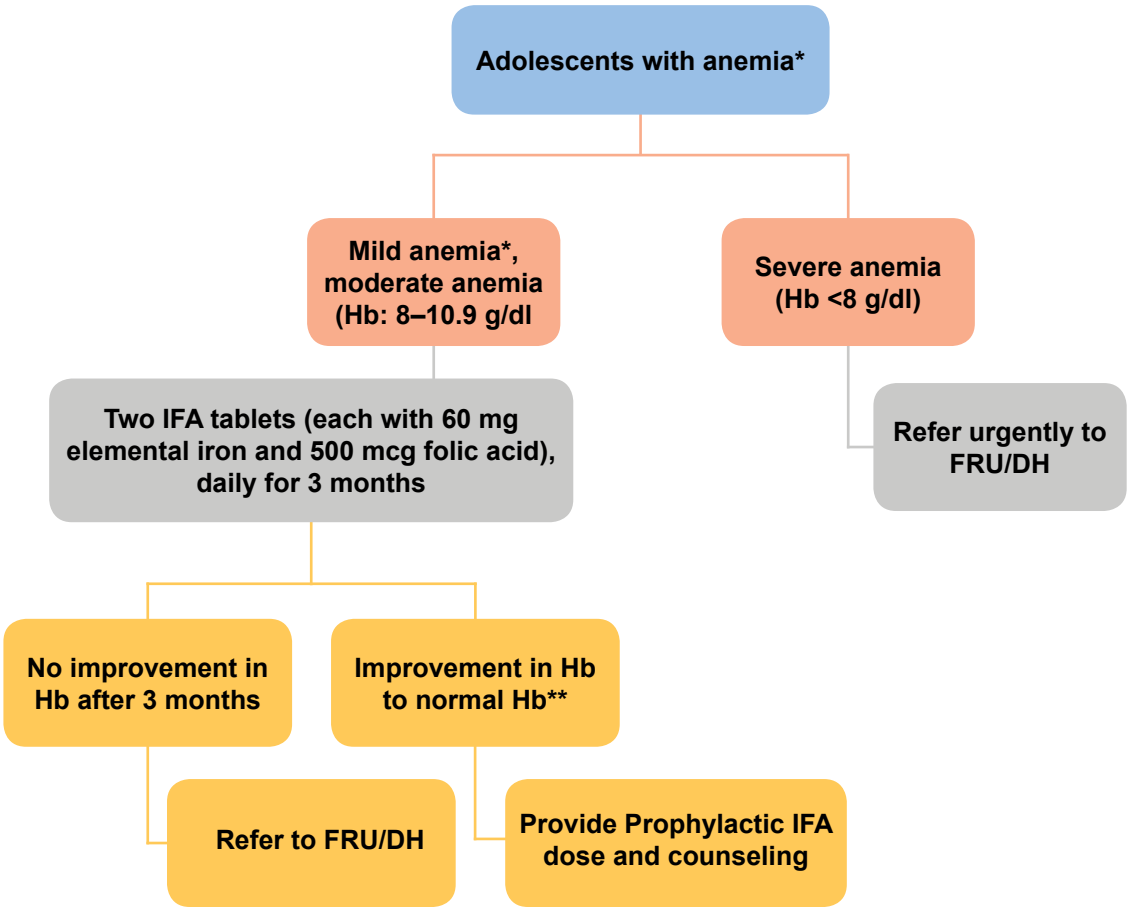
Flowchart 1: Treatment of anemia amongst children (6-59 months)



Flowchart 2: Treatment of anemia amongst children (5–9 years)



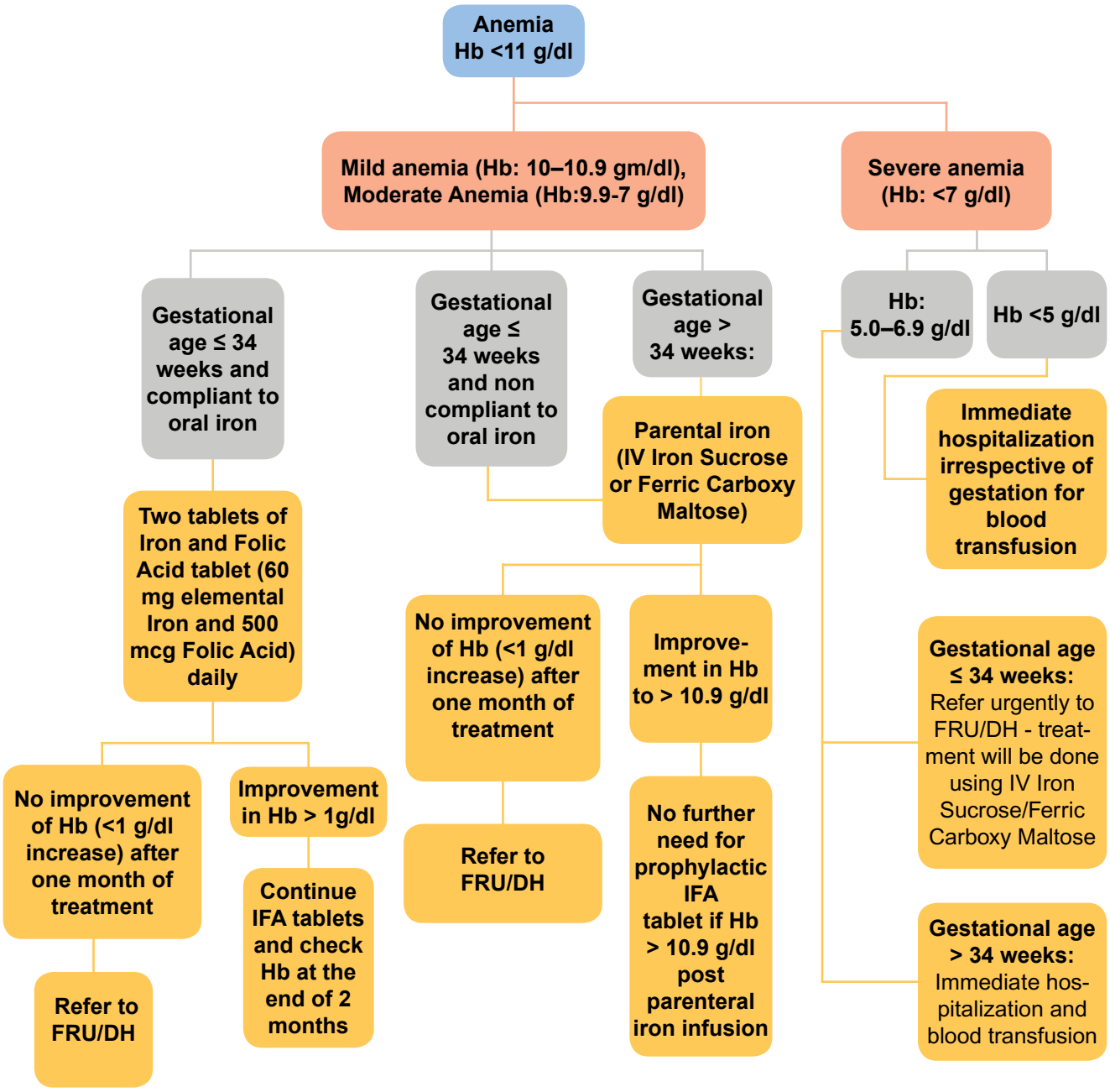
Flowchart 3: Treatment of anemia amongst adolescents (10–19 years)



Classification of Anemia:

Population	Mild Anemia (g/dl)*	No Anemia (g/dl)**
Children (10-11 years of age)	11-11.4	≥11.5
Children (12-14 years of age)	11-11.9	≥12
Women (15- 19 years of age)	11-11.9	≥12
Men (15- 19 years of age)	11-12.9	≥13

Flowchart 4: Treatment of anemia amongst pregnant women



Step 3: Distribute the copies of Flowcharts 1–5 to all the participants

Step 4: Summarize by saying mild and moderate anemia can be treated effectively at all ages by recommended dose of IFA tablets. However, after the hemoglobin levels come to normal, prophylactic IFA dose should be provided along with counselling.

Session 2: Parenteral Iron Therapy

Activity 1: Parenteral iron therapy: An introduction

Duration: 45 minutes

Objectives:

After the session, the participants will be able to:

- describe the importance of parenteral iron therapy
- identify the conditions where parenteral iron therapy is indicated
- provide treatment of anemia with intravenous iron sucrose in pregnancy

Methodology:

Group work and discussion

Materials Required:

Chart papers, Markers, PowerPoint presentation, LCD

Step 1: Welcome the participants and inform them they will be doing a group work

Step 2: Divide the participants into four groups. Distribute the following topics to the groups:

Group 1: Importance of parenteral iron therapy

Group 2: Indications of parenteral iron therapy

Group 3: Iron sucrose administration: Do's and don'ts

Group 4: Iron sucrose administration: Precautions

Step 3: Distribute charts and markers to the groups and let them work for 10 minutes

Step 4: After 10 minutes, let the groups present their work one by one. After each presentation, add the left out information from **Facilitator's Guide 2.4**

(Alternatively, after each presentation a PowerPoint slide from Facilitator's Guide 2.4 may be projected)

Facilitator's Guide 2.4

Parenteral iron therapy

Why parenteral iron therapy

Oral IFA supplementation is often associated with poor compliance mainly due to side effects such as vomiting, nausea, constipation, indigestion, etc.

Parenteral iron treatment circumvents the natural gastrointestinal regulatory mechanisms to deliver non-protein bound iron to the red blood cells. Intra-venous (IV) iron helps in achieving rapid correction of hemoglobin and iron stores, and is better tolerated than oral iron in treating iron deficiency anemia.

Iron sucrose formulation

Iron sucrose is the most common formulation used for parenteral iron therapy.

Iron sucrose is a non-dextran intravenous iron formulation with a complex of polynuclear iron (III) – hydroxide core bounded by sucrose. It has short half-life of 5–6 hours, which is responsible for relatively rapid erythropoiesis and can provide quick rise in hemoglobin within 5 to 7 days.

Indications

Intra-venous Iron Sucrose (IVIS) may be considered as the first line of management in individuals identified with the following conditions:

I. Moderate anemia during pregnancy (after the first trimester of pregnancy) and during postpartum period if:
   - Oral iron is not tolerated
   - Non-compliance to oral iron
   - No improvement in hemoglobin level or improvement less than 1gm/dL after one month of oral IFA treatment

II. Severe anemia (Hb 6.9 to 5 gm/dL) during 13 to 34 weeks of pregnancy

Contraindications:

I. Patients with evidence of iron overload

II. Patients with known hypersensitivity to iron preparation or any of its component

III. Patients with anemia not caused by iron deficiency

IV. Liver disorder like jaundice, cirrhosis or renal failure

V. Acute cardiac failure

VI. Known case of thalassemia, sickle cell anemia or hemolytic anemia

Iron sucrose administration: Dos and don'ts

- Iron sucrose is available in 5 ml vial, with 20 mg of elemental iron per ml of iron sucrose.
- IV iron sucrose should be administered as a slow infusion of 200 mg/dose in 100 ml 0.9% saline administered over 20-30 minutes.
- During the first five minutes, infusion should be given at the rate of 20-30 drops/minute and then increased to 80-90 drops/minute.
- Subsequent doses can be given over a period of 20 to 25 minutes. It is important to administer the drug at this rate since too slow or too fast rates have been associated with side effects.

- Maximum dose should not exceed 600 mg (3 doses of 200 mg each) of iron sucrose in a week.
- Iron sucrose should be administered at primary health care or higher level of health care under the supervision of the medical officer.
- Vital signs such as blood pressure, heart rate, respiratory rate, temperature and foetal heart rate should be monitored before, during (every 5 minutes after initiation of infusion) and at the end of the infusion.
- The expected increase in hemoglobin level for pregnant women with severe and moderate anemia is approximately 2.5 gm/dL and 1.6 gm/dL, respectively after 3 weeks of complete dose of IV iron sucrose treatment.
- To avoid permanent discolouration of the skin due to extravasation of IVIS, patency of the cannula has to be checked by flushing normal saline before initiation of treatment.

Precautions

- All lifesaving equipment should be kept available to deal with any unexpected severe adverse reaction.
- Hand hygiene shall be performed before and after the contact with pregnant women.
- Use sterile and disposable intravenous (IV) infusion set, venflon and syringe.
- Patency of IV cannula has to be ensured, otherwise extravasation of iron could lead to permanent staining of skin.
- Discard the remaining unused drug in the vial after withdrawing the required dose. Do not store the remaining IV iron sucrose for later use.
- In case of any reaction, administer one ampoule of inj. Avil (Pheniramine) and one vial of inj. Hydrocortisone intravenously immediately and contact the medical officer on duty.

Step 6: Conclude the activity by thanking the participants and tell them they will be learning more about parenteral therapy of anemia during pregnancy in the next activity.

Activity 2: Parenteral iron therapy during pregnancy

Duration: 45 minutes

Objectives:

After the session, the participants will be able to:

- describe the importance of parenteral iron therapy
- identify the conditions where parenteral iron therapy is indicated
- provide treatment of anemia with intravenous iron sucrose in pregnancy

Methodology:

Discussion, PowerPoint presentation, Exercise

Materials Required:

Chart papers, Markers, PowerPoint presentation, LCD

Step 1: Welcome the participants and tell them they will be learning about treatment of anemia using intravenous iron sucrose during pregnancy.

Step 2: Run the PowerPoint presentation and answer the queries, if any.

Step 3: Distribute **Handout 1:** Treatment of anemia using intravenous iron sucrose during pregnancy.

Handout 1

Treatment of anemia using intravenous iron sucrose during pregnancy

Indications

Parenteral therapy using intravenous iron sucrose during pregnancy is indicated in:

Moderate anemia during pregnancy (after the first trimester of pregnancy) and during postpartum period if:

- Oral iron is not tolerated
- No improvement in hemoglobin level or improvement less than 1gm/dL after one month of oral IFA treatment

Dosage calculation:

Iron requirement for intravenous administration of iron sucrose can be calculated using Ganzoni's formula.

Total iron deficit (mg) = Body weight* (kg) x (target Hb in gm/dL– actual Hb in gm/dL) x 2.4 + 500*****

**Pre-pregnancy weight. If pre-pregnancy weight is not available, weight recorded during the first visit of first trimester can be used*

***Target Hb for pregnant women = 11.0 gm/dL*

****500 mg for replenishing iron stores in the body of women weighing 35 kg*

If the pregnant women's weight is less than 35 kg, allowance for iron store = 15mg/kg body weight)

Example:

If a pregnant woman has a weight of 60 kg (pre-pregnant weight) a hemoglobin level 9.5 gm/dL:

Total iron deficit = 60 x (11.0-9.5) x 2.4 + 500 = 716 mg

Simplified method:

A total dose of 200 mg of iron sucrose (10 ml of Iron Sucrose) can be infused at a time

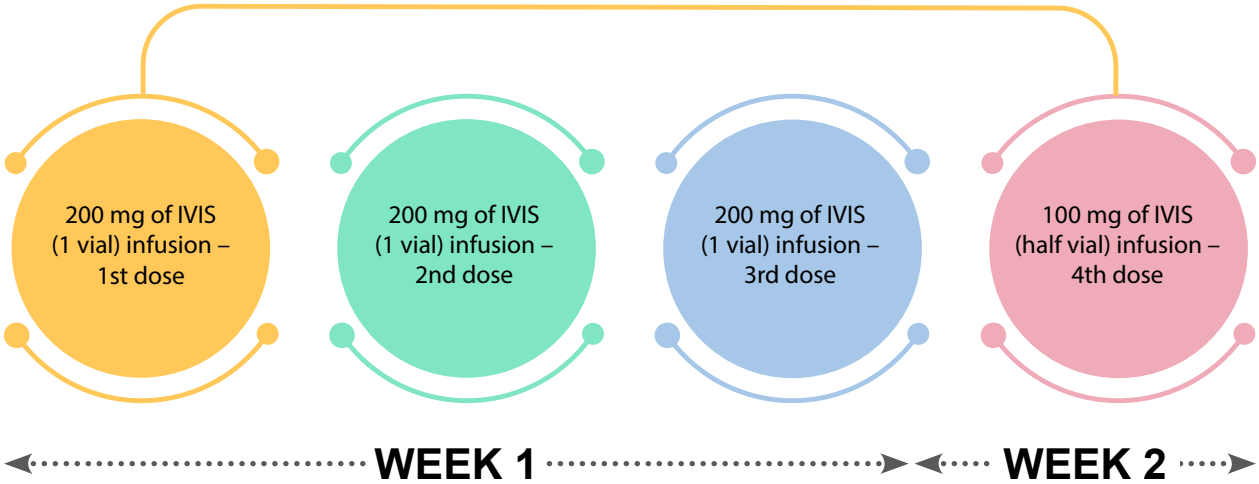
Total iron sucrose dose calculation sheet

Hb / Wt	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
5	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.1	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.2	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.3	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.4	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.5	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.6	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.7	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.8	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5.9	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.1	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.2	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.3	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.4	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.5	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.6	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.7	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.8	900	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6.9	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.1	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.2	800	800	800	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.3	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.4	800	800	800	800	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.5	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.6	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.7	800	800	800	800	800	900	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.8	700	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
7.9	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.1	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.2	700	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.3	700	700	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.4	700	700	700	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.5	700	700	700	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.6	700	700	700	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.7	700	700	700	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.8	600	600	700	700	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
8.9	600	600	700	700	700	700	700	800	800	800	800	800	800	900	900	900	900	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

** If the pregnant women weighs less than 40 kg, weight category of 40 kg should be considered in the chart.*

This table can be used as a guide for Iron Sucrose dose calculation. However, it is advisable to use Ganzoni's formula to calculate the intravenous iron sucrose dose for each pregnant women

Illustration: A pregnant woman with 28 weeks of gestational age weighs 36 kg and if her hemoglobin is 8.3 gm/dL, she will be requiring in total 700 mg doses of iron sucrose (according to the table on page 41). **She has to be given a total of 700 mg (three 10 ml iron sucrose vials with 200 mg iron in each, plus half a dose in the 4th vial of iron sucrose (5 ml) for 100 mg of iron) of iron sucrose in four different visits (one 200 mg of iron sucrose at each visit in first week and 100 mg iron in the last visit during the second week).** She has to make four visits. In each visit, 200 mg iron sucrose has to be transfused and at last visit, 100 mg is to be transfused. The flow diagram below depicts the administration of iron dose to pregnant women.



Documentation and post-infusion management

Document the dose, date of infusion and side effects (if any) observations in the Antenatal clinic (ANC) record and Mother and Child Protection Card (MCPC) of the pregnant woman. The pregnant woman should be observed for 1 hour after infusion and can be discharged on the same day if all vitals are stable.

Follow-up of after iron sucrose administration

The hemoglobin level of the pregnant woman should be checked 4 and 6 weeks after administration of iron sucrose. If there is no change in hemoglobin levels at the end of IV iron sucrose treatment, other causes of anemia should be investigated.

Step 3: Divide the participants into four groups and distribute the following case studies. Ask the groups to work on the case study and answer the questions give below.

CASE STUDY 1

Sunita is a pregnant woman with 24 weeks of gestational age. She weighs 53 kg and her hemoglobin is 6.3 gm/dL

Questions for discussion:

1. What will be the total required doses of 200 mg doses of iron sucrose?
2. What will be the dosage schedule?
3. How many visits will she require for the treatment?

CASE STUDY 2

Rukhsana is having 32 weeks of gestational age. She weighs 39 kg and her hemoglobin is 5.9gm/dL

Questions for discussion:

1. What will be the total required doses of 200 mg doses of iron sucrose?
2. What will be the dosage schedule?
3. How many visits will she require for the treatment?

CASE STUDY 3

Sarita is a pregnant woman with 24 weeks of gestational age. She weighs 68 kg and her hemoglobin is 5.6 gm/dL

Questions for discussion:

1. What will be the total required doses of 200 mg doses of iron sucrose?
2. What will be the dosage schedule?
3. How many visits will she require for the treatment?

CASE STUDY 4

Vanita is a pregnant woman with 29 weeks of gestational age. She weighs 49 kg and her hemoglobin is 8.4 gm/dL

Questions for discussion:

1. What will be the total required doses of 200 mg doses of iron sucrose?
2. What will be the dosage schedule?
3. How many visits will she require for the treatment?

CASE STUDY 5

Zameela is pregnant with 35 weeks of gestational age. She weighs 69 kg and her hemoglobin is 7.6 gm/dL

Questions for discussion:

1. What will be the total required doses of 200 mg doses of iron sucrose?
2. What will be the dosage schedule?
3. How many visits will she require for the treatment?

CASE STUDY 6

Anita is a pregnant woman with 36 weeks of gestational age. She weighs 57 kg and her hemoglobin is 9.2 gm/dL

Questions for discussion:

1. What will be the total required doses of 200 mg doses of iron sucrose?
2. What will be the dosage schedule?
3. How many visits will she require for the treatment?

Step 4: Ask the groups to present their work. Answer questions, if any.

Step 5: Conclude the activity by summarizing that parenteral therapy in pregnancy is done by using intravenous iron sucrose. The dose is calculated using Ganzoni's formula and the treatment has to be spread over two weeks, giving 3-4 doses of 200 mg iron sucrose per week.

Points to remember:

- ☑ Mild and moderate anemia can be effectively treated by oral iron folic acid therapy in all age groups and pregnancy in recommended doses.
- ☑ After the hemoglobin levels come to normal, prophylactic IFA dose should be provided along with counselling.
- ☑ All cases with no improvement in Hb level after oral iron folic acid therapy for recommended duration, should be referred to FRU/ district hospital.
- ☑ Parenteral iron therapy for anemia is done using Intra-venous Iron Sucrose (IVIS).
- ☑ Intra-venous Iron Sucrose (IVIS) is considered as the first line of management in individuals with severe anemia (Hb 6.9 to 5.0 gm/dL) between 13-34 weeks of gestational age.
- ☑ Iron sucrose is contraindicated in patients with evidence of iron-over load, known hypersensitivity to iron preparation or any of its components or non-iron deficiency anemia.
- ☑ During pregnancy, Intra-venous Iron Sucrose (IVIS) may be considered in moderate anemia where, diagnosis of anemia in late stages of pregnancy, no tolerance to oral iron, no improvement in hemoglobin level (Hb level <1gm/dL) after one month of oral IFA treatment, noncompliance for oral IFA tablets and also for anemia in postpartum period.
- ☑ The dose of iron sucrose is calculated with Ganzoni's formula.
- ☑ The treatment has to be spread over 2-3 weeks, with 3 doses per week.
- ☑ The pregnant woman should be observed for 1 hour after infusion for any side effects.
- ☑ The hemoglobin level of the pregnant woman should be checked 4 and 6 weeks after administration of iron sucrose.

TALK ANEMIA:
SOCIAL & BEHAVIOUR CHANGE COMMUNICATION ON SOLID BODY, SMART MIND CAMPAIGN FOR SERVICE PROVIDERS & FIELD FUNCTIONARIES

UNIT 3

TALK ANEMIA

Session 1: Understanding the Behaviour Change Process

Part I: Telling a story using the story cards

Part II: Presenting the first chart depicting the seven steps in behaviour change

Part III: Sharing of personal experiences in changing behaviour by participants

Part IV: Presentations from groups and discussion

Session 2: Communication Activities and How to Use AMB Communication Materials for IPC and Dialogue with Clients

Session 1: Understanding the Behaviour Change Process

Duration: **2 hours**

Learning Objectives:

After the session, the participants will be able to:

- Understand different steps in behaviour change process
- Understand the importance of effective communication for behaviour change.

Focus will be on:

1. Increase in knowledge on anemia
2. Increase in risk perception of anemia
3. Increase in motivation and self-efficacy for required behaviours to prevent/ treat anemia
4. Increase social support for anemia management.

Methodology:

Case study, discussion (examples and case studies around the three behaviours for target groups for AMB: Children 6-59 months, Children 5-9 years, Adolescent Girls 15-19 years, Adolescent Boys 15-19 years, Women of Reproductive Age (WRA), Pregnant Women, Lactating Women)

The session is divided into four parts

Part I: Telling a story using the story cards

Part II: Presenting the first chart depicting the seven steps in the behaviour change process

Part III: Sharing of personal experiences in behaviour change first in groups; then each group shares one experience narrated in the group with the other groups in the plenary sessions

Part IV: Presenting the full chart and discussing each step in the behaviour change process Focusing on the chance that a person may drop out at any stage of the change process

Materials Required:

- Story cards
- Blackboard and chalk or chart paper and sketch pens

Part I: Telling a story using the story cards

Using the story cards narrate the following story: Shanta's Story

Duration: 30 minutes

Story card 1: *Poonam, the ASHA of Rampur Sub Health Centre (SC), was concerned that a large number of women and adolescents in the block were anemic and many infants were malnourished. She always took the opportunity to motivate them whenever they visited the SC. She ensured that she explained the importance of taking IFA tablets regularly and talking to them about the importance of having an iron rich diet. She also supported other ASHAs in her area to motivate pregnant and lactating women and their families to ensure that IFA tablets are taken as prescribed.*

Story card 2: *Shanta, who was about to enter the fourth month of her pregnancy had come to the PHC from a nearby village for her first antenatal check-up. Her husband also accompanied her. After registering the pregnancy and conducting all the necessary check-ups, Pooja the ANM at the PHC explained the need for and benefits of taking one IFA tablet – the red tablet – daily for the next 180 days (six months). Shanta said that she understood the benefits of taking IFA tablets regularly but told Poonam that her family, especially her mother-in-law, did not trust IFA tablets. Her sister-in-law who had consumed IFA tablets during her pregnancy used to complain of nausea and also passed black coloured stools. She had therefore, discontinued taking IFA tablets. Also, both her mother and her mother-in-law believed that taking IFA tablets may result in the baby developing a dark complexion*

Story card 3: *In a friendly and caring manner, Pooja explained to Shanta that taking IFA tablets regularly was very important to ensure the good health of the mother as well as the baby in the womb. She gave her a strip of IFA tablets and also explained the need to take an iron-rich diet such as green leafy vegetables, whole grains and pulses, nuts and oilseeds along with meat, eggs, liver and fish (if the family consumes non-vegetarian food). She further explained that including vitamin C-rich foods such as lemons, tomatoes, guavas, oranges, amlas and sprouts help in absorption of iron in the body. She cheerfully explained that the benefits of taking IFA tablets were far greater than the few discomforts that one might face initially after consuming the tablets. Shanta assured Pooja that she would try to convince her mother-in-law to let her take the IFA tablets.*

Story card 4: *About two weeks later, Pooja visited Shanta's village as part of the routine supportive supervision provided to ASHAs. During her conversation with Poonam, the village ASHA, about the status of pregnant women in the village, she remembered to check about Shanta. Poonam reported that she had visited Shanta and motivated her to start taking one IFA tablet everyday, preferably at the same time without fail. She also told Pooja that although Shanta was keen to start, she had been hesitant to take IFA tablets and that her visit to Shanta's place and explanation to Shanta's mother-in-law of the benefits of taking IFA tablets had helped Shanta to start taking them. Pooja decided to visit Shanta's house along with Poonam.*

Story card 5: *After exchanging pleasantries with Shanta's mother-in-law, Pooja and Poonam enquired about Shanta. She complained that Shanta experienced headaches and nausea after she started taking IFA tablets and that she did not want her grandchild to face any problems due to the mother's condition. She told Pooja and Poonam that Shanta had stopped taking IFA tablets now. While they were talking, Shanta came in offering water to both. She looked very pale and tired.*

Story card 6: *Together, Pooja and Poonam explained the benefits of IFA tablets once again and the grave dangers that it protected both mother and child from. They gave examples of their own pregnancies and how they had faced the same problems while taking IFA tablets and that after some time they had become used to them. The side effects of the tablets also reduced in some time. Poonam was carrying a set of dialogue cards that she used effectively to explain why taking IFA tablets regularly along with an iron and vitamin C-rich diet (which includes dark green leafy vegetables, locally produced fruits and vegetables like pumpkin, papaya, orange, lemon and guavas) was very important for the health of the mother and the baby.*

Story card 7: *Thereafter, Pooja and Poonam decided to meet Shanta's husband Ramlal who ran a small grocery shop nearby. They went to meet him with the village Pradhan whose daughter-in-law had recently delivered a healthy baby in the PHC. They patiently explained all the benefits of regular IFA tablet consumption to Shanta's husband and requested him to ensure Shanta took the tablets regularly. They also explained that an anemic person may feel lethargic, experience breathlessness, giddiness or weakness and get tired easily. The village Pradhan helped in motivating Shanta's husband by narrating how his daughter-in-law and the newborn were both healthy because they had followed all the advice given by the ASHA and ANM didis. Poonam also requested Ramlal to bring Shanta to the PHC for her next ANC check-up which was due after two months.*

Story card 8: *During the next visit, both Ramlal and his mother accompanied Shanta to the PHC where along with other check-ups, Pooja also checked Shanta's haemoglobin levels. The results were satisfactory. This was a result of Shanta taking her daily dose of IFA tablets without fail. Now her family also supported her in ensuring she took an iron-rich diet along with daily IFA supplementation.*

Story card 9: *Shanta delivered a healthy child at the PHC after a few months. All the steps related to healthy delivery such as delayed cord clamping and early initiation of breastfeeding were ensured by the medical team attending to Shanta. Pooja, as a capable team member, counselled Shanta and her family members on continuing consumption of IFA tablets for another 180 days (six months) as it is equally important for lactating mothers to take IFA tablets as it is for pregnant women. Not only does Shanta take her IFA tablets regularly but she also motivates other pregnant women and lactating mothers in her village to take IFA tablets without fail during pregnancy and lactation.*

Once you have completed narrating the story, ask the following questions:

1. What did you think of the story? Do you find families like Shanta's who are reluctant to follow your advice?

2. How did Pooja handle the case? Did she try to find out the reasons for Shanta's mother-in-law not supporting consumption of IFA tablets? Did Shanta's family accept her advice?

3. How did Pooja finally convince the family and win Shanta's support in promoting health care?

4. What is it that Pooja could have done better? (Like counselling the family regarding possible side effects of taking IFA tablets)

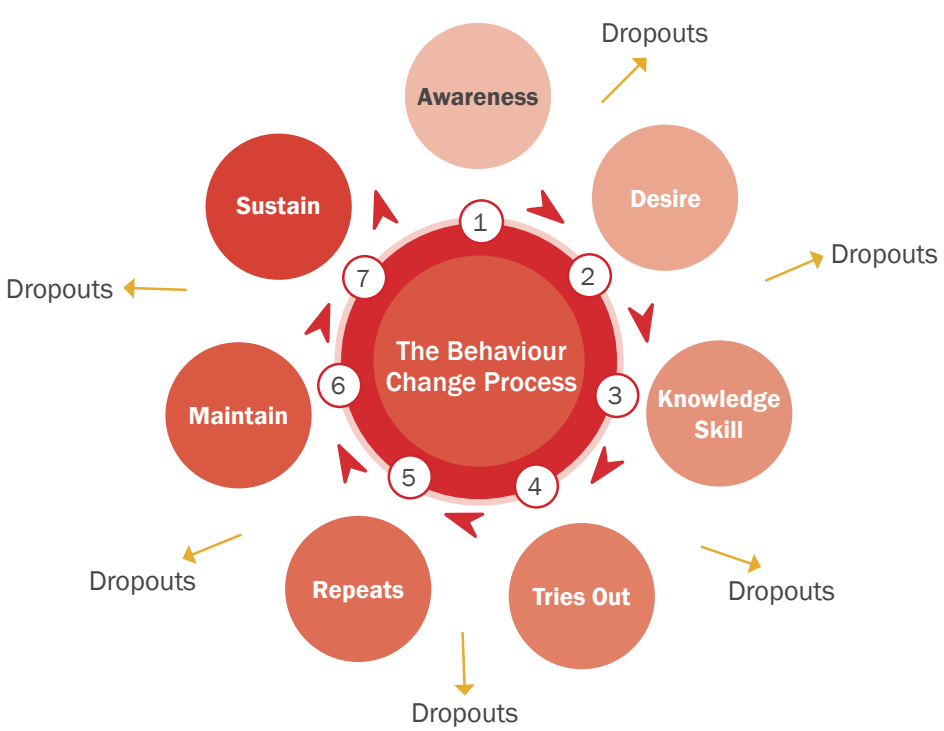
Allow sufficient time for participants to reflect and share their views on each of the above questions. Keep asking questions to elicit the following:

- During Shanta's first visit to the PHC, Poonam was able to create an 'awareness' as well as a 'desire' in Shanta to start taking IFA tablets. But her mother-in-law influenced Shanta and dissuaded her.
- When Poonam visited Shanta at her home, she was able to convince Shanta and her mother-in-law so that Shanta could start taking IFA tablets. Thus, Poonam was able to get Shanta and her mother-in-law to agree to test the 'desired' behaviour change.
- But again, the fact that Shanta felt nauseated and experienced headaches and also that they were not fully convinced about the cause, caused Shanta to discontinue taking IFA tablets.
- Again, Pooja and Poonam influenced and motivated the family by talking to Shanta's mother-in-law and taking the village Sarpanch to meet Ramlal, Shanta's husband and convince him. They were successful in convincing the family to get Shanta to start taking IFA tablets daily.
- In this manner, the family realized that it was good to take IFA tablets daily and to follow the advice of the ASHA and ANM. Shanta continued to take IFA tablets daily and started availing other services, thereby 'sustaining' the behaviour change.
- Finally, Shanta also starting 'advocating' for both pregnant women and lactating mothers to take IFA tablets regularly.

Part II: Presenting the first chart depicting the seven steps in behaviour change

Duration: 30 minutes

Leading from the discussions on Shanta's story in Part I, initiate discussion on the behaviour change process.



Step 1 in the change process is to become **AWARE** of the change that needs to take place. Write 'Aware' on the board and discuss how Shanta became aware about the fact that taking IFA tablets is beneficial for all women. This awareness could come from a neighbour, a relative or a friend or through the ASHA/AWW or any other functionary (using IEC materials such as dialogue cards, pamphlet or recipe book etc.). It could also be through the media – newspaper, radio or TV.

Once the same message is heard several times (e.g. every woman and girl should take IFA tablets regularly, every child should be immunised, every child should be in school, institutional deliveries are safest for mother and child, etc.), one develops a **DESIRE** to test the change. This is **Step 2** of the change process. Write 'Desire' on the board as shown in the chart and draw an arrow indicating that awareness leads to a desire for change.

Now that one desires the change, one will look at ways to make the change and this could be acquiring a new **SKILL** (as in the case of the skill to breastfeed a baby the right way) or **KNOWLEDGE** (as in the case of finding out when and where one's child can be immunized or when an IFA tablet should be taken).

An enabling environment consists of:

- Supportive family, relatives and neighbours.
- Functionaries and volunteers and other opinion leaders through their sustained encouragement, through counselling and dialogue and provision of quality services.
- The media through repeated supportive messaging in jingles, spots, hoardings and wall paintings.

Therefore, **Step 3** is acquiring the necessary skill or knowledge to make the behaviour change. Write 'Knowledge' (in Shanta's case the knowledge was where to get IFA tablets as well as knowing that it had to be taken every day) or 'Skill' (as in the case of being able to breastfeed a child the right way) on the board as shown in the chart and draw an arrow to indicate that desire leads to acquiring the necessary knowledge and/or skill to make that change.

Now that one has acquired the knowledge and/or the skill, **Step 4** will be to **TRY OUT** that change (e.g. starting to consume IFA tablets as advised by the ASHA or AWW). Write 'Try out' on the board as shown in the chart and discuss this as the fourth step in the change process. Individuals analyse the experience of trying out the change behaviour and if the assessment is negative (as in Shanta's case), the person drops out from the process.

If it is positive, the tendency is to try it out once again. In other words, **REPEAT** the action. This is **Step 5** of the cycle. Write 'Repeat' on the board as shown in the diagram and discuss the same with the participants.

If it is negative, like black stools or nausea after taking iron tablets, chances of falling back are high. At this time, the person requires support, solutions, explanations and motivation from the functionary or family to try again and repeat the action.

If the experience of Step 5 was good, one will tend to repeat the action; in other words, **MAINTAIN (Step 6)** the behaviour and soon it becomes a **SUSTAINED (Step 7)** behaviour change or a habit. Write 'Maintain' and 'Sustain' on the board as in the chart with the arrows linking them and discuss these steps with the participants.

The behaviour change process is thus completed.

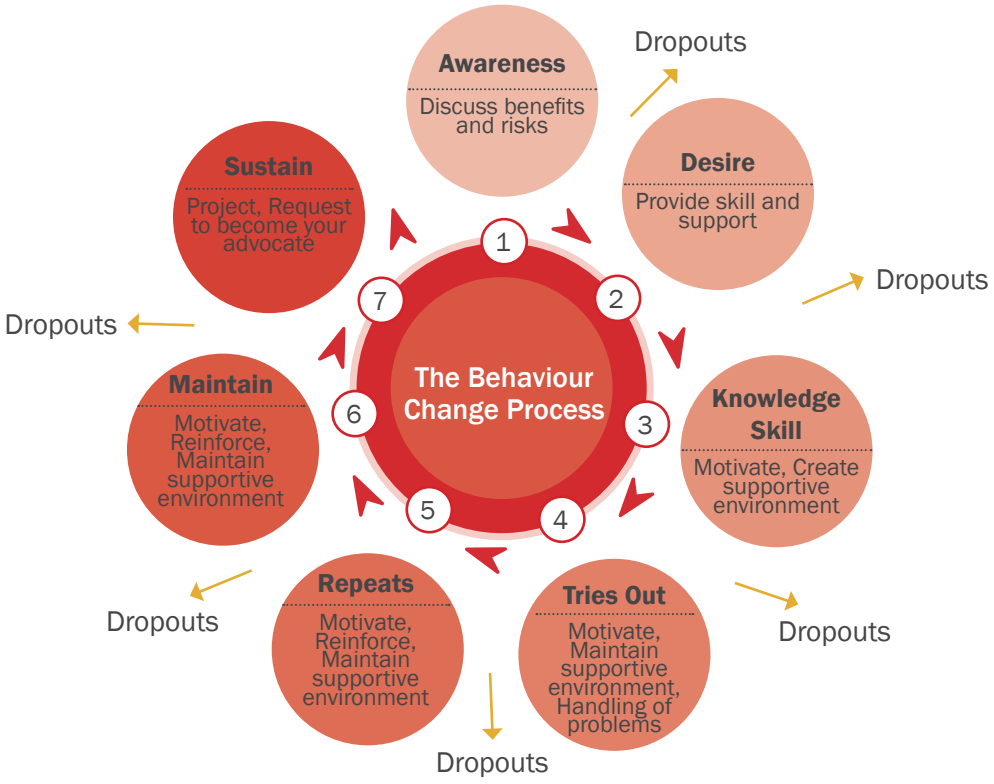
Part III: Sharing of personal experiences in changing behaviour by participants

Duration: 30 minutes

Divide the participants into groups of six or seven members each. Request each participant to share any one of their personal experiences in changing a health or nutrition related behaviour (encourage them to share any experiences related to adopting behaviours that cure anemia) or acquiring a new behaviour with the other members of their group. Request participants to share their experiences keeping in mind the steps discussed and listed in Part II.

Part IV: Presentations from groups and discussion

Duration: 30 minutes



Once each member in the group has shared her/his experience, ask each group to select one of the experiences shared within the group and share it with the other groups. One member from the group has to present the experience.

One member of each group presents one of the experiences from her/his group. They are given five minutes each. Group members should be requested to supplement the presentation by their groups.

Once you have completed narrating the story, ask the following questions:

1. Whether they were aware of the different steps of the change process discussed in Part II while they underwent the change.
2. Whether any member had tried a changed behaviour and given up at any stage of the process. Allow sufficient time to elicit the fact that people drop out and give up. Discuss what the reasons could be for giving up.
3. Whether there was someone motivating them or inspiring them to go ahead with each step of the change process.

Summarize participants' experiences in terms of the role played by them at each stage of the change process. This will help them understand how there is a definite role to play at each step.

Give sufficient time for participants to discuss each question and highlight the key points arising from the discussions.

Show the earlier diagram of the change process and explain/discuss their role at each step.

Concluding the Session

Using the diagram that was drawn in Part II of the session and the discussions from Part III, complete the chart indicating that at any step of the cycle one could drop out from the change process, unless there is someone motivating and 'facilitating' the person to make that particular change.

This is where the Medical Officer (MO)/Staff Nurse/ANM or any other worker should monitor and support the individual to carry on with the change process. We know of many cases where women and adolescent girls drop out after taking IFA tablets for the first few days. If we are to prevent such dropouts, we need to follow up with each family 'at risk' of anemia and support them in understanding the need for the changed behaviour. Therefore, it is critical that an **ENABLING ENVIRONMENT** is created and sustained to help individuals, families and communities make the desired change. An enabling environment would consist of the following:

1. Supportive relatives and neighbours.
2. Functionaries and volunteers and other opinion leaders through their sustained encouragement through counselling and dialoguing and provision of quality services.
3. The media (press, radio, TV etc.) through supportive messaging.

In conclusion, ask the participants how they found the entire session. Ask them what the major learning outcomes were and whether they were able to relate to the behaviour change process. Tell them that we will be building on the concept further and working on behaviour change.

Tips for the Facilitator

Emphasize that the communicator plays an important role at every step of the change process.

In the case of Shanta, the ANM Poonam had first discussed the issue with Shanta at the PHC. When this did not work, she went to her house and spoke to her husband and her mother-in-law and convinced them about the importance of taking IFA tablet. When the child missed the second dose, she brought the Sarpanch and two of Ramlal's friends and convinced the family.

Thus, at each stage, we have to be very conscious that the individual or family could drop out and therefore we need to monitor them and ensure that we continue with our efforts to bring about behaviour change with supportive strategies.

Anemia Prevention in Children, Adolescent Girls and Women – Diet, IFA, Deworming

Behaviour	Key messages
Every child 6–59 months receives biweekly iron folic acid syrup Children 12–59months receive bi-annual deworming (½ tablet to children 12–24 months and 1 tablet to children 24–59 months Every child 5–9 years is protected against anemia with adequate diet diversity, weekly pink iron folic acid supplements and twice yearly deworming	• Anemia is a serious condition and anemic children will become tired, weak and have difficulty studying and doing well in school. Anemia results from a deficiency of iron in the blood. • Children should eat a variety of foods that include green leafy vegetables, proteins and vitamins and consume IFA supplementation every week to protect against anemia • Intestinal worms can cause anaemia. Every child should be given deworming tablets twice a year • Caregivers should ensure screening of girls and boys for anemia and seek for treatment as required
Every adolescent (10–19 years) is protected against anemia with adequate diet diversity, weekly blue iron and folic acid supplementation, twice yearly deworming	• Without adequate iron in the blood, adolescent girls and boys become anaemic and experience tiredness, weakness, lack of appetite and lack of interest in studies • To protect against this, adolescents should eat foods rich in iron and Vitamin C in a diverse diet. • Adolescents should take weekly iron supplementation and six monthly deworming tablets • Caregivers should screen girls and boys if they are anemic and then begin treatment
Every pregnant woman and lactating mother has an adequately diverse diet, takes iron and folic acid supplements daily, takes calcium, deworming and iodized salt	• Anemia is a serious condition and can lead to premature birth, low birth weight babies and even maternal death • Growth of the child (mental and physical) starts in pregnancy, hence prevent anemia in pregnancy • Pregnant women need more iron. Ensure you consume the IFA tablets daily during pregnancy and for at least six months while your baby is exclusively getting nutrition from you through breastfeeding. • Pregnant and lactating mothers: take deworming tablets to help prevent anemia
Every pregnant woman and lactating mother has access to family planning services	• Pregnant and lactating mothers need information and regular, easy supplies of family planning methods to delay the next pregnancy so they can recover from the previous birth
Every child is protected from malaria through the use of bednets	• Malaria causes anemia, which impairs growth and development • To prevent malaria, children must sleep under a mosquito net • In malaria endemic areas, all family members must sleep under a mosquito net

Session 2: Communication Activities and How to Use AMB Communication Materials for IPC and Dialogue with Clients

Duration: **1 hour**

Learning Objectives:

At the end of the session, participants will be able to:

Plan for communication activities, understand and practice their skills of using the AMB communication package consisting of the following materials for IPC and dialogue with clients:

1. Set of posters
2. Dialogue cards
3. Pamphlet
4. Recipe booklet
5. Playing cards
6. 4 Mantra booklet
7. TVCs – Thakaan Mail, Toofan Mail
8. Radio spots – Thakaan Mail, Toofan Mail

Methodology:

Demonstration and mock sessions

Materials Required:

- Set of posters, dialogue cards, pamphlet, recipe booklet, playing cards, 4 Mantras booklets for adolescents, TVCs, radio spots
- Handout 2: How to Use AMB Communication Material

Process:

1. Demonstrate how to use the materials and also share the handout on how to use the materials. Answer any questions that the participants may have.
2. Then ask 2-3 volunteers to conduct a mock session for using each material.

Share the handout on how to use the materials and ask participants to read it. This will take about 15 to 20 minutes. Answer any questions that the participants may have. Prepare a checklist of how these materials can be used on a flip chart.

Handout 2: How to Use AMB Communication Materials

HOW TO USE DIALOGUE CARDS

Audience: **Adolescent Girls, Pregnant and Lactating Women, WRA, Husbands, Fathers, Mother-in-law**

- Position the dialogue cards in such a place that a small group can see it. Or, circulate the cards around the group.
- Point to the pictures and not to the written content.
- Face the audience (for group talks). Move around the room with the dialogue cards if the whole group cannot see them at one time. Try to involve the group.
- Ask the audience questions about the illustrations to check their understanding.
- If the dialogue card has text, use it as a guide but familiarize yourself with the content beforehand so that you are not dependent on the text.
- The dialogue cards 1-13 are common for all target audiences and can be shown to all of them. Dialogue card 14 is for children between 6-59 months, dialogue card 15 is for children between 5-9 years, dialogue card 16 is for adolescents between 10-19 years, dialogue card 17 is for WRA, dialogue card 18 is for pregnant women, and dialogue card 19 is for breastfeeding mothers and can be shown specifically to those target audiences or their caregivers, as appropriate.

HOW TO USE BOOKLET

Audience: **Adolescents and Parents**

Booklets, like the 4 Mantra booklet for adolescents are designed to reinforce or support information given verbally by the functionary. If used properly, they will strengthen the messages that you give to adolescents.

The following are suggestions on how to use booklets (this material can primarily be used by AFHC counsellors):

- Go through each page of the booklet with the adolescent. This will give you a chance to show and tell about a problem or practice and answer any questions that the adolescent has.
- Point to the pictures and not the text. This will help the adolescent to remember what the illustrations represent.
- Assess the adolescent's reactions. If s/he looks puzzled or worried, then discuss the worries or ask questions. Discussions will help establish a good relationship and build trust between you and the adolescent. A person who has confidence in her/his health service provider will often transfer that confidence to the method or health practice selected.
- Give the booklet to the adolescent. Suggest that s/he share it with others, even if the adolescent makes a decision not to adopt the health practice described.

HOW TO USE PLAYING CARDS

Audience: Literate & Semi-literate Community Members, Adolescents, School Children

Before you begin the game, read the instructions provided on the box of the playing cards carefully and then conduct the session. The cards can be played with different audiences that are literate and semi-literate. Mix all the cards and distribute them in the audience. All the participants should have an equal number of cards. Then, conduct the session as per the instructions provided on the box.

HOW TO USE BOOKLET ON HOME-AUGMENTED IRON RICH SNACKS/RECIPES

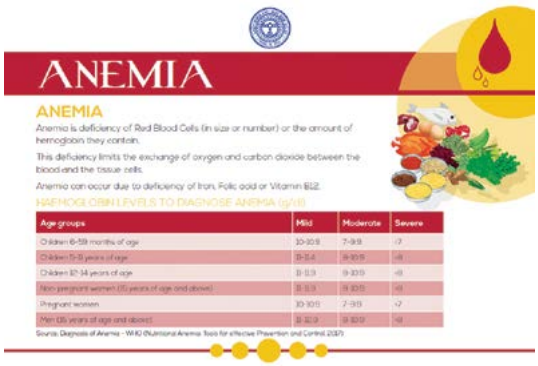
Audience: SHG Women, Literate & Semi-literate WRA

The recipe booklet provides information on the various iron-rich recipes that can be prepared such as poha, barfi, laddoos, chaat etc. using locally available ingredients such as spinach, bajra, soya flour, peanuts, jaggery etc. You can share the recipes with women who visit the health facility and engage them in conversations about their cooking preferences. You can inform them that these recipes are easy and the meals are tasty and can be enjoyed by the entire family. You can discuss recipes they like from the booklet and also give them a copy for their own reference.

HOW TO USE PAMPHLET

Audience: Literate Persons

The pamphlet can be distributed to community members who visit the facility for them to read at their own pace. The pamphlet provides a detailed description of the causes, signs and symptoms of anemia, its prevention and control and do's and don'ts. It can be used effectively as an IEC material for people who can read. It can be distributed among community members during PMSMA events and immunization events. It can also be given during home visits after reminding about the information given during a session.



HOW TO USE LEAFLET

Audience: Literate Persons

The pamphlet can be distributed among clients for individuals to read at their own pace. The pamphlet provides a detailed description of the tips for each target audience regarding diet and IFA intake. It can be used effectively as an IEC material for people who can read. It can be distributed among clients during meetings, festivals and events. It can also be given during home visits after reminding about the information given during a session.

HOW TO USE POSTERS

Audience: Literate Persons

There are two kinds of posters:

- Posters to inform and trigger behaviour (AMB posters for different levels of audiences – like caregivers, WRA, pregnant women, lactating women and adolescents)
- Posters to educate (Do's and don'ts poster)
- Display posters in places of high visibility in the facility such as in corridors, outside and in the maternity ward, outside and in Adolescent Friendly Health Clinics (AFHCs), at the medical store etc. Think about what the poster is meant to do and what community members will see.
- You also can use posters to initiate a discussion with target audiences.
- Ask the target audience what they see and what it means to them. If correct, reinforce their understanding positively. If incorrect, improve their understanding in a polite and patient way.

HOW TO USE TVC AND RADIO SPOTS

Audience: Everyone

A series of TVCs and radio spots have been developed for different target audiences as part of the Anemia Mukt Bharat strategy. One such TVC and radio spot is the Thakaan mail, Toofan mail targeted towards adolescents. All the TVCs and radio spots can be downloaded from the Anemia Mukt Bharat website in the following link and relevant TVCs and radio spots can be shown to specific target audiences by facility staff on their smartphones:

Concluding the Session

The greatest advantage of using communication materials is that they help you in keeping your discussions focused on the topic. The conversation remains on target and brief which is the hallmark of good communication.

Tips for the Facilitator

- This session highlights the importance of using communication aids and aims to help participants to assess their own knowledge of the communication tools that they can use.
- The handout should be shared with participants and the questions raised by them, if any, after going through it can be answered. However, the main purpose of the session is for them to practice the use of the communication materials and the organisation of the sessions. Also help them in generating a checklist for correct usage of materials, which will reinforce learning from the handout.

SUPPLY CHAIN MODULE
FOR PROGRAMME MANAGERS AND SERVICE PROVIDERS

UNIT 4

Section 1: Public Health Supply Chain Management

Section 2: IFA Supply Chain process and action plan

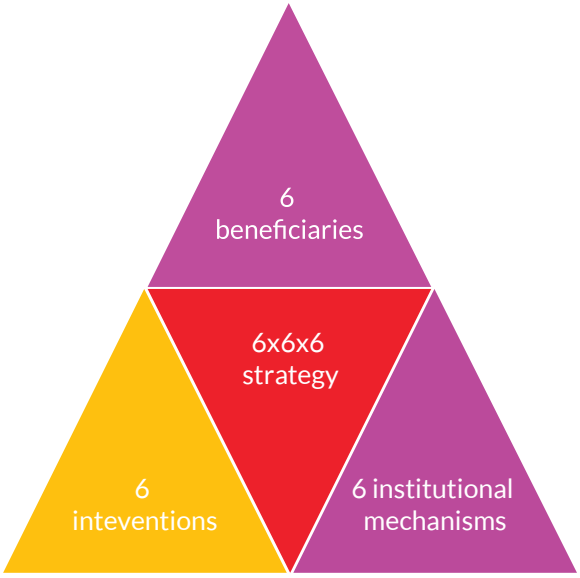
Section 3: Roles and Responsibilities of State-District-Block Team

Background

Anemia is widespread across most age groups and across all states in the country. As per NFHS-4, every second person in the continuum of care (children-adolescents-women of reproductive age-pregnant and lactating women) in the country is anemic. Emerging experience from the field shows that inadequate infrastructure, lack of training of personnel, issues in procurement and distribution of Iron and Folic Acid (IFA), irregular and random supplies to pharmacies at the district and block level and lack of reliable data on distribution and consumption are major hindrances in the entire ecosystem of IFA service delivery.

The Anemia Mukt Bharat (AMB) strategy plans to build upon the learning of implementing the National Iron Plus Initiative (NIPI) and Weekly Iron Folic Acid Supplementation (WIFS) programmes. The strategic 6x6x6 intervention proposed under AMB focuses on ensuring services to six target beneficiaries on six interventions via six institutional mechanisms. One of the key institutional mechanisms under the strategy is to strengthen the procurement and supply chain mechanisms.

Fig 1: 6x6x6 Intervention



450 million
beneficiaries – nearly 50% of the country's population will be reached

Rationale

Many of the districts in the country are experiencing chronic shortages in IFA supplies in the last few years. Random distribution of IFA as per availability at the State level, erratic reporting, irregular stock audits, centralized forecast and estimation of supplies, poor knowledge on practice of indents and floating demands have led to an increase in the existing demand-supply gap for IFA.

To ensure seamless (upstream and downstream) delivery of IFA at the state level, bottlenecks in IFA procurement, deliveries, quality control, storage, disposal and distribution have to be addressed and a robust system of documentation, monitoring and training of personnel has to be established across key stakeholders [(Ministry of Health and Family Welfare (MoHFW), Ministry of Human Resource Development (MHRD) and Ministry of Women and Child Development (MWCD)] via effective intra and inter-ministerial convergence.

IFA Supply Chain Management Manual for Programme Managers and Service Providers is aimed at empowering users to adopt innovative strategies to establish and/or strengthen the existing supply chain management system at the States. It attempts to inform stakeholders about the strategic approach and types of investments needed to move from one stage to the next with the ultimate aim to integrate the existing supply chain management system under the AMB strategy.

Purpose of the manual

The manual is developed for AMB Programme Managers: State, District and Block levels, Drug Store/ Warehouse Managers and Store Supervisors under Health, Education and ICDS. Pharmacists: District, Block and PHC levels, and Partners involved in defining strategies for strengthening supply chain management activities under the AMB programme.

Overall learning objectives:

- To understand the pillars and process for effective supply chain management
- To understand the organizational structure and roles and responsibility of personnel involved in the supply chain management process
- To strengthen the information management system as an integral process in the entire supply chain management system
- To evolve from the system based on assumptions and speculations, to an informed, responsive and effective supplies and logistics management system

Methodology adopted:

- Power point presentations
- Discussion
- Calculation simulation
- Practice exercise

Resources needed (for imparting training):

- Laptop, projector, screen
- Charts, marker pens, writing board

Sections:

This manual is divided in three sections:

1. Public Health Supply Chain Management and Supply Chain Evolution Model
2. IFA Supply Chain Process and action plan
3. Roles and Responsibilities of State-District-Block Teams in IFA Supply Chain Management

Session 1: Public Health Supply Chain Management

Duration: **2 hours**

Key focus of the section:

- To understand processes and people involved in the supply chain management process.
- To understand importance of establishing a chain of events before initiating the supply chain process.
- To evolve from the state of an assumption and speculation based system to a more organized and integrated system of supply chain management.

Duration of the training: **45 mins**

Learning objectives:

By the end of the session, the participants should be able to:

- Understand the various processes and players involved in the supply chain management network
- Assess the status of existing supply chain management and identify ways and measures to strengthen it
- Identify ways to increase coordination between stakeholders at every level to ensure timely and adequate supply of IFA to health facilities.

Methodology adopted:

- PowerPoint presentations

Materials Required:

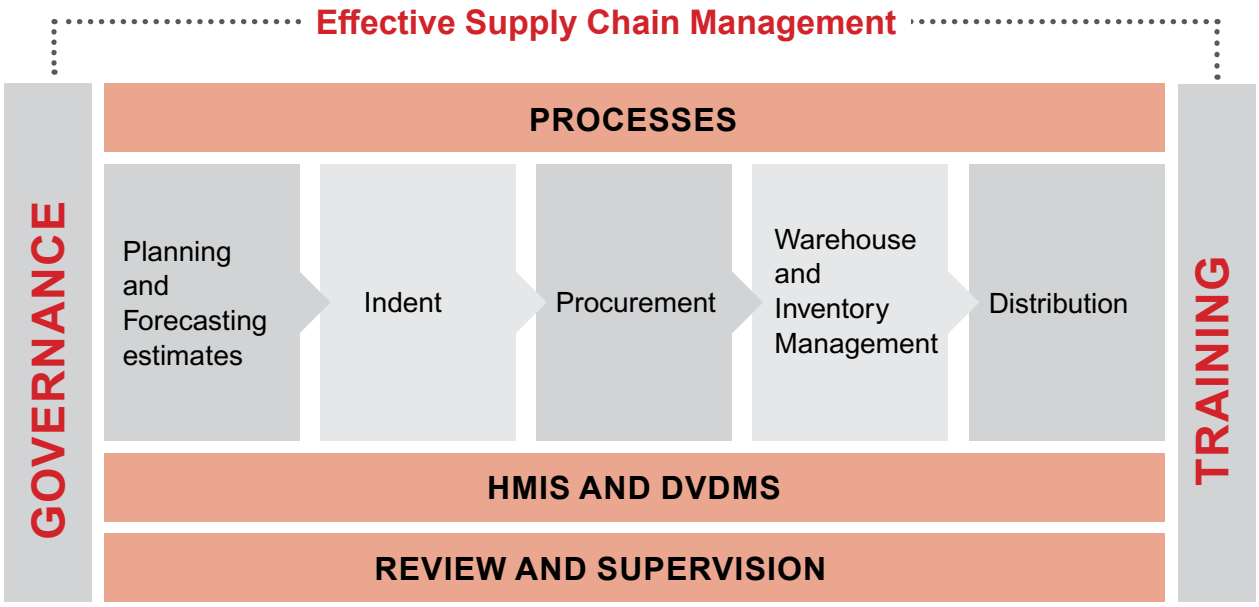
- Projector, laptop, screen

What is a public health supply chain?

A public health supply chain is a network of interconnected organizations, people and processes that ensures the availability of health commodities to the people who need them

- Public health supply chain management involves:
- Departments and Ministry of Health and Family Welfare (programmes, planning, procurement, drug regulatory boards, human resources, and health programmes) and allied ministries
- Central Medical Service Society, State Medical and Infrastructure Corporations
- State, Regional and District warehouses
- Health facilities, Anganwadi Centers (AWCs) and schools (Service Delivery Points) and Community health workers
- Private sector partners, such as third-party logistics providers, drug manufacturers, transport and distributors etc.

Fig 2: Pillars of Effective Supply Chain Management



Effective supply chain management structure

SUPPLY

IFA available at health facilities, schools, AWCs	District and Block Points are sufficiently supplied	Regional Warehouses are sufficiently supplied	State/Central Warehouses are adequately procured	Selection of manufacturers and suppliers and quantification of products by programme managers and policy makers

DEMAND

Health Facilities, Schools, AWCs	District and Block Drug store	Regional Drug Store	State/Central Drug Store	Suppliers and Manufacturers

Characteristic of integrated SCM

Clarity of roles and responsibilities, agility, streamlined process, visibility of information, trust and collaboration, alignment of objectives, robust technology support

Points to remember:

- ☑ It is critical to ascertain the various players (departments and personnel) and processes involved in the supply chain management system to ensure timely procurement and last mile delivery of supplies
- ☑ To strengthen the existing supply chain management system, identify gaps in planning based on process and structure mentioned above
- ☑ Capacity building of the key human resource at every level along with vigilant monitoring and reporting of activities (e-Aushadhi/DVDMS) remains main stay to strengthen linkage and ensure transparency.

Section 2: IFA Supply Chain Process and Action Plan

Key focus of the section:

- To understand the flow of information/products at each level of the programme management unit
- Focus on timeliness of activities and processes to be done in conjunction with allied Departments/Ministries.
- To understand the steps involved in the entire chain of events to ensure IFA supplementation till the last mile
- To develop an effective logistic and supply chain action plan and implement the same.

Duration of the training: **1.5 hours**

Learning objectives:

By the end of the session, the participants should be able to:

- Assess the status of existing supply chain management and identify ways and measures to strengthen it
- Identify ways to increase coordination between stakeholders at every level to ensure timely and adequate supply of IFA to health facilities.

Methodology adopted:

- PowerPoint presentations
- Calculation practice

Resources needed (for imparting training):

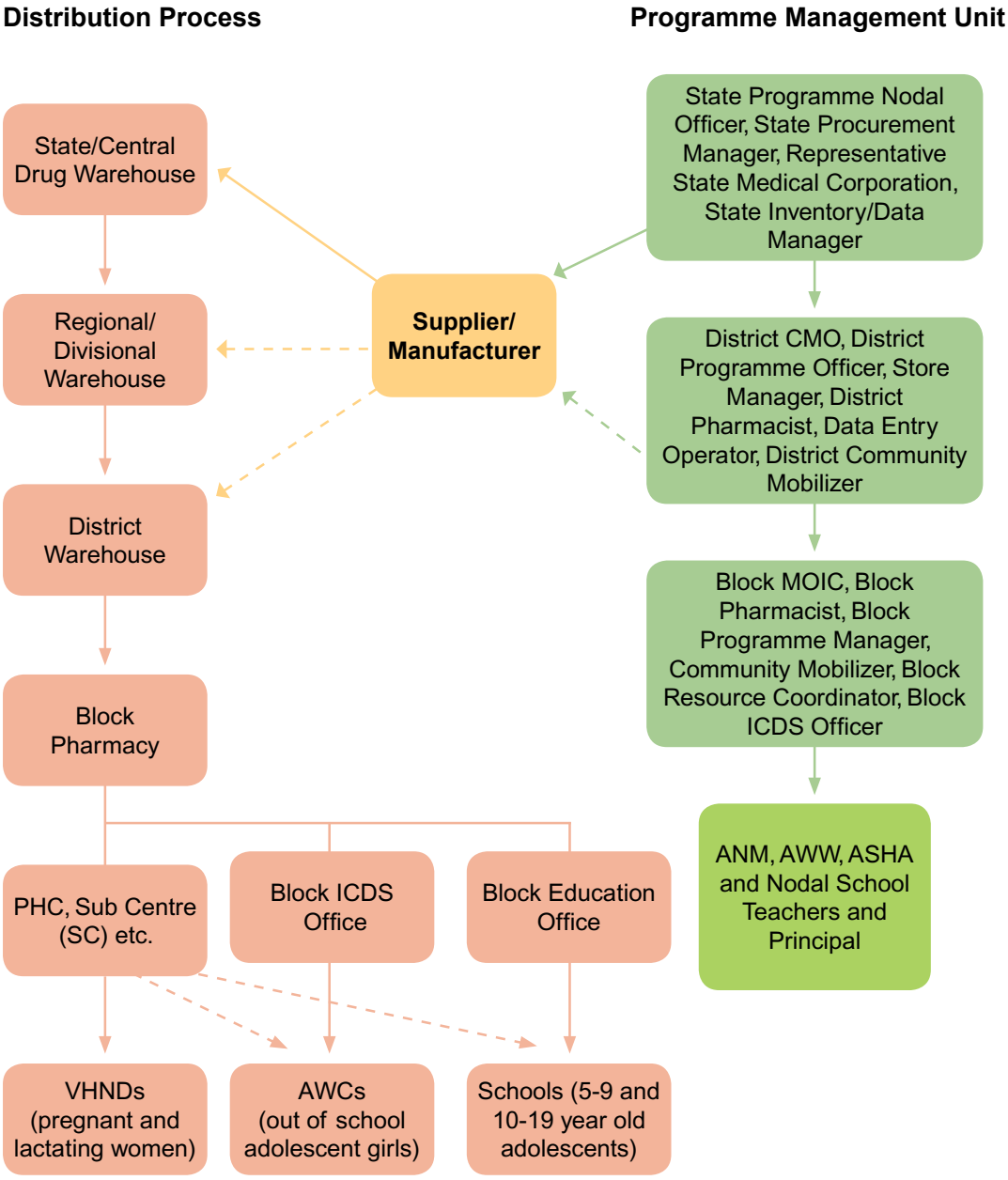
- Projector, laptop, screen
- Charts, marker pen, pens, writing board

STATE-DISTRICT-BLOCK ACTION PLAN FOR IFA SUPPLY CHAIN MANAGEMENT

Supply chain management: Organogram

In order to understand the gaps and to address issues in the existing IFA supply chain management, it is imperative to define the internal structure and units involved to ascertain the relationship amongst various departments, levels, teams as well as individuals. Setting up a Supply Chain Management organogram will help improve visibility across the chain of events, define the line of command, flow of authority and information from top to bottom and otherwise.

Fig 4:Flow chart depicting the IFA supply chain management process and programme unit involved



Dash lines: *Supply of IFA into the system* | ***Solid lines:*** *Flow of information and supplies* | ***Boxes:*** *Concerned stakeholders at each level* | ***PHC:*** *Primary Health Centre* | ***VHND:*** *Village Health and Nutrition Day* | ***AWC:*** *Anganwadi Centre* | ***ICDS:*** *Integrated Child Development Services* | ***ANM:*** *Auxiliary Nurse Midwife* | ***AWW:*** *Anganwadi Worker*

Plan to ensure regular supply of IFA

Defining the roles and responsibility of the programme management unit at each level will help in streamlining the process to estimate requirement, timely procurement and adequate distribution of the product till the last mile. Timely and accurate reporting of stocks and coverage from the Sub Centre till the district level will further aid in estimating requirements and will also help in effective management of the inventory.

State Level

- Estimate annual target population (validated with district estimates)
- Estimate annual indents (validated with district estimates)
- Proposal and approval in Annual State PIPs
- Capacity building (Warehouse Manager, Data Entry Operator)
- Timely procurement and distribution of supplies
- Update stock status in Inventory Management System (DVDMS)
- Monitoring, review and supervision

District Level

- Estimate annual target population
- Estimate annual indents
- Capacity building (Drugstore Manager, Data Entry Operator, District Programme Manager and Community Mobilizer)
- Timely procurement (in case of local purchase) and distribution of supplies
- Develop microplan (map supply delivery points, identify shortest route map to reach the blocks, identify delivery vehicle, plan of action in case of stock out or surplus)
- Update stock status in Inventory Management System (HMIS and DVDMS)
- Stock audit
- Monitoring, review and supervision

Block Level

- Estimate annual target population
- Develop microplan (identify shortest route map to reach the health facilities, identify delivery vehicle, plan of action in case of stock out or surplus)
- Estimate annual indents (IFA Syrup, Pink, Blue and Red)
- Capacity building (Block Pharmacist, Data Entry Operator, Block Programme Manager and Community Mobilizer)
- Timely distribution of supplies
- Coordinate with Block Resource Coordinator and Block ICDS Officer to ensure reach of supplies and reporting formats
- Update stock status in HMIS and DVDMS

Sub Centre Level

- Estimate annual indents (IFA Red)
- Ensure buffer stock (10% of total indent) before re-order
- Maintain stock records (physical and HMIS)
- Maintain and update record of distribution of stocks
- Schools
- Maintain records on stock in hand and stock required (quarterly)
- Update monthly progress report and submit to Block Resource Center or Block PHC/CHC

IFA SUPPLY CHAIN PROCESS

Step 1: **Planning and forecasting**

The process of calculating target beneficiaries and forecasting supplies for the target population may be made more participatory and inclusive by involving the district in calculating target beneficiaries and involving the block in estimating the requirement of drugs based on population and coverage.

Objective: To identify missed opportunities and ensure increased supply and coverage of IFA (Red, Pink, Blue and Syrup) for all age groups under AMB via Sub Centres, AWCs and schools.

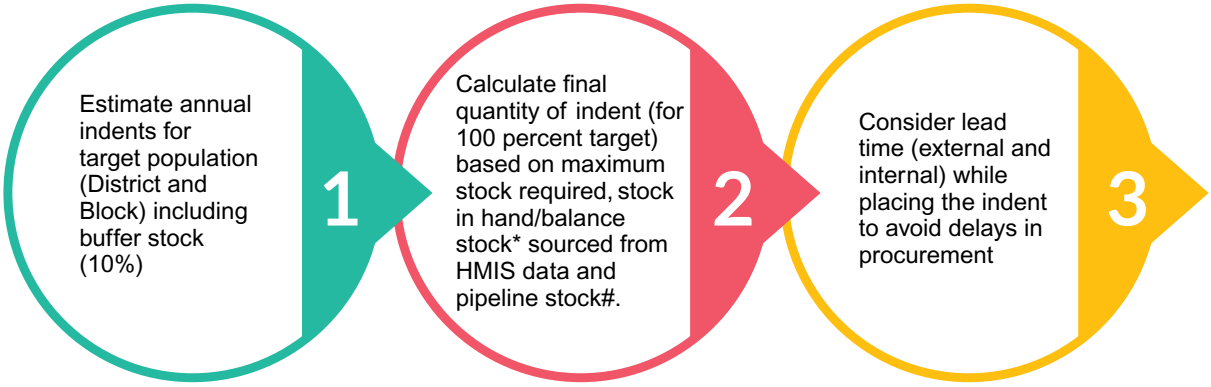
Estimating the target population (denominators) is as follows:

Children (6-59 months)	**Who:** Nodal Officer – Child Health **Where:** State and District level **How:** As per Census 2011 estimations **Data Compilation:** District → State
Children (5-10 years)	**Who:** Nodal Officer – Child Health **Where:** State and District level **How:** As per Census 2011 estimations **Data Compilation:** District → State
Adolescents (10-19 years) (in school and out of school)	**Who:** Nodal Officer – Adolescent Health **Where:** State and District level **How:** **In school:** Number of 10-19 year old enrolled in government and government aided schools **Out of school:** Number of 10-19 year old registered at AWCs under ICDS **Data Compilation:** District → State
Pregnant and lactating women	**Pregnant women:** Annual State and District PIP estimations **Lactating women:** HMIS report – Live births
Newlywed women and WRA	**Who:** Nodal Officer – Family Planning **Where:** Block and Sub Center level **How:** Number of eligible couples registered under Mission Parivar Vikas Yojna* **Data Compilation:** Block→District→State

**= States opting for 100% population of WRA may specify the annual target for deciding on WRA denominator for AMB Dashboard*

Step 2: Indent (at the State and district level)

The process of indent differs between districts and blocks. To streamline the process following actions should be ensured.



= Stock available in hand (from the previous cycle) at the time of estimating supplies for next procurement cycle
#= Stock expected to reach the warehouse from the supplier before the start of next procurement cycle.

Objective: To ensure that at every level of service delivery, an indent plan for IFA Red (pregnant, lactating women and WRA group – Mission Parivar Vikas) and Albendazole for pregnant women, IFA syrup for children aged 6-59 months, IFA Pink for children aged 5-9 years, IFA Blue for adolescents aged 10-19 years are available around the year.

S. No.	Target Beneficiary	Calculation of Indent (for 100 percent target population)	Flow of Information	Verification of Information by	Source of Information
1.	Children aged 6-59 months	**Estimated IFA syrup bottle (50 ml each) supply** = 2 x number of children aged 6-59 months + additional 10% as buffer stock* **Actual Indent**= Estimated indent- (stock in hand + pipeline stock)	ASHA → ASHA SUPERVISOR → BCM & BPM → DCM& DPM → STATE NODAL OFFICER	ANM at the Sub Centre	Line list from MCTS and ASHA register
2	Children aged 5-9 years	**In school** **Estimated IFA tablet supply** = (Number of children aged 5-9 years registered in schools x 52 tablets) + (52 tablets/teacher/ year) + additional 10% as buffer stock* **Actual Indent** = Estimated indent- (stock in hand + pipeline stock) Out of school **Estimated IFA tablet supply** = (Number of children aged 5-9 years registered with ICDS x 52 tablets) + (52 tablets/year for each AWW + 52 tablets/year for ASHA) + additional 10% as buffer stock* **Actual Indent** = Estimated indent- (stock in hand + pipeline stock)	SCHOOL NODAL TEACHER→ BLOCK RESOURCE CENTRE → BCM & BPM → DCM & DPM → STATE NODAL OFFICER Out of school AWW → BLOCK ICDS OFFICER → BCM & BPM → DCM & DPM → STATE NODAL OFFICER	Block and District Resource Centre- MoHRD (UDISE) Block and District ICDS officer- MoWCD	Students' (boys and girls) enrolment register for classes 1-5 Line list at AWC

S. No.	Target Beneficiary	Calculation of Indent (for 100 percent target population)	Flow of Information	Verification of Information by	Source of Information
3	Adolescents aged 10-19 years	**In school** **Estimated IFA tablet supply** = (52 x total number of children (both girls and boys) in 10-19 years) + (52 tablets/per teacher/ year) + additional 10 % as buffer stock* **Actual Indent** = Estimated indent- (stock in hand + pipeline stock) Out of school adolescent girls **Estimated IFA tablet supply** = (number of adolescent girls registered with ICDS x 52 tablets) + (52 tablets/year for each AWW + 52 tablets/year for ASHA) + additional 10% as buffer stock* **Actual Indent** = Estimated indent- (stock in hand + pipeline stock)	SCHOOLS → BLOCK RESOURCE CENTRE → BCM & BPM → DCM & DPM → STATE NODAL OFFICER Out of school AWW→BLOCK ICDS OFFICER→BCM & BPM→ DCM & DPM→ STATE NODAL OFFICER	Block and District Resource Centre- MoHRD (UDISE) Block and District ICDS officer- MoWCD	Students' (boys and girls) enrolment register for classes 6-12 Line list at AWC
4	Pregnant women and lactating women	Considering all pregnant women requiring 180 IFA tablets (1 tablet daily) and 50% pregnant women as anemic in India requiring 360 IFA tablets (2 tablets daily) during pregnancy **Estimated IFA tablet supply** = (half number of PW as per HMIS x 180 tablets) + (half number of PW as per HMIS x 360 tablets) + (number of live birth as per HMIS x 180 tablets) + additional 10% as buffer stock* **Actual Indent** = Estimated indent- (stock in hand + pipeline stock)	ANM BPM DPM STATE NODAL OFFICER	BPM and DPM	HMIS records
5	WRA group	**Estimated IFA tablet supply** = (number of eligible couples registered under Mission Parivar Vikas x 52 tablets) + additional 10% as buffer stock* **Actual Indent** = Estimated indent- (stock in hand + pipeline stock)	ANM → BPM → DPM → STATE NODAL OFFICER	BPM and DPM	Eligible Couple Register at Sub Centre

FOR INSTANCE:
1. ESTIMATION OF IFA RED AND ALBENDAZOLE FOR PREGNANT AND LACTATING WOMEN

IFA Red

Annually, if there are 10,000 pregnant women registered and 9,000 live births reported under HMIS in a district, the requirement of IFA for pregnant women (considering 50% of them are anemic in the state) and lactating mothers will be as follows:

A – Half number of pregnant women as per HMIS*180 tablets = 5000*180 = 9,00,000

B – Half number of pregnant women as per HMIS*360 tablets = 5000*360 = 18,00,000

C – Number of live births as per HMIS*180 tablets = 9,000*180 = 16,20,000

D – 10 % Buffer stock = (9,00,000 + 18,00,000 + 16,20,000)*0.1 = 4,32,000

Total Requirement = (A + B + C + D) = (9,00,000 + 18,00,000 + 16,20,000 + 4,32,000) = **47,52,000**

In case if the state has 10,00,000 stock in hand left and 5,00,000 stock in pipe line. The total final requirement will be

Total Requirement- (stock in hand+ stock in pipe line)= 47, 52,000-(10,00,000+5,00,000)= 32,52,000

Albendazole for pregnant women

A – Number of registered pregnancies as per HMIS = 10,000

B – Number of tablets required = 1 per pregnancy

Total Requirement = A*B = 10,000*1 =**10,000**

Note: Estimation of number of anemic pregnant women may vary from state to state depending on the anemia prevalence as per NFHS-4

2. ESTIMATION OF IFA BLUE FOR SCHOOL GOING ADOLESCENTS

IFA Blue

Say for an academic year, a district has 10,000 adolescents (10-19 year old girls and boys) registered in school of which 7,000 are boys and 3,000 are girls in the district. The requirement of IFA blue will be as follows:

In school adolescents (girls and boys)

Tablets required for prophylactic dose

A – Number of adolescents in school = 10,000*52= **5,20,000**

Tablets required for therapeutic dose

B – Anemic adolescent girls identified in school (estimated to be 50%) to be given therapeutic dose of **two IFA blue tablets once daily for 90 days** (3months)

Therefore, B = 50% of 3,000 = 1,500 = (1,500*2)*90= **2,70,000**

C – Anemic adolescent boys identified in school (estimated to be 29%) to be given therapeutic dose of **two IFA blue tablets once daily for 90 days** (3 months)

Therefore, C= 29% of 7,000= 2,030= (2,030*2)*90= **3,65,400**

Note: To avoid overestimation, the buffer stock estimate should be adjusted with the total prophylactic dose required (A) as it includes prophylactic dose estimates for anemic adolescents also.

Total requirement= (A+B+C)= 5,20,000+2,70,000+3,65,400= 11,55,400

In case if the state has 2,00,000 stock in hand left and 1,00,000 stock in pipe line. The total final requirement will be

Total Requirement- (stock in hand+ stock in pipe line)= 11,55,400-(2,00,000+1,00,000)= 8,55,400

Note: Estimation of number of anemic adolescent girls and boys may vary from state to state depending on the anemia prevalence as per NFHS-4

3. ESTIMATION OF IFA PINK FOR 5-9 YEAR OLD IN SCHOOL AND OUT OF SCHOOL CHILDREN

IFA Pink

Say for an academic year, a district has 10,000 children (5-9 year old girls and boys) registered in school of which 7,000 are boys, 3,000 are girls and 200 children are out of school. The requirement of IFA blue will be as follows:

In school children, 5-9 years old (girls and boys)

Tablets required for prophylactic dose

A – Number of children in school = (10,000*52) = **5,20,000**

Tablets required for therapeutic dose: Anemic 5-9 year old girls and boys identified in school (estimated to be 50%) to be given therapeutic dose of 3 mg iron/kg/day for 2 months.

Note: The average weight of 5-9 year old children ranges from 15-20 kgs. Hence, one tab of 45 mg iron and 400 mcg folic acid can be given **once daily for 60 days** (2 months) as therapeutic dose.

Therefore, **B** = 50% of 10,000 = 5,000 = (5000*1)*60 = **3,00,000**

Total requirement for in school children (C)= A+B = 5, 20,000+3,00,000= 8,20,000

Note: To avoid overestimation, buffer stock estimate should be adjusted with the total prophylactic dose required (A) as it includes prophylactic dose estimates for anemic children also.

Out of school children, 5-9 years old (girls and boys)

Tablets required for prophylactic dose

D – Number of out of school children = (200*52) = **10,400**

Tablets required for therapeutic dose: Anemic 5-9 year old out of school girls and boys identified (estimated to be 50%) to be given therapeutic dose of 3 mg iron/kg/day for 2 months.

Note: The average weight of 5-9 year old children ranges from 15-20 kgs. Hence, one tab of 45 mg iron and 400 mcg folic acid can be given **once daily for 60 days** (2 months) as therapeutic dose.

Therefore, **E** = 50% of 200 = 100 = (100*1)*60 = **6,000**

Total Requirement for out of school children (F) = D+E= 10,400+6000= 16,400

Total requirement= (C+F)= (8,20,000+16,400) = 8,36,400

Note: To avoid overestimation, buffer stock estimate should be adjusted with the total prophylactic dose required (A) as it includes prophylactic dose estimates for anemic children also.

In case if the state has 2,00,000 stock in hand left and 1,00,000 stock in pipe line. The total final requirement will be
Total Requirement- (stock in hand+ stock in pipe line)= 8,36,000-(2,00,000+1,00,000)= 5,36,000

Note: Estimation of number of anemic 5-9 year old children may vary from state to state depending on the anemia prevalence as per NFHS-4

4. ESTIMATION OF IFA SYRUP (50 ML) FOR 6-59 MONTHS CHILDREN

i. For 6-12 months children: Annually if there are 10,000 children aged 6-12 months old in a district and each child has to be given 8-10 doses of IFA syrup per month i.e. 96-120 ml of IFA syrup. It is estimated that each child will require two 50 ml bottles of IFA Syrup bottles as prophylactic doses

A. IFA bottles for prophylactic dose: for 10,000 children aged 6-12 months= (10, 000* 2) = 20,000

B. IFA bottles for therapeutic dose : Estimating 50% of anemic children aged 6-12 months require **1ml of IFA Syrup/day for 2 months**

Therapeutic requirement of IFA syrup bottles will be = 5000*1 = 5000

Total requirement of IFA Syrup bottles for 6-59 months (A+B) = 20,000+5,000= 25000

ii. For children 1-3 years: Annually if there are 10,000 children aged 1-3 years old in a district and each child has to be given 8-10 doses of IFA syrup per month i.e. 96-120 ml of IFA syrup. It is estimated that each child will require two 50 ml bottles of IFA Syrup bottles as prophylactic doses

C. IFA bottles for prophylactic dose: for 10,000 children aged 1-3 years= (10, 000* 2) = 20,000

D. IFA bottles for therapeutic dose : Estimating 50% of anemic 1-3 years old children require 1.5ml of IFA Syrup/day for 2 months

Therapeutic dosage of IFA syrup per child = 1.5 x 60 = 90 ml = 2 IFA Syrup bottle

Therapeutic requirement of IFA syrup bottles for 50% anemic children = 5000X2= 10,000

Total requirement of IFA Syrup bottles for 1-3 years children (C+D) = 20,000+10,000= 30,000

iii. For children 3-5 years: Annually if there are 10,000 children aged 3-5 years old in a district and each child has to be given 8-10 doses of IFA syrup per month i.e. 96-120 ml of IFA syrup. It is estimated that each child will require two 50 ml bottles of IFA Syrup bottles as prophylactic doses

E. IFA bottles for prophylactic dose: for 10,000 children aged 3-5 years= (10, 000* 2) = 20,000

F. IFA bottles for therapeutic dose : Estimating 50% of anemic 3-5 years old children require **2 ml of IFA Syrup/day for 2 months**

Therapeutic dosage of IFA syrup per child = 2 x 60 = 120 ml= 2 IFSA Syrup bottle

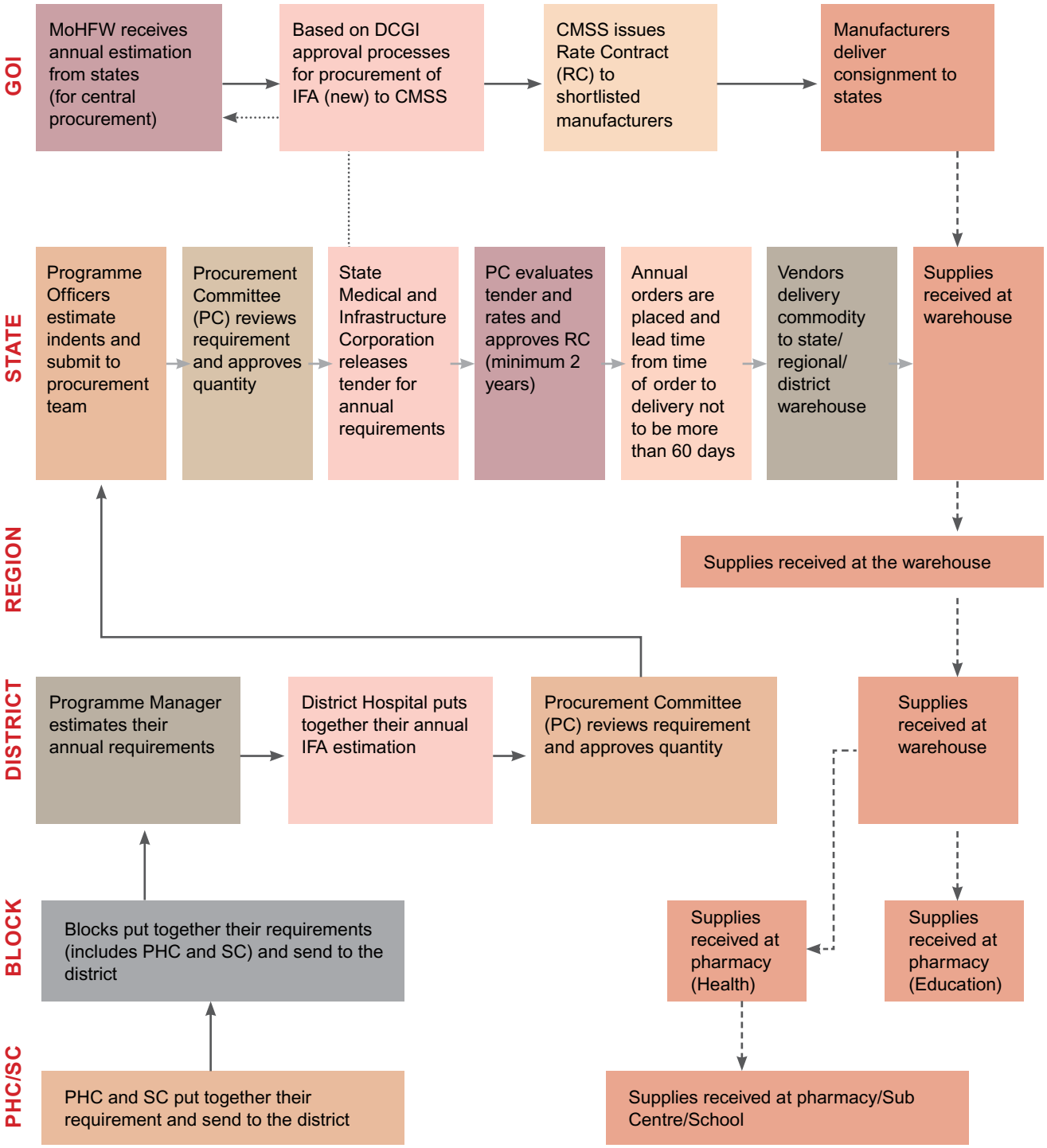
Therapeutic requirement of IFA syrup bottles for 50% anemic children = 5000X2= 10,000

Total requirement of IFA Syrup bottles for 1-3 years children (E+F) = 20,000+10,000= 30,000

Note: To avoid overestimation, buffer stock estimate should be adjusted with the total prophylactic dose required as it includes prophylactic dose estimates for anemic children also

Note: Estimation of number of anemic adolescent girls and boys may vary from state to state depending on the anemia prevalence as per NFHS-4

Step 3: Procurement



Solid lines: Flow of Information Dash: Flow of supplies Dash Dot: States opting for Central procurement

Step 4: **Distribution**

Objective: To ensure timely and adequate distribution of supplies till the last mile i.e. Sub Centres, VHNDs and schools.

i. Before initiating distribution:

- Identify the supply delivery facilities and the distribution route
- Define the distribution cycle (monthly, quarterly, biannually) and ascertain the quantity of supplies to be distributed to each delivery point (based on the indent request)
- Update DVDMS/e-Aushadhi and HMIS to maintain track of supplies (receipt, distribution) and stock-at-hand details respectively

ii. Identify the stock delivery points receiving supplies:

- District/Block drug ware houses and health facilities dispensing products to end users should be identified as stock delivery points
- Tracking of monthly consumption of supplies at the stock delivery points should be done

iii. Tracking of supplies:

- Bottom up tracking of supplies at the stock delivery points should be done to estimate consumption. For e.g. Block drug store should track the monthly stock supplied to the health facilities (SC,PHC, Schools, AWC etc.) in its vicinity and district drug store should track the stocks supplied to the block drug stores respectively.

iv. Identify facilities:

The facility list should contain information about each facility (including store houses) in the supply chain. In addition to the facility code and contact person, the list should have the following information for each facility:

- Type of facility (for example, State/Regional/District Warehouse, Block Pharmacy, health facility, State/District government office etc.)
- Function of the facility (for example, warehouse, health facility or both)
- List of drugs in stock (IFA Red, Blue, Pink Syrup, Albendazole etc.)
- Minimum and maximum months' worth of stock

v. Identify product category:

It is essential to define the category of IFA to be tracked by assigning unique product category codes, specification of the product and the minimum shipment amount from the central supplier.

To ensure seamless and smooth functioning of all activities linked with logistics of supply chain management, the following components have to be ensured:

- ☑ Each facility receives products from one—and only one—supply link.
- ☑ Products are distributed only to facilities at the next level in the supply chain.
- ☑ All facilities report on the same software or on traditional reporting formats.
- ☑ Reports are submitted to the linked health facility (PHC, CHC etc.), which can then electronically submit the data to the district or state level.

☑ Reporting is relatively complete, timely, and accurate.

☑ Facilities report beginning stock levels, receipts, issues and adjustments for each product during each reporting period

vi. Identify the delivery vehicle:

Define the capacity of delivery vehicles in the distribution system and decide which vehicle to assign to a particular route in accordance with cargo volume and vehicle capacity.

vii. Define delivery routes:

After identifying the delivery vehicle and delivery personnel,

- Locate each health facility to ensure last mile delivery within the distribution network.
- Create a distribution network with identified distribution routes, facilities assigned, specified distance and traveling time between each facility in the route and between each facility and distribution center.

Facility wise historical distribution of supplies data can be obtained by timely and complete data entry in the inventory management system (DVDMS/e-Aushadhi etc.)

In case of stock-out:

- Identify the facility most in need of resupply and request for an indent
- Based on the consumption pattern, estimate the actual quantity to be delivered to the facility
- Stocks can be deviated to the facility in need from facilities reporting surplus (based on their consumption pattern)
- This will maximize the effectiveness of limited delivery resources by scheduling deliveries according to need

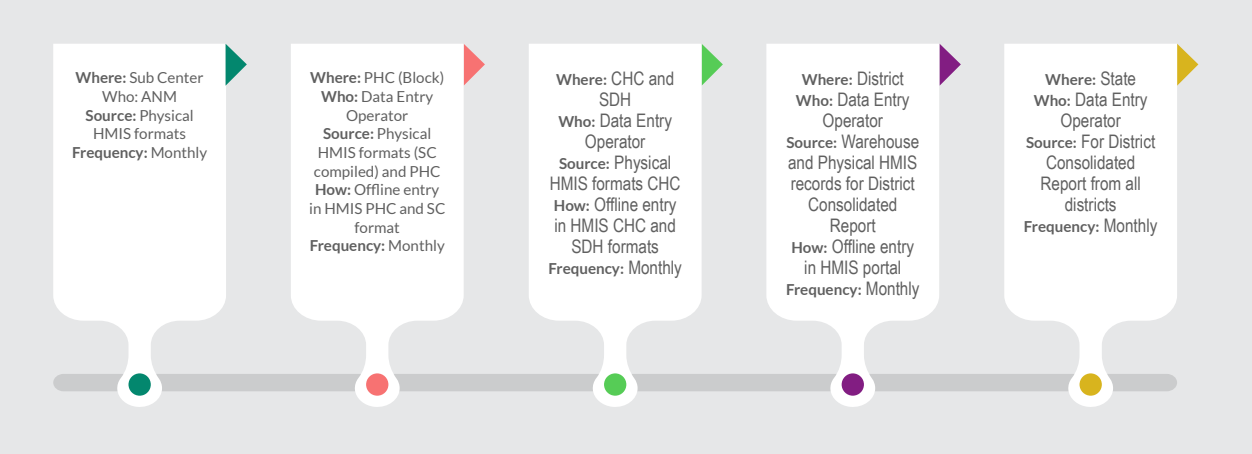
Step 5: Reporting

The reporting of stock position has to be maintained on a monthly basis in the HMIS. At every level of health facility, entry on the stock position has to be recorded by the concerned service provider/ programme manager and validated by the officer in-charge.

The mechanism for reporting supply distribution and coverage data from schools is depicted in the diagram below:

Fig 4: Solid lines: Flow of supplies Dotted line: Flow of information (coverage data)

The process for flow of data in the HMIS is mentioned below:



The HMIS data elements in which stock status has to be updated are mentioned below.

HMIS DATA ELEMENTS FOR REPORTING ON STOCKS

HMIS 19.6	**IFA Tablets (Red)** 1. Balance from Previous Month 2. Stock Received 3. Unusable Stock 4. Stock Distributed 5. Total Stock
HMIS 19.7	**IFA Tablets (Blue) (Adolescent 10-19 years)** 1. Balance from Previous Month 2. Stock Received 3. Unusable Stock 4. Stock Distributed 5. Total Stock
HMIS 19.8	**IFA Tablets (Pink) (WIFS Junior 5–9 years)** 1. Balance from Previous Month 2. Stock Received 3. Unusable Stock 4. Stock Distributed 5. Total Stock
HMIS 19.9	**IFA Syrup (Pediatric)** 1. Balance from Previous Month 2. Stock Received 3. Unusable Stock 4. Stock Distributed 5. Total Stock
HMIS 19.15	**Albendazole Tablets 400 mg** 1. Balance from Previous Month 2. Stock Received 3. Unusable Stock 4. Stock Distributed 5. Total Stock
NEW	Percentage of stocks available for Insecticidal Treated Nets (ITNs)

Points to remember:

- ☑ Identify the processes and personnel involved at the various level to improve transparency and timely flow of information
- ☑ Identify bottlenecks in IFA need forecasting and inconsistent supplies due to delays in supplier deliveries
- ☑ Stock delivery point and facility route mapping should be done to ensure timely and adequate distribution of supplies till the last mile
- ☑ Indents and supplies at the level of health facility and schools should be fixed to every quarter to ensure feasibility and availability of sufficient stocks around the year
- ☑ Stock in hand and IFA coverage/distribution data should also be considered while estimating annual indents at the block and district level.
- ☑ Records on stock received (quantity and quality check), batch number, stock distributed and balance stock should be maintained and made available for raising indents
- ☑ Timely and complete monthly reporting of data in terms of coverage and stocks should be uploaded on HMIS portal for effective planning and monitoring.

Session 3: Roles and Responsibilities of State/ district/block Team

To establish an effective and efficient Supply Chain Management system, it is critical that the programme management team involved in various processes of the supply chain not only understand their respective roles but also strategically manage supplies across partners, logistics functions and health system levels while monitoring the overall system performance and its individual functions.

Key objective:

- To orient the programme management unit on their respective roles and responsibilities in various processes under supply chain management

Duration of the training: 30 mins

Methodology adopted:

- Presentation and discussion (including AMB financial template)

Resources needed (for imparting training):

- Projector, laptop, screen

Roles and responsibilities of personnel involved in AMB Supply Chain Management: State team

Process	State Nodal Officer (Child, Adolescent and Maternal Health)	State Procurement Manager (NHM Procurement)	Manager – Procurement/ Drug Store, Medical Service Infrastructure Corporation Limited (MSICL)	State Data Entry Operator
Planning and forecasting estimates	» Process for including IFA supplementation with newer specifications in State-EDL » Coordinate with Department of Education and DWCD for annual in school and out of school children estimates for IFA Blue and Pink » Develop an annual estimation for IFA (Red, Blue, Pink and Syrup) and Albendazole » Validate estimations with district targets » Propose estimation in annual PIPs and ensure necessary approvals and funds » Communicate requirement to NHM procurement cell.	» Review revised technical specifications » Ensure availability of funds in coordination with programme team	» Map availability of suppliers on revised IFA tablet specification and ensure fund approvals for procurement.	» Maintain updated stock records in HMIS and DVDMS » Share district wise stock status report with concerned programme team for informed decision » Analyse stock status and intimate programme team on patterns in reporting and compilation from districts
Indent	» Estimation of indents to be done as per calculations mentioned in AMB guidelines » Estimation for consecutive financial year to be completed before initiation of state PIP process (December-January) » Ensure timely submission of indents to procurement division » Solicit regular indents from districts to maintain transparency and accountability.	» Share required indent placed by districts (updated in DVDMS or state specific LMIS) with programme team for further action » In concurrence with programme team, ensure timely release of approved quantity of supplies to the concerned district.	**No specific procedure**	**No specific procedure**

Process	State Nodal Officer (Child, Adolescent and Maternal Health)	State Procurement Manager (NHM Procurement)	Manager – Procurement/ Drug Store, Medical Service Infrastructure Corporation Limited (MSICL)	State Data Entry Operator
Procurement	» Finalize quantity of supplies to be procured for the state based on distribution pattern, current stock available, stock distributed, pipeline inventory and safety (buffer) stock » Fix procurement cycle in conjunction with State Medical Service and Infrastructure Corporation Limited in view of storage space and shelf life of the product.	» Float the tender for bids and convene meeting with the state procurement committee to finalize (technical and financial) bids » Ensure necessary checks on manufacturers, for example, licenses and regulatory approvals, compliance to quality control measures, quality manufacturing practices etc. » Solicit necessary approvals and issue Rate Contracts » In conjunction with programme team, decide procurement cycle depending upon storage capacity and stock delivery points within distribution cycle.	» Ensure manufacturer compliance to the procurement cycle and lead times » Ensure timely receipt of consignment and dispatch of concerned storage unit/s within the distribution cycle. » Ensure strict adherence to norms and procedures such as delivery time, minimum shelf life, bank guarantee, quality checks etc. mentioned in Rate Contract. » Identify defaulters and ensure appropriate penalty imposed	» Update DVDMS or state LMIS with the procurement quantity, batch number, stock received, buffer stock expiry date etc.

Process	State Nodal Officer (Child, Adolescent and Maternal Health)	State Procurement Manager (NHM Procurement)	Manager – Procurement/ Drug Store, Medical Service Infrastructure Corporation Limited (MSICL)	State Data Entry Operator
Warehouse and inventory management	Coordinate with district AMB nodal officer to ascertain minimum and maximum stock level to be maintained at district drug warehouse depending upon target beneficiaries and distribution pattern.	**No specific procedure**	» Tack orders and systematically locate supplies in relation of receiving, packing and shipping areas » Physical checks of consignment received for quantity, quality compliance, damage, pilferage, batch number, expiry, supplier details etc. » Identify IFA category by assigning unique barcode, color etc. » Identify delivery routes within distribution network and estimated delivery time based on distance in between districts and from district to state warehouse. » Maintain and update Bin card (Tally) system to update order receipt details (batch wise) » Identify delivery vehicle based on cargo volume and vehicle capacity » Follow First-Expiry-First-Out (FEFO) system of inventory control to reduce wastage and expiry » Ensure aisles are clear and supplies are stacked neatly in pre-designed place » Ensure emergency exists and sprinklers are not blocked » Safety expectation to be placed in highly visible locations » Manage expired drugs, damaged materials and their quantification and disposal.	» Update DVDMS or state LMIS with the procurement quantity, batch number, stock received, buffer stock expiry date etc.

Process	State Nodal Officer (Child, Adolescent and Maternal Health)	State Procurement Manager (NHM Procurement)	Manager – Procurement/ Drug Store, Medical Service Infrastructure Corporation Limited (MSICL)	State Data Entry Operator
Distribution	» Identify stock delivery points within the distribution circle and ascertain the quantity of supplies to be distributed » Intimate the state warehouse (logistics team) on scheduling deliveries according to the need to prevent stock out or surplus.	Follow up with districts to timely update stock receipt status in DVDMS/state specific LMIS after dispatch from state level.	» Define minimum shipment size » Track vehicles scheduled for delivery and vehicles completed deliveries » Ensure timely supplies to respective stock delivery point. » Follow up with districts on timely receipt of supplies at the warehouse.	
Reporting	Coordinate with district AMB nodal officers to report on monthly progress and quarterly trend on stock distribution and other coverage key performance indicators.	Generate quarterly status on stock receipt and distribution within the circle and share with programme nodal officer for further action.	**No specific activity**	Follow up with districts to ensure timely data entry on stock position (received, distributed, in-hand) and service coverage in HMIS. *(IFA HMIS data elements annexed)*
Review and supervision	» Review district wise progress on stock distributed (monthly) and service coverage (quarterly) based on AMB Dashboard Portal » Identify gaps and areas for improvement in service delivery (IFA Red, Pink, Blue, Syrup) » Identify good practices on the ground to improve coverage and explore feasibility for scale up » Encourage districts to include review of stocks and supply chain status under AMB in monthly review meetings with CMOH and District Collector.	**No specific activity**	» Technical assistance to GM procurement on matters related to purchase, storage and distribution of drugs » Convene meeting of district drug/store manager in order to motivate them and harness their skills.	Provide handholding support to district data entry operators on queries related to source of data for stock position (balance, received, used, unused and distributed)

Roles and responsibilities of personnel involved in AMB Supply Chain Management: District team

Process	District Programme Team (District Programme Manager and Community Mobilizer)	District Drug Manager	District Data Entry Operator
Planning and forecasting estimates	» Coordinate with Department of Education and WCD for annual in school and out of school children estimates for IFA Blue and Pink » Develop an annual estimation for IFA (Red, Blue, Pink and Syrup) and Albendazole » Propose estimation in annual district PIPs and ensure necessary approvals and funds » Communicate the requirement to state programme team	» Ensure availability of funds in coordination with the programme team	» Maintain updated stock records in HMIS and DVDMS » Share block wise stock status report with concerned programme team for informed decision » Analyse stock status and intimate programme team on patterns in reporting and compilation from blocks
Indent	» Estimation of indents to be done as per calculations mentioned in AMB guidelines » Estimation for consecutive Financial Year to be completed before initiation of district PIP process (December-January) » Ensure timely submission of indent estimates to state programme team » Solicit regular indents from blocks to maintain transparency and accountability.	» Share required indent placed by blocks (updated in DVDMS or state specific LMIS) with programme team for further action » In concurrence with programme team, ensure timely release of approved quantity of supplies to concerned district.	**No specific activity**
Procurement	» Finalize quantity of supplies to be procured for the district based on distribution pattern, current stock available, stock distributed and safety(buffer) stock » Communicate final quantity of drug to be procured.	» Ensure necessary checks on manufacturers for e.g. licenses and regulatory approvals, compliance to quality control measures, quality manufacturing practices etc. <u>In case of local purchase</u> » Assist in floating tender for bids and convene meeting of district procurement committee to finalize (technical and financial) bids » Solicit necessary approvals and issue Rate Contracts » In conjunction with programme team, decide procurement cycle depending upon storage capacity and stock delivery points within distribution cycle	Update DVDMS or state specific LMIS and HMIS with procurement quantity, batch number, stock received, buffer stock expiry date etc.

Process	District Programme Team (District Programme Manager and Community Mobilizer)	District Drug Manager	District Data Entry Operator
Warehouse and inventory management	Coordinate with block medical officers to ascertain minimum and maximum stock level to be maintained at block pharmacy depending upon target beneficiaries and distribution pattern.	» Tack orders and systematically locate supplies in relation of receiving, packing and shipping areas » Physical checks of consignment received for quantity, quality compliance, damage, pilferage, batch number, expiry, supplier details etc. » Identify IFA category by assigning unique barcode, color etc. » Identify delivery routes within distribution network and estimated delivery time based on distance in from districts to blocks and within blocks » Maintain and update Bin card (Tally) system to update order receipt details (batch wise) » Identify delivery vehicle based on cargo volume and vehicle capacity » Follow First-Expiry-First-Out (FEFO) system of inventory control to reduce wastage and expiry » Ensure aisle are clear and supplies are stacked neatly in the pre-designed place.	» Update DVDMS and HMIS (monthly) to provide accurate data on inventory position (stock distributed and stock at hand) and consumption to facilitate efficient order and re-order.
Distribution	» Identify stock delivery points within the distribution circle and ascertain the quantity of supplies to be distributed » Intimate the district warehouse (logistic team) on scheduling deliveries to blocks according to their need to prevent stock out or surplus.	» Follow up with blocks to timely update stock receipt status in DVDMS/state specific LMIS after dispatch from district level » Define minimum shipment size » Track vehicles scheduled for delivery and vehicles completed deliveries » Ensure timely supplies to respective block pharmacy » Follow up with blocks on timely receipt of supplies.	**No specific activity**

Process	District Programme Team (District Programme Manager and Community Mobilizer)	District Drug Manager	District Data Entry Operator
Reporting	» Coordinate with Block Medical Officers to report on monthly progress and quarterly trend on stock distribution and other coverage key performance indicators.	» Generate quarterly status on stock receipt and distribution within the circle and share with District Programme Officer for further action.	Follow up with blocks to ensure timely data entry on stock position (received, distributed, in-hand) and service coverage in HMIS. *(IFA HMIS data elements annexed in reporting section)*
Review and supervision	» Review block wise progress on stock distributed (monthly) and service coverage (quarterly) based on HMIS data » Identify gaps and areas for improvement in service delivery (IFA Red, Pink, Blue, Syrup) » Identify good practices on the ground to improve coverage and explore feasibility for scale up » Encourage blocks to include review of stocks and supply chain status under AMB in monthly review meetings with the BMOH.	Convene meeting with block pharmacists in order to motivate them and harness their skills.	Provide handholding support to block data entry operators on queries related to source of data for stock position (balance, received, used, unused and distributed).

Roles and responsibilities of personnel involved in AMB Supply Chain Management: Block (CHC or Nodal PHC) team

Process	Block Programme Team (Block Programme Manager, Block Community Mobilizer and Block Programme Assistants)	Block Pharmacist	Block Data Entry Operator
Planning and forecasting estimates	» Coordinate with Block Resource Coordinator and Block ICDS officer for annual in school and out of school children estimates for IFA Blue and Pink » Develop an annual estimation for IFA (Red, Blue, Pink and Syrup) and Albendazole » Propose estimation in annual block PIPs and ensure necessary approvals and funds » Communicate the requirement to district programme team.	**No specific activity**	» Maintain updated stock records in HMIS and DVDMS » Share stock status of PHC area (consolidated) report with the concerned programme team for informed decision » Analyse the stock status and intimate the programme team on patterns in reporting and compilation from the blocks.
Indent	» Estimation of indents to be done as per calculations mentioned in AMB guidelines » Estimation for the consecutive Financial Year to be completed before initiation of district PIP process (December-January) » Ensure timely submission of indent estimates to the district programme team » Solicit regular indents (consolidated) from the PHC to maintain transparency and accountability.	» Share the required indent placed by health facilities (updated in DVDMS or state specific LMIS) with the programme team for further action » In concurrence with the programme team, ensure timely release of approved quantity of supplies to the concerned PHC.	**No specific procedure**
Procurement	» Finalize the quantity of supplies to be procured by each PHC on distribution pattern, current stock available, stock distributed and safety(buffer) stock » Communicate the final quantity of the drug to be procured.	**No specific procedure**	Update DVDMS or state specific LMIS and HMIS with the procurement quantity, batch number, stock received, buffer stock expiry date etc.
Warehouse and inventory management	Coordinate with the PHC medical officer to ascertain minimum and maximum stock level to be maintained at the block pharmacy depending upon the target beneficiaries and distribution pattern.	**No specific procedure**	Update DVDMS and HMIS (monthly) to provide accurate data on inventory position (stock distributed and stock at hand) and consumption to facilitate efficient order and re-order.

Process	Block Programme Team (Block Programme Manager, Block Community Mobilizer and Block Programme Assistants)	Block Pharmacist	Block Data Entry Operator
Distribution	» Identify stock delivery points within the distribution circle and ascertain the quantity of supplies to be distributed » Intimate PHC pharmacist on scheduling deliveries to PHCs according to their need to prevent stock out or surplus.	Follow up with PHCs to timely update stock receipt status in DVDMS/state specific LMIS after dispatch from district level.	
Reporting	Coordinate with PHC Medical Officers to report on monthly progress and quarterly trend on stock distribution and other coverage key performance indicators based on HMIS data	Generate quarterly status on stock receipt and distribution within the circle and share with the Block Programme Officer for further action.	Follow up with PHCs to ensure timely data entry on stock position (received, distributed, in-hand) and service coverage in HMIS. *(IFA HMIS data elements annexed in reporting section)*
Review and supervision	» Review PHC wise (consolidated) progress on stock distributed (monthly) and service coverage (quarterly) based on HMIS data » Identify gaps and areas for improvement in service delivery (IFA Red, Pink, Blue, Syrup) » Identify good practices on the ground to improve coverage and explore feasibility for scale up » Encourage the PHC Medical Officer to include review of stocks and supply chain status under AMB in monthly review meetings.	**No specific procedure**	Provide handholding support to PHC data entry operators on queries related to source of data for stock position (balance, received, used, unused and distributed).

ANEMIA MUKT BHARAT DASHBOARD:
ONE STOP PORTAL FOR REPORTING, MONITORING AND REVIEW

UNIT 5

Session 1: Introduction

Duration of the training: **30 minutes**

Key Focus:

- Overall introduction to Anemia Mukt Bharat (AMB) online dashboard and programme.

Learning Objective:

- To understand different aspects of the AMB strategy and exposure to different elements of the AMB dashboard

Methodology:

- Presentation

Resource:

- 'Introduction' presentation, AMB mobile App in smartphones

AMB Dashboard and Digital Portal – One-stop Shop on Anemia

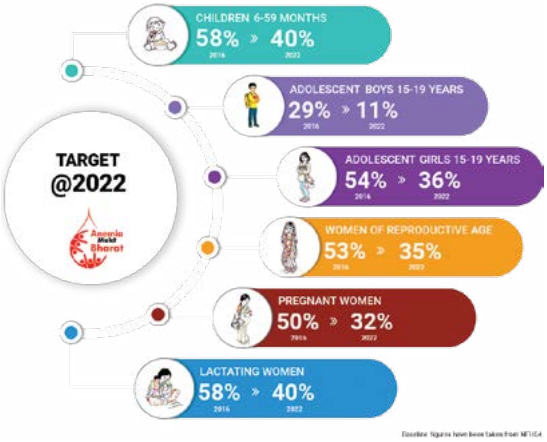
The AMB portal is a one-stop shop of materials developed under the AMB strategy in one place, such as communication resource materials, survey data, targets, State and district-wise denominators, and State and district-wise quarterly progress reports.

Open dashboard using: https://anemiamuktbharat.info/dashboard/#/

AMB Mobile Application

The AMB mobile app available in Android and the Apple Play Store has been designed to search for data; easily visualize tables and graphs, create map visualization reports and share them with others via standard sharing options.

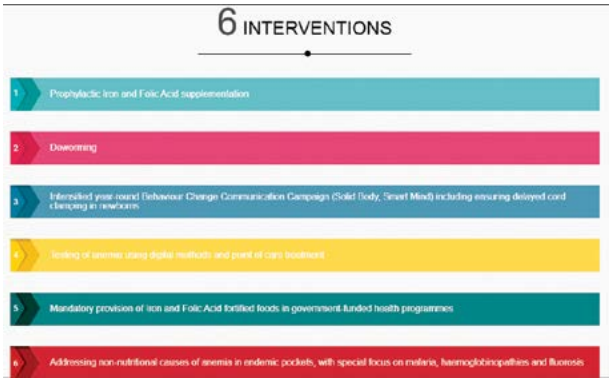
Visualizing Six Targets



Visualizing Six Eligible Groups of Beneficiaries

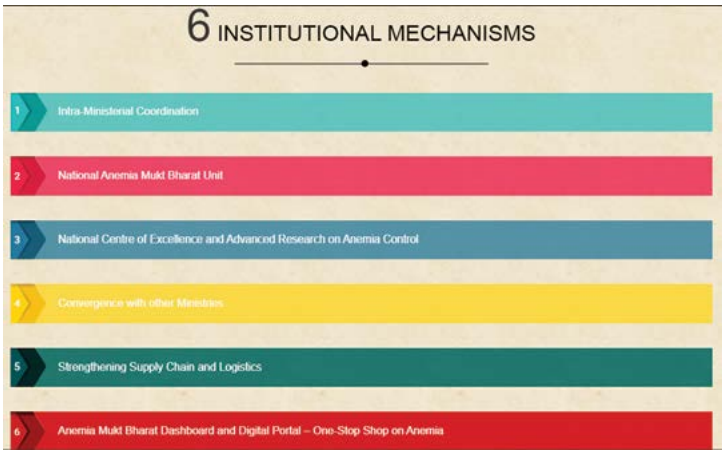
Visualizing Six Interventions

- Prophylactic Iron and Folic Acid supplementation
- Deworming
- Intensified year-round Behaviour Change Communication (BCC) campaign (Solid Body, Smart Mind) including ensuring delayed cord clamping in newborns
- Testing of anemia using digital methods and point of care treatment
- Mandatory provision of Iron and Folic Acid fortified foods in government-funded health programmes
- Addressing non-nutritional causes of anemia in endemic pockets, with special focus on malaria, haemoglobinopathies and fluorosis



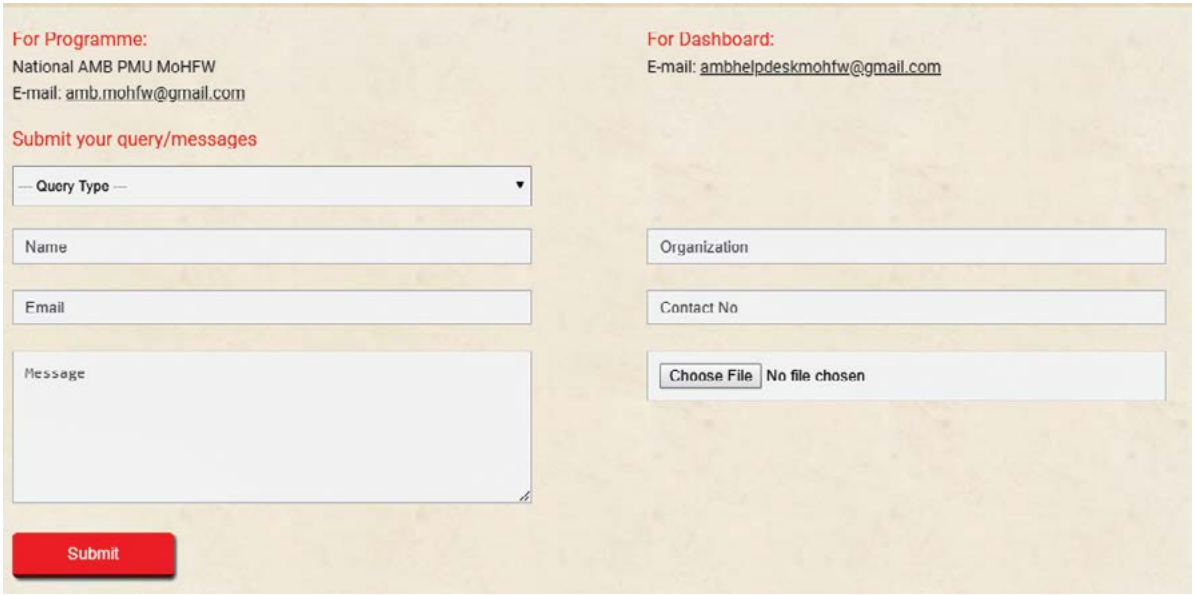
Visualizing Six Institutional Mechanisms

- Intra-ministerial coordination
- National Anemia Mukt Bharat Unit
- National Centre of Excellence and Advanced Research on Anemia Control
- Convergence with other Ministries
- Strengthening supply chain and logistics
- AMB dashboard and digital portal – One-stop shop on anemia



India Target@2022

Current anemia prevalence and target to be achieved by 2022



Session 2: Data

Duration: **1 hour**

Key Focus:

- Data mining and analysis

Learning Objective:

- To understand the various AMB data elements and their definition.

Methodology:

- Presentation

Resource:

- AMB dashboard

AMB Data Elements Matrix based on HMIS Reporting

Sr No	Data Element	SC	PHC	CHC	SDH	DH	DHQ
Part A.	*REPRODUCTIVE AND CHILD HEALTH*	*(HMIS code on respective facility type)*					
M1	ANC Detail						
1.2.4	Data Element -Number of PW given 180 Iron Folic Acid (IFA) tablets	1.2.4	1.2.4	1.2.4	1.2.4	1.2.4	NA
1.2.6	Data Element: Number of PW given one Albendazole tablet after 1st trimester	1.2.6	1.2.6	1.2.6	1.2.6	1.2.6	NA
1.4.2	Data Element- Number of PW having Hb level<11 (tested cases) (7.1 to 10.9)	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	NA
1.4.3	Data Element- Number of PW having Hb level<7 (tested cases)	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	NA
1.4.4	Data Element- Number of PW having severe anaemia (Hb<7) (treated cases)	NA	1.4.4	1.4.4	1.4.4	1.4.4	NA
M6	Post Natal Care						
6.3	Data Element - Number of mothers provided full course of 180 IFA tablets after delivery	4.3	6.3	6.3	6.3	6.3	NA
M9	Child Immunization	6.9	9.9	9.9	NA	NA	NA
9.9	Data Element-Number of children (6-59 months) provided 8-10 doses (1ml) of IFA syrup (Bi weekly) NIPI	6.9	9.9	9.9	NA	NA	NA
9.10	Data Element-Total Number of children (12-59 months) provided Albendazole	6.10	9.10	9.10	9.10	9.10	NA
Part D	Monthly Inventory details						
H	Stock Position (During the Month)						
M19	Other Items						
19.6	IFA tablets (Adult)	NA	NA	NA	NA	NA	3.6
19.7	IFA - Blue (Adolescent 10-19 yrs)	NA	NA	NA	NA	NA	3.7

Sr No	Data Element	SC	PHC	CHC	SDH	DH	DHQ
19.8	IFA- Pink (Junior 6-10 yrs)	NA	NA	NA	NA	NA	3.8
19.9	Iron and folic acid (IFA) Syrup-Paediatric	NA	NA	NA	NA	NA	3.9
19.15	Albendazole tablets 400mg						
Part E	Other Programmes						
M22	Adolescent Health						
22.1	Coverage under Weekly Iron and Folic Acid (WIFS) Supplementation Programme						
22.1.1	Number of students (6th -12th class) provided 4 IFA tablets in schools						
22.1.1.a	Data Element- Girls (6th -12th class) provided 4 IFA tablets in schools	NA	NA	NA	NA	NA	6.1.1.a
22.1.1.b	Data Element- Boys (6th -12th class) provided 4 IFA tablets in schools	NA	NA	NA	NA	NA	6.1.1.b
22.1.2	Number of students (6th -12th class) provided Albendazole in schools						
22.1.2.a	Data Element- Girls (6th -12th class) provided Albendazole in schools	NA	NA	NA	NA	NA	6.1.2.a
22.1.2.b	Data Element- Boys (6th -12th class) provided Albendazole in schools	NA	NA	NA	NA	NA	6.1.2.b
22.1.3	Data Element- Number of out of school adolescent girls (10-19 years) provided 4 IFA tablets at Anganwadi Centres	NA	NA	NA	NA	NA	6.1.3
22.1.4	Data Element- Number of out of school adolescent girls (10-19 years) provided Albendazole at Anganwadi Centres	NA	NA	NA	NA	NA	6.1.4
M23	Coverage under WIFS JUNIOR (Weekly Iron Folic Acid Supplementation Programme for children 6 - 10 years) - PINK IFA tablet						
23.1	Data Element- Number of children covered under WIFS JUNIOR (6 - 10 years) provided 4-5 IFA tablets in schools	NA	NA	NA	NA	NA	7.1
23.2	Data Element- Number of children (6 - 10 years) provided Albendazole in schools	NA	NA	NA	NA	NA	7.2
23.3	Data Element- Number of out of school children (6-10 years) given 4-5 IFA tablets at Anganwadi Centres	NA	NA	NA	NA	NA	7.3
23.4	Data Element- Number of out of school children (6-10 years) provided Albendazole at Anganwadi Centres	NA	NA	NA	NA	NA	7.4

Data Definitions

Sr No	Data Element	SC	PHC	CHC	SDH	DH	DHQ
Part A.	*REPRODUCTIVE AND CHILD HEALTH*						
1.2.4	**Data Element -Number of PW given 180 Iron Folic Acid (IFA) tablets**	1.2.4	1.2.4	1.2.4	1.2.4	1.2.4	NA
	Definition: Total number of pregnant women who have given 180 IFA tablets (equivalent to 60 mg of elemental iron and 0.5 mg of folic acid per tablet daily) during the re-porting month. **Guideline:** The number of pregnant women who were given 180 IFA tablets are to be reported and NOT the number of IFA tablets.						
	If the number of IFA tablets given to a pregnant woman is less than 180, then she should not be reported till she is given 180th tablet. If more than 180 IFA tablets are given to any pregnant woman, she should be counted when she had received 180 IFA tablet and should not be counted for extra tablets given to her. This number should NOT be more than ANC registration. If it is more, then please check that any person other than pregnant women is not included. **Data Source** – Antenatal Register / Pregnancy Register						
1.2.6	**Data Element: Number of PW given one Albendazole tablet after 1st trimester**	1.2.6	1.2.6	1.2.6	1.2.6	1.2.6	NA
	Definition: Total number of pregnant women who were given one tablet of Albendazole (400 mg) after 1st trimester for the reporting month. **Guideline:** The number of pregnant women who were given one tablet of Albendazole(400 mg) is to be reported and NOT the number of Albendazole tablets (400 mg). This number should NOT be more than ANC registration. If it is more, then please check that any person other than pregnant women is not included. **Data Source** – Antenatal Register / Pregnancy Register						
1.4.2	**Data Element- Number of PW having Hb level<11 (tested cases) (7.1 to 10.9)**	1.4.2	1.4.2	1.4.2	1.4.2	1.4.2	NA
	Definition: Number of pregnant women having Haemoglobin (Hb) less than 11g/dl (7.1 to 10.9 g/dl) during the reporting month. **Guideline:** Only those cases are to be reported where the Hb was measured by a Hemoglobinometer or any other acceptable laboratory method Examination of eye/nails is not to be reported. Only new cases should be REPORTED. **Data Source** – Antenatal Register / Laboratory Register						
1.4.3	**Data Element- Number of PW having Hb level<7 (tested cases)**	1.4.3	1.4.3	1.4.3	1.4.3	1.4.3	NA
	Definition: Number of pregnant women tested and found with Haemoglobin (Hb.) less than 7g/dl during the reporting month. **Guideline:** Only those cases are to be reported where the Hb was measured by a Hemoglobinometer or any other acceptable laboratory method and was found to be less than 7g/dl. Examination of eye/nails is not to be reported. ONLY NEW CASES SHOULD BE REPORTED **Data Source** – Antenatal Register / Laboratory Register						

Sr No	Data Element	SC	PHC	CHC	SDH	DH	DHQ
1.4.4	**Data Element- Number of PW having severe anaemia (Hb<7) (treated cases)**	NA	1.4.4	1.4.4	1.4.4	1.4.4	NA
	Definition: Total number of pregnant women with Haemoglobin (Hb.) less than 7g/dl treated during the reporting month. **Guideline:** Pregnant woman who has haemoglobin under 7 grams/dl (severe anaemia) and detected at health facilities are to be either treated if there is no provision for treatment it should be referred to a higher facility for treatment. **Data Source** – Antenatal Register / Laboratory Register						
6.3	**Data Element - Number of mothers provided full course of 180 IFA tablets after delivery**	4.3	6.3	6.3	6.3	6.3	NA
	Definition: Total number of mothers who were given 180 IFA tablets (equivalent to 60 mg of elemental iron and 0.5 mg of folic acid per tablet daily) during the reporting month. **Guideline:** The number of mothers who were given 180 IFA tablets are to be reported and NOT the number of IFA tablets. If the number of IFA tablets given to a mother is less than 180, then she should not be reported till she is given 180th tablet. If more than 180 IFA tablets are given to any mother, she should be counted when she had received 180 IFA tablets and should not be counted for extra tablets given to her. Any person other than woman (who has recently delivered) given IFA tablets should not be counted here. **Data Source** –Pregnancy Register/Post-natal Register						
9.9	**Data Element-Number of children (6-59 months) provided 8-10 doses (1ml) of IFA syrup (Bi weekly) NIPI**	6.9	9.9	9.9	NA	NA	NA
	Definition: Total number of children, aged 6-59 months, who were given 8-10 doses of IFA syrup during the reporting month. **Guideline:** As per National Iron Plus Initiative (NIPI), children aged 6-59 months should be given one ml of IFA syrup containing 20 mg of elemental iron and 100 mcg of folic acid biweekly for 100 doses in a year. Those children who were given biweekly dose of IFA syrup for all weeks in the reporting month should be reported. **Data Source:** AMB Reporting format						
9.10	**Data Element-Total Number of children (12-59 months) provided Albendazole**	6.10	9.10	9.10	9.10	9.10	NA
	Definition: Total number of children, aged 12-59 months, who were given Albendazole (400 mg) tablet during the reporting month. **Guideline:** As per National Iron Plus Initiative (NIPI), children aged 12-59 months should be given 400 mg Albendazole tablet. **Data Source:** AMB Reporting format						
Part D	***Monthly Inventory details***						
H	Stock Position (During the Month) Balance from Previous month: Balance remaining in the store on last day of the previous month. **Stock received:** Stock received from 1st to last day of the reporting month. **Unusable stock:** The stock, which becomes unusable due to any reason during the reporting month. Unusable Stock can occur due to a variety of reasons like breakage, expiry, Wastages etc. and this quantum/number is to be recorded. Recording this is necessary to arrive at the Total Stock in Hand. **Stock Distributed:** Stock distributed to the health facilities in the district during the reporting month. **Total Stock:** Stock balance in the store on the last day of the reporting month.						

Sr No	Data Element	SC	PHC	CHC	SDH	DH	DHQ
M19	Other Items						
19.6	IFA tablets (Adult)	NA	NA	NA	NA	NA	3.6
19.7	IFA - Blue (Adolescent 10-19 yrs)	NA	NA	NA	NA	NA	3.7
19.8	IFA- Pink (Junior 6-10 yrs)	NA	NA	NA	NA	NA	3.8
19.9	Iron and folic acid (IFA) Syrup-Paediatric	NA	NA	NA	NA	NA	3.9
19.15	Albendazole tablets 400mg	NA	NA	NA	NA	NA	3.15
Part E	Other Programmes						
M22	Adolescent Health						
22.1	Coverage under Weekly Iron and Folic Acid (WIFS) Supplementation Programme						
22.1.1	Number of students (6th -12th class) provided 4 IFA tablets in schools						
22.1.1.a	Data Element- Girls (6th -12th class) provided 4 IFA tablets in schools	NA	NA	NA	NA	NA	6.1.1.a
	Definition: Total number of girls (6th – 12th class) consumed 4 IFA tablets through supervised ingestion in schools during the reporting month. **Guidelines:** Adolescent Girls in Classes 6th to 12th studying in Government, Government Aided or Municipal schools covered under the WIFS Programme who has consumed 4 IFA in the reporting month. The IFA tablets should be given at the Schools and the ingestion of the tablets by the adolescent should be supervised by Teacher. **Data Source:** Format-5, District Monthly Report						
22.1.1.b	Data Element- Boys (6th -12th class) provided 4 IFA tablets in schools	NA	NA	NA	NA	NA	6.1.1.b
	Definition: Total number of boys (6th – 12th class) consumed 4 IFA tablets through supervised ingestion in schools during the reporting month. **Guidelines:** Adolescent Boys in Classes 6th to 12th studying in Government, Government Aided or Municipal schools covered under the WIFS Programme who has consumed 4 IFA in the reporting month. The IFA tablets should be given at the Schools and the ingestion of the tablets by the adolescent should be supervised by Teacher. **Data Source:** Format-5, District Monthly Report						

Sr No	Data Element	SC	PHC	CHC	SDH	DH	DHQ
22.1.2	***Number of students (6th -12th class) provided Albendazole in schools***						
22.1.2.a	**Data Element- Girls (6th -12th class) provided Albendazole in schools**	**NA**	**NA**	**NA**	**NA**	**NA**	**6.1.2.a**
	Definition: Total number of girls (6th – 12th class) consumed Albendazole tablets through supervised ingestion in schools during the reporting month. **Guidelines:** Adolescent Boys in Classes 6th to 12th studying in Government, Government Aided or Municipal schools covered under the WIFS Programme who has consumed Albendazole Tablets in the reporting month. The IFA tablets should be given at the Schools and the ingestion of the tablets by the adolescent should be supervised by Teacher. **Data Source:** Format 5, District Monthly Report						
22.1.2.b	**Data Element- Boys (6th -12th class) provided Albendazole in schools**	**NA**	**NA**	**NA**	**NA**	**NA**	**6.1.2.b**
	Definition: Total number of boys (6th – 12th class) consumed Albendazole tablets through supervised ingestion in schools during the reporting month. **Guidelines:** Adolescent Boys in Classes 6th to 12th studying in Government, Government Aided or Municipal schools covered under the WIFS Programme who has consumed Albendazole Tablets in the reporting month. The IFA tablets should be given at the Schools and the ingestion of the tablets by the adolescent should be supervised by Teacher. **Data Source:** Format 5, District Monthly Report						
22.1.3	**Data Element- Number of out of school adolescent girls (10-19 years) provided 4 IFA tablets at Anganwadi Centres**	**NA**	**NA**	**NA**	**NA**	**NA**	**6.1.3**
	Definition: Total number of out of school adolescent girls(10-19 years) consumed 4 IFA tablets through supervised ingestion at Anganwadi Centers (AWCs) during the reporting month. **Guidelines:** Out of School Adolescent Girls (10-19 years of age) who have consumed 4 IFA Tablets in the reporting month. IFA Tablets should be given at Anganwadi Centre and the ingestion of the tablet by the adolescent girl should be supervised by Anganwadi Worker. **Data Source:** Format-5, District Monthly Report						
	Data Element- Number of out of school adolescent girls (10-19 years) provided Albendazole at Anganwadi Centres	**NA**	**NA**	**NA**	**NA**	**NA**	**6.1.4**
22.1.4	**Definition:** Total number of out of school adolescent girls (10-19 years) consumed Albendazole tablets through supervised ingestion at Anganwadi Centers (AWCs) during the reporting month. **Guidelines:** Out of School Adolescent Girls (10-19 years of age) who have consumed Albendazole Tablets in the reporting month. Albendazole tablet should be given at Anganwadi Centre and the ingestion of the tablet by the adolescent girl should be supervised by Anganwadi Worker. **Data Source:** Format 5, District Monthly Report						
M23	***Coverage under WIFS JUNIOR (Weekly Iron Folic Acid Supplementation Programme for children 6 - 10 years) -*** ***PINK IFA tablet***						

Sr No	Data Element	SC	PHC	CHC	SDH	DH	DHQ
23.1	**Data Element- Number of children covered under WIFS JUNIOR (6 - 10 years) provided 4-5 IFA tablets in schools**	NA	NA	NA	NA	NA	7.1
	Definition: Total number of children in classes 1st to 5th in a specified reporting school who have received minimum four sugar-coated pink colored Iron-folic acid tablets during the reporting month under the NIPI Weekly Iron Folic Acid Supplementation junior (WIFS junior) programmer. **Data Source –**Monthly WIFS junior report						
	Data Element- Number of children (6 - 10 years) provided Albendazole in schools	NA	NA	NA	NA	NA	7.2
23.2	**Definition:** Number of children aged 6-10 years are administered Albendazole tablets in government-government aided schools and private schools. **Data Source –**Coverage report of National Deworming Day						
	Data Element- Number of out of school children (6-10 years) given 4-5 IFA tablets at Anganwadi Centres	NA	NA	NA	NA	NA	7.3
23.3	**Definition:** Total number of out-of-school children aged 5 to 10 years in a specified reporting AWC who have received minimum four sugar-coated pink colored Iron-folic acid tablets during the reporting month under the NIPI Weekly Iron Folic Acid Supplementation junior (WIFS junior) programmer. **Data Source –**Monthly WIFS junior report						
23.4	**Data Element- Number of out of school children (6-10 years) provided Albendazole at Anganwadi Centres**	NA	NA	NA	NA	NA	7.4
	Definition: Number of out of school children aged 6-10 years are administered Albendazole tablets in Anganwadi centers **Data Source –**Coverage report of National Deworming Day						

(Type of Formats SC-Sub Centre, PHC-Primary Health Centre, CHC-Cummunity Health Centre, SDH-Sub District Hospital, DH-District Hospital, DHQ-District Head Quarter

Denominator

"The denominators are the target beneficiary numbers across each age group of AMB. These denominators are estimations (based on Census 2011 data) and reported programme targets. The denominators for each of these target groups are fixed for the FY and no edits of the data are allowed in the back end."

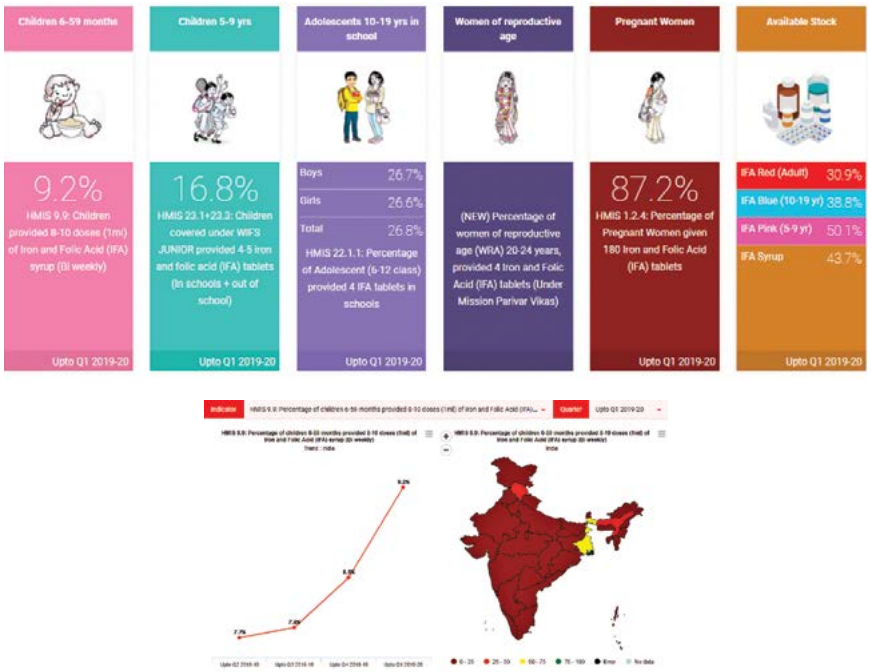
Area Name	Target Beneficiary		Drugs Requirement	
India	2018-2019	2017-2018	2018-2019	2017-2018
Andaman & Nicobar Islands	2018-2019	2017-2018	2018-2019	2017-2018
Andhra Pradesh	2018-2019	2017-2018	2018-2019	2017-2018
Arunachal Pradesh	2018-2019	2017-2018	2018-2019	2017-2018
Assam	2018-2019	2017-2018	2018-2019	2017-2018
Bihar	2018-2019	2017-2018	2018-2019	2017-2018
Chandigarh	2018-2019	2017-2018	2018-2019	2017-2018
Chhattisgarh	2018-2019	2017-2018	2018-2019	2017-2018
Dadra & Nagar Haveli	2018-2019	2017-2018	2018-2019	2017-2018

Process of Coverage Data Updated in AMB Dashboard

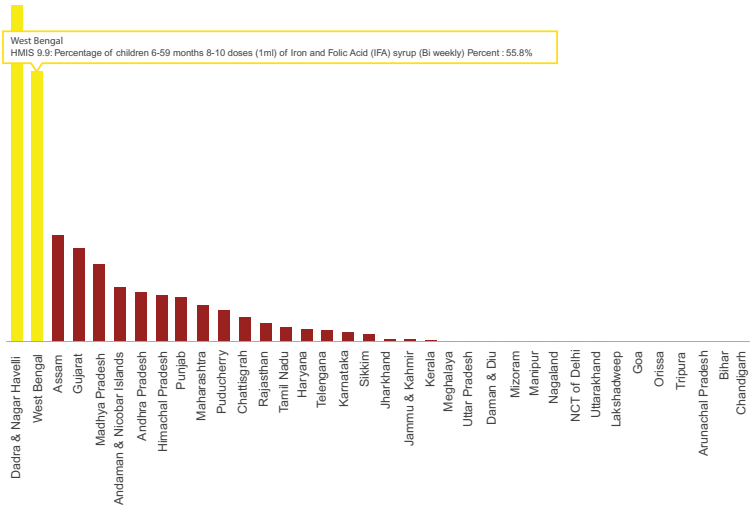
Data is being uploaded quarterly on the AMB portal. Each quarter is defined as Q1 (April to June), Q2 (July to September), Q3 (October to December) and Q4 (January to March). The used numerators are from the HMIS Standard report generated from the HMIS portal. The HMIS Standard report is downloaded after one and half month completion of each quarter because of reporting done after completion of each month and compiled after 15 days. Thereafter data cleaning to remove non-reporting is performed on downloaded data according to the requirement of the AMB portal. Based on the cleaned data, a Data Entry Sheet (DES) is prepared and uploaded on the AMB portal. The percentage calculation based on the denominator is an automated process performed by pre-defined jobs. Thus the computed percentage data is shown on the AMB portal.

Key Performance Indicator Report

- ☑ HMIS 9.9: Children provided 8-10 doses (1ml) of Iron and Folic Acid (IFA) syrup (Bi weekly
- ☑ HMIS 23.1+23.3: Children covered under WIFS JUNIOR provided 4-5 iron and folic acid (IFA) tablets (In schools + out of school)
- ☑ HMIS 22.1.1: Percentage of Adolescent (6-12 class) provided 4 IFA tablets in school
- ☑ (NEW) Percentage of women of reproductive age (WRA) 20-24 years, provided 4 Iron and Folic Acid (IFA) tablets (Under Mission Parivar Vikas)
- ☑ HMIS 1.2.4: Percentage of Pregnant Women given 180 Iron and Folic Acid (IFA) tablets
- ☑ Percentage of Stock Availability of IFA Red, Blue, Pink and Syrup.



Key Performance Indicators

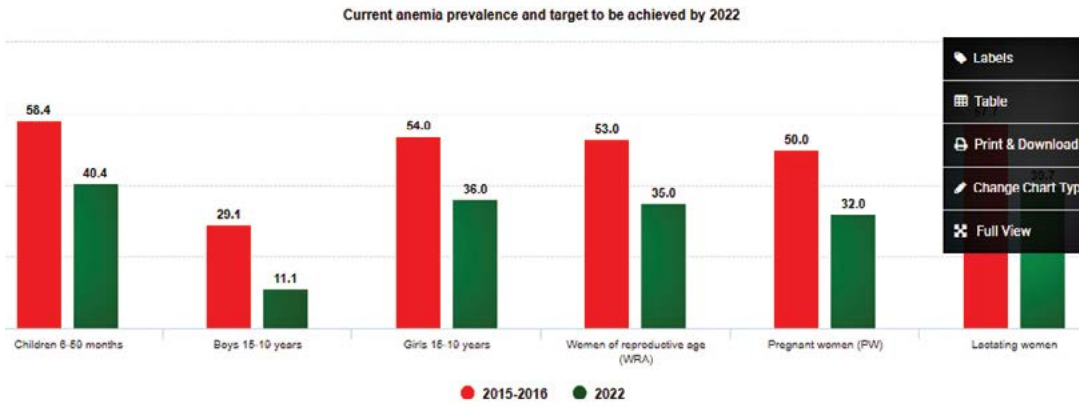


Percentage of children 6-59 months provided 8-10 doses (1ml) of Iron and Folic Acid (IFA) syrup (Bi weekly)

India – 2019.03

Label

The label is prevalence of anemia among 6 focused age groups. The purpose here is to represent the achievable target of reduction in anemia prevalence by one-third of NFHS-4 levels by 2022. These are calculated as 3 percentage points' reduction per year.



Label and Drop Down

Using the Label and Drop Down option, you can access Across State and District data in the Left Black box along with its download option.

Session 3: Quarterly Progress Report

Duration: **45 minutes**

Key Focus:

- Making an effective quarterly progress report

Learning Objective:

- To understand the quarterly report formulae and how to monitor the progress of various key indicators.

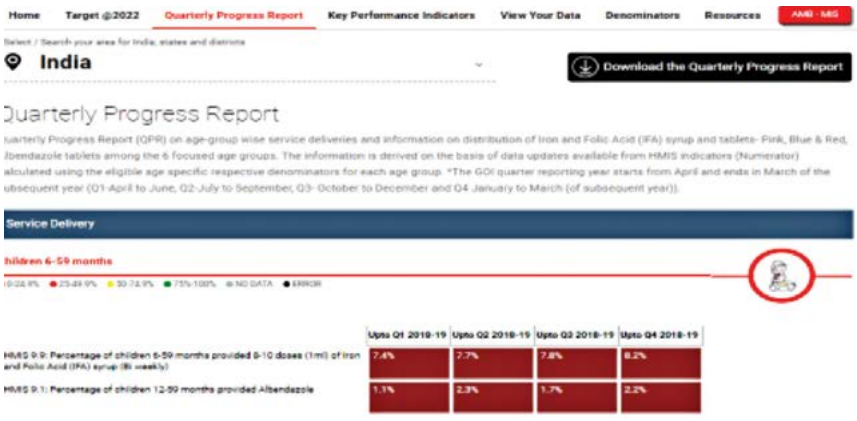
Methodology:

- Presentation

Resource:

- Quarterly report format

Quarterly Progress Reports (QPR) are generated on age-group wise service deliveries and information on distribution of Iron and Folic Acid (IFA) syrup and tablets - Pink, Blue & Red, and Albendazole tablets among the 6 focused age groups. The information is derived on the basis of data updates available from HMIS indicators (Numerator) calculated using the eligible age specific respective denominators for each age group.



*The GoI quarter reporting year starts from April and ends in March of the subsequent year (Q1-April to June, Q2-July to September, Q3- October to December and Q4 January to March (of subsequent year)

Quarterly Progress Report Formulae

Age Group	HMIS Code	Indicators	Quarterly Progress Report Formulae			
			Q1	Q2	Q3	Q4
Children 6-59 months	HMIS 9.9	Children 6-59 months provided 8-10 doses (1 ml) of iron and folic acid (IFA) syrup (Bi weekly)	(respective Q1 Numerator) /3 x 100 Target)	(respective Q2 Numerator) /6 x 100 (Target) (respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
	HMIS 9.1	Children 12-59 months provided albendazole	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
Children 5-9 years	HMIS 23.1+23.3	Children covered under WIFS JUNIOR (5-9 years) provided 4-5 iron and folic acid (IFA) tablets in schools+out of school	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100(Target)	(respective Q4 Numerator) /12 x 100 (Target)
	HMIS 23.2+23.4	Children (5-9 years) provided albendazole in schools+out of school	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
Adolescents 10-19 years	HMIS 22.1.1	Adolescents (6-12 class) provided 4 IFA tablets in schools	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
	HMIS 22.1.1.a	Girls (6-12 class) provided 4 IFA tablets in schools	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
Adolescents 10-19 years	HMIS 22.1.1.b	Boys (6-12 class) provided 4 IFA tablets in schools	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
	HMIS 22.1.2	Adolescents (6-12 class) provided albendazole in schools	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)

Age Group	HMIS Code	Indicators	Quarterly Progress Report Formulae			
			Q1	Q2	Q3	Q4
Adolescents 10-19 years	HMIS 22.1.2.a	Girls (6-12 class) provided albendazole in schools	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
	HMIS 22.1.2.b	Boys (6-12 class) provided albendazole in schools	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
Adolescents 10-19 years	HMIS 22.1.3	Out of school adolescent girls 10-19 years provided 4 iron and folic acid (IFA) tablets at Anganwadi Centres	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
	HMIS 22.1.4	Out of school adolescent girls 10-19 years provided albendazole at Anganwadi Centres	(respective Q1 Numerator) /3 x 100 (Target)	(respective Q2 Numerator) /6 x 100 (Target)	(respective Q3 Numerator) /9 x 100 (Target)	(respective Q4 Numerator) /12 x 100 (Target)
Pregnant women	HMIS 1.2.4	Number of pregnant women (PW) given 180 iron and folic acid (IFA) tablets	respective Q1 Numerator x 100 (ANC registered in respective Q)	respective Q2 Numerator x 100 (ANC registered in respective Q)	respective Q3 Numerator x 100 (ANC registered in respective Q)	respective Q4 Numerator x 100 (ANC registered in respective Q)
	HMIS 1.2.6	Number of pregnant women (PW) given one albendazole tablet after 1st trimester	respective Q1 Numerator x 100 (ANC registered in respective Q)	respective Q2 Numerator x 100 (ANC registered in respective Q)	respective Q3 Numerator x 100 (ANC registered in respective Q)	respective Q4 Numerator x 100 (ANC registered in respective Q)
Pregnant women	HMIS 1.2.6	Number of pregnant women (PW) given one albendazole tablet after 1st trimester	respective Q1 Numerator x 100 (ANC registered in respective Q)	respective Q2 Numerator x 100 (ANC registered in respective Q)	respective Q3 Numerator x 100(ANC registered in respective Q)	respective Q4 Numerator x 100 (ANC registered in respective Q)
	HMIS 1.4.2	Number of pregnant women (PW) having Hb level<11 (tested cases) (7.1 to 10.9)	respective Q1 Numerator x 100 (ANC registered in respective Q)	respective Q2 Numerator x 100 (ANC registered in respective Q)	respective Q3 Numerator x 100 (ANC registered in respective Q)	respective Q4 Numerator x 100 (ANC registered in respective Q)

Age Group	HMIS Code	Indicators	Quarterly Progress Report Formulae			
			Q1	Q2	Q3	Q4
Pregnant women	HMIS 1.4.3	Number of pregnant women having Hb level<7 (tested cases)	respective Q1 Numerator x 100 (ANC registered in respective Q)	respective Q2 Numerator x 100 (ANC registered in respective Q)	respective Q3 Numerator x 100 (ANC registered in respective Q)	respective Q4 Numerator x 100 (ANC registered in respective Q)
	HMIS 1.4.4	Pregnant women having severe anaemia (Hb<7) treated	respective Q1 Numerator x 100 (ANC registered in respective Q)	respective Q2 Numerator x 100 (ANC registered in respective Q)	respective Q3 Numerator x 100 (ANC registered in respective Q)	respective Q4 Numerator x 100 (ANC registered in respective Q)
Lactating women 0-6 months	HMIS 6.3	Number of mothers provided full course of 180 iron and folic acid (IFA) tablets after delivery	respective Q1 Numerator x 100 (No. of live birth/4)	respective Q2 Numerator x 100(No. of live birth/4)*2	respective Q3 Numerator x 100 (No. of live birth/4)*3	respective Q4 Numerator x 100 (No. of live birth)
Stocks available	HMIS 19.6	IFA - Red (Adult)	respective Q1 Numerator x 100 (Target /4)	respective Q2 Numerator x 100 (Target /4)*2	respective Q3 Numerator x 100 (Target /4)*3	respective Q4 Numerator x 100 (Target)
Stocks available	HMIS 19.7	IFA - Blue (10-19 Years Adolescent)	respective Q1 Numerator x 100 (Target /4)	respective Q2 Numerator x 100 (Target /4)*2	respective Q3 Numerator x 100 (Target /4)*3	respective Q4 Numerator x 100 (Target)
	HMIS 19.8	Iron and folic acid (IFA) tablets - Pink (Junior 6-10 years)	respective Q1 Numerator x 100 (Target /4)	respective Q2 Numerator x 100 (Target /4)*2	respective Q3 Numerator x 100 (Target /4)*3	respective Q4 Numerator x 100 (Target)
Stocks available	HMIS 19.9	Iron and folic acid (IFA) - Syrup- Paediatric	respective Q1 Numerator x 100 (Target /4)	respective Q2 Numerator x 100 (Target /4)*2	respective Q3 Numerator x 100 (Target /4)*3	respective Q4 Numerator x 100 (Target)
Stocks available	HMIS 19.15	Albendazole tablets- 400 mg	respective Q1 Numerator x 100 (Target /4)	respective Q2 Numerator x 100 (Target /4)*2	respective Q3 Numerator x 100 (Target /4)*3	respective Q4 Numerator x 100 (Target)
Reporting status	A.1	No. of facilities reporting in the quarter	respective Q1 Numerator x 100 (Target)	respective Q2 Numerator x 100 (Target)	respective Q3 Numerator x 100 (Target)	respective Q4 Numerator x 100 (Target)

Session 4: Resources

Duration: **15-20 minutes**

Key Focus:

- Introduction to available resource materials

Learning Objective:

- To learn about different resource materials and how to use them

Methodology:

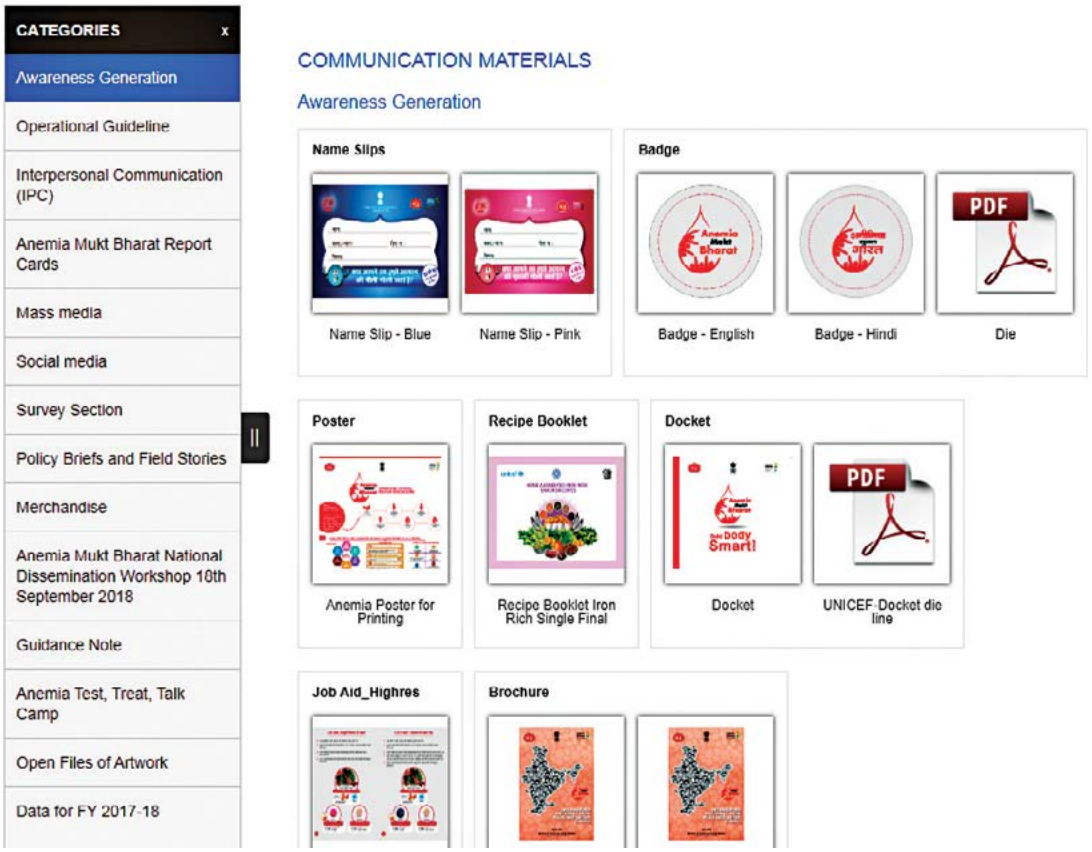
- Presentation

Resource:

- Online e-material, to be downloaded before the day of the session

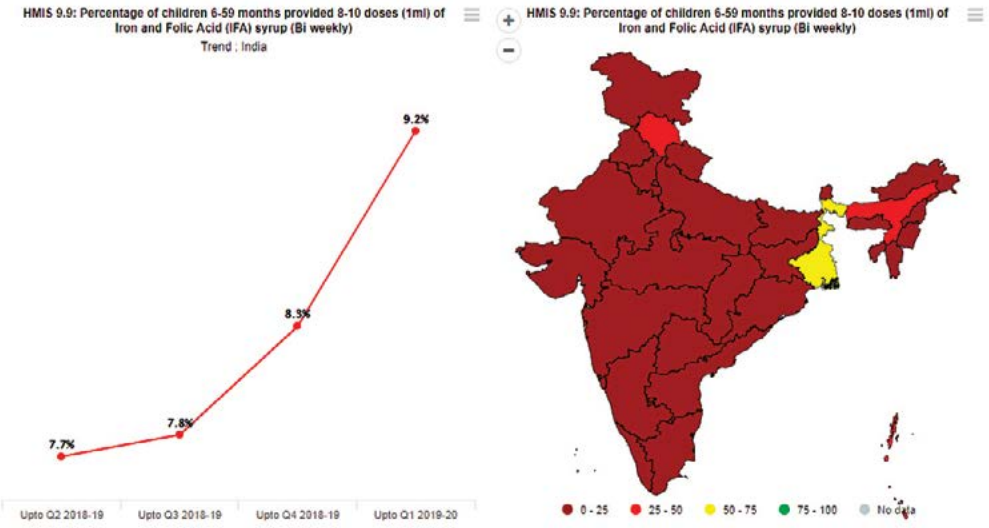
Available Materials in Resources Section

- Communication materials like name slips, badge, poster, docket, brochure etc.
- Operational Guidelines in English and Hindi language
- Interpersonal communication materials like logo
- Social media ads for AMB
- Merchandise like banners, shirt cap images, book marks, booth branding, selfie booth etc.
- Workshop of 18th September 2018 materials



View Your Data

Raw data for the selected indicator is also available in View your data, using this numerator and given denominator you can calculate your percentage through the portal given directly for use.



NOTES

unicef
for every child

NCEAR-A

SBCC Hub