

NOTIFICATION**Subject: Tracking of Severely Anemic Pregnant Women.**

Severe anemic women are more prone to pregnancy related complications which may lead to maternal deaths. Mortality & Morbidity related to severe anemia during pregnancy is avoidable. Therefore, as an intensified action to address this public health problem, all Health Units shall henceforth implement Tracking of all Severely Anemic Pregnant Women to enable provision of timely management, referral if required and further follow up till desired correction of anemia is achieved as per the Guideline of Tracking of Severe Anaemia herein enclosed as Annexure I.

The Chief Medical Officer are to take up the following measures and ensure Tracking of Severely Anemic Pregnant Women is implemented in all Health Units.

1. To issue necessary instructions and follow up ATR thereof, for sensitization of various categories of Health Workers on the importance of the Activity during Review Meetings at the District, Block and Health Unit level.
2. To issue necessary instructions and follow up ATR thereof, for incorporation in the on-going training programmes:
 - a. Orientation & training of Health Workers particularly Nurses of SC and PHC on estimation of Hemoglobin by Sahli's haemoglobinometer or by Standard Hb Colour Scale.
 - b. Orientation & training of Health Workers (ANM/GNM) the recording of Hemoglobin status in the MCP Card, MCTS and HMIS.
3. To issue necessary instructions and follow up ATR thereof, for ensuring availability of necessary equipment and reagents required for Hemoglobin Estimation. If not available, it can be procured from the Untied Fund/Annual Maintenance Grant.
4. To ensure availability of necessary drugs for anemia management.
5. To issue necessary instructions and follow up ATR thereof, for ensuring timely submission of Reports in the prescribed format by all health units & Health Blocks within the time line.
6. To analyze the status and take corrective measures at regular interval and to submit the Implementation Status to the State within the time line.

(DR. KHANLO MAGH)

Mission Director (NRHM)

Dated Kohima the Aug 2013

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Copy to:-

1. The Commissioner & Secretary to the Govt of Nagaland, Health & Family Welfare Department, Nagaland: Kohima
2. The Principal Director, Directorate of Health & Family Welfare Nagaland: Kohima
3. The Deputy Commissioner & Chairman, District Health Society, Dimapur/ Kiphire/ Kohima/ Longleng/ Mokokchung/ Mon/ Peren/ Phek/ Tuensang/ Wokha, Zunheboto.
4. The Chief Medical Officer Dimapur/ Kiphire/ Kohima/ Longleng/ Mokokchung/ Mon/ Peren/ Phek/ Tuensang/ Wokha, Zunheboto.
5. The Medical Superintendent/ Managing Director/ Hospital Manager, District Hospital Dimapur/ Kiphire/ Kohima/ Longleng/ Mokokchung/ Mon/ Peren/ Phek/ Tuensang/ Wokha, Zunheboto.
6. The DPO (RCH/UIP), Dimapur, Kohima, Kiphire, Longleng, Mokokchung, Mon, Phek, Peren, Tuensang, Wokha, Zunheboto
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Guideline on Tracking of Severely Anemic Pregnant Women

The consequences of anaemia in women are enormous as the condition adversely affects both their productive and reproductive capabilities. Among women, iron deficiency prevalence is higher than among men due to menstrual iron losses and the extreme iron demands of a growing foetus during pregnancies, which are approximately two times the demands in the non-pregnant state. Worldwide, it is estimated that about 20 per cent of maternal deaths are caused by anaemia; in addition, anaemia contributes partly to 50 per cent of all maternal deaths. First, anaemia reduces women's energy and capacity for work and can therefore threaten household food security and income. Second, severe anaemia in pregnancy impairs oxygen delivery to the foetus and interferes with normal intra-uterine growth, resulting in intrauterine growth retardation, stillbirth, Low Birth Weight (LBW) and neonatal deaths. Therefore, anaemia is a major contributor to poor pregnancy and birth outcomes in developing countries as it predisposes to premature delivery, increased perinatal mortality and increased risk of death during delivery and postpartum.

Therefore, in order to address this major public health problem, all Health Units shall henceforth implement Tracking of all Severely Anemic Pregnant Women for providing timely management, referral if required and further follow up till desired correction of anemia is achieved

1. Institutionalization:

The Chief Medical Officer must ensure:

- a. Implementation of Tracking of all Severely Anemic Pregnant Women in all Health Units.
- b. Maintenance of Register for Name Wise Line Listing of Pregnant Women with severe anemia for Tracking and timely Management.
- c. All Health Unit must submit the Monthly Monitoring Report on Severe Anemia.

The In-Charge of the Health Block must ensure that:

- d. Necessary Equipment, Reagents, Hemoglobin Estimation is available in all Health Units. If not available, it can be procured from the Untied Fund.
- e. Necessary Register and Reporting Formats required for Tracking Severely Anemic Pregnant Women is available in all Health Units. If not available, it can be procured from the Untied Fund.
- f. All relevant categories health personnel are trained on Estimation of Hemoglobin and recording of the anemia status in the Integrated RCH Register, MCP Card, MCTS and HMIS.

2. Reporting System:

- a. All Health Unit must submit the Monthly Monitoring Report on Severe Anemia to the BPMU on or before 7th of every month.
- b. The BPMU in turn shall compile, analyze and take corrective measure and forward the Block Report to the Chief Medical Officer on or before 15th of every month.
- c. The DPMU shall compile, analyze the Block Report and take corrective measure and forward the District Report to the SPMU on or before 25th of every month.
- d. The SPMU shall compile, analyze the District Report and take corrective measure and forward the State Report every quarter to the MoHFW.
- e. Reporting Formats:
 - i. Monthly Monitoring of Severe Anaemia (For Health Units) as given in Form- 1.
 - ii. Monthly Reporting Monitoring of Severe Anaemia (For District/Block) as given in Form- 2.

3. Iron Supplementation & Therapeutic Management of Anaemia as per National Guideline for Control of Iron Deficiency Anaemia

A. Supplementation for Pregnant Women and Lactating Mothers:

- a. Iron and folic acid tablets are being distributed through sub-centres, primary health centres (PHCs), community health centres (CHCs) and district hospitals (DHs) to all pregnant women and lactating mothers.
- b. Dose and regimen
 - IFA supplementation (100 mg elemental iron and 500 mcg of folic acid) every day for at least 100 days, starting after the first trimester, at 14–16 weeks of gestation followed by the same dose for 100 days in post-partum period. Nutrition counselling is being provided during antenatal/postnatal check-ups and during monthly Village Health & Nutrition Day (VHND) to pregnant women and lactating mothers.
 - In addition to this, all women in the reproductive age group in the pre-conception period and up to the first trimester of the pregnancy are advised to have 400 mcg of folic acid tablets to reduce the incidence of neural tube defects in the foetus.
- c. Implementation
 - Provision of IFA tablets to pregnant women will be during routine antenatal visits at subcentre/ PHC/CHC/DH.
 - ASHA to ensure provision of IFA supplements to pregnant women who are not able to come for regular antenatal checkups through home visits. She will also monitor compliance of IFA tablets consumption through weekly house visits.
 - ASHA to be suitably incentivized for this activity.

B. Management of anaemia on the basis of haemoglobin levels among pregnant and lactating women:

Screening of all pregnant women for anaemia at sub-centre/VHND/outreach/PHC level can be done by **Sahli's haemoglobinometer** or by **Standard Hb Colour Scale**. Therapeutic dose of oral IFA supplementation can be initiated even on clinical signs and symptoms, however, such cases must be referred for confirmation of degree of anaemia through Hb testing and for further management as per Table given below:

Haemoglobin level	Level of facility	Therapeutic regimen
9–11 gm/dl	Sub-centre Signs and symptoms (generalised weakness, giddiness, breathlessness, etc.) Clinical examination (pallor eyelids, tongue, nail beds, palm, etc.) Confirmation by laboratory testing	Hb level between 9–11 gm/dl <ul style="list-style-type: none"> • 2 IFA tablets (1 in the morning and 1 in the evening) per day for at least 100 days (at least 200 tablets of IFA). • Hb levels should preferably be reassessed at monthly intervals. If on testing, Hb has come up to normal level, discontinue the treatment. • If it does not rise in spite of the administration of 2 tablets of IFA daily and dietary supplementation, refer the woman to the next higher health facility for further management.
7–9 gm/dl	PHC/CHC Signs and symptoms (generalised weakness, giddiness, breathlessness, etc.) Clinical examination (pallor of eyelids, tongue, nail beds, palm, etc.) Confirmation by laboratory testing	Hb level between 8–9 gm/dl <ul style="list-style-type: none"> • Before starting the treatment, the woman should be investigated to detect the cause of anaemia. • Oral IFA supplementation as for Hb level 9–11 gm/dl. • Hb testing to be done every month. • Depending on the response to

		<p>treatment, same course of action as prescribed for Hb level between 9–11 gm/dl.</p> <p>Hb level between 7–8 gm/dl</p> <ul style="list-style-type: none"> • Before starting the treatment, the woman should be investigated to diagnose the cause of anaemia. • Injectable IM iron preparations (parenteral iron) should be given if iron deficiency is found to be the cause of anaemia. • IM iron therapy in divided doses along with oral folic acid daily if women do not have any obstetric or systemic complication; repeat Hb after 8 weeks. If the woman has become non-anaemic, no further medication is required: if Hb level is between 9–11 gm/dl, same regimen of oral IFA prescribed for this range. • If woman with Hb between 7–8 gm/dl comes to PHC/CHC in the third trimester of pregnancy, refer to FRU/MC for management. <p>Multiple dose regime</p> <ul style="list-style-type: none"> • Intramuscular (IM) - Test dose of 0.5 ml given deep IM and woman observed for 1 hour. Iron dextran or iron sorbitol citrate complex given as 100 mg (2 ml) deep IM in gluteal region daily. Recommended dose is 1500–2000 mg (IM in divided doses) depending upon the body weight and Hb level • If parenteral iron therapy is contraindicated e.g. in CHF, H/O allergy, asthma, eczema; Haemochromatosis, liver cirrhosis, rheumatoid arthritis and acute renal failure etc, refer the woman to FRU/MC
<7 gm/dl	<p>FRU/DH/MC</p> <p>Signs and symptoms (generalised weakness, giddiness, breathlessness, etc.)</p> <p>Clinical examination (pallor eyelids, tongue, nail beds, palm, etc.)</p> <p>Confirmation by laboratory testing</p>	<p>Hb level between 5-7 gm/dl</p> <ul style="list-style-type: none"> • Continue parenteral iron therapy as for Hb level between 7–8 gm/dl. Hb testing to be done after 8 weeks • If the woman becomes non-anaemic, no further medication is required: if Hb level is between 9–11 gm/dl, same regimen of oral IFA prescribed for this range • Depending on the further response to treatment, same course of action as prescribed for Hb level between 9–11 gm/dl <p>Hb level less than 5 gm/dl</p> <ul style="list-style-type: none"> • Evidence for injectable IV sucrose

		<p>preparation: under Randomised Control Trial of GOI</p> <ul style="list-style-type: none"> • Immediate hospitalisation irrespective of period of gestation in hospitals where round-the-clock specialist care is available for intensive personalised care and decision for blood transfusion (packed cell transfusion)
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Pre-requisites for parenteral therapy

- Should be given under proper supervision
- After test dose only
- Close monitoring required
- Inj. Adrenaline, Hydrocortisone and oxygen to be available for management of anaphylactic reactions.
- Cardiopulmonary resuscitation facility to be available.
- Other indications for parenteral iron therapy are poor compliance or intolerance to oral iron therapy.

Post-partum/post-natal period

- Regime of management of anaemia and dosage for IFA supplementation during postpartum period will depend on the degree of anaemia if this persists (as already given above), based on results of Hb assessment and as advised by the treating doctor. If the woman is non-anaemic in post-partum period, prophylactic regime (1 tablet per day for 100 days) should be given.

Compliance

- Ensure availability of IFA tablets at all levels
- Provision of tablets to pregnant women in time
- Regular tracking of pregnant women for ANC checkups including Hb testing and completion of treatment
- Counselling of pregnant women on the common side-effects of IFA supplementation, general myths associated with intake of IFA tablets, related risk if anaemia not treated, etc
- Provision of incentives to frontline health workforce for completion of treatment resulting in rise of Hb level to normal level

Precautions for oral therapy

- Intake of doses as per regime, should be taken regularly and must complete the treatment
- Ideally, tablets should be taken on empty stomach for better absorption. In case of gastritis, nausea, vomiting etc., advise to take one hour after meal or at night
- If constipation occurs, advise to drink more water and add roughage to diet
- IFA tablets should not be consumed with tea, coffee, milk or calcium tablets
- IFA treatment should always supplemented with diet rich in iron, vitamins (particularly Vitamin C), protein, minerals and other nutrients e.g. green leafy vegetables, whole pulses, jaggery, meat, poultry and fish, fruits and black gram, groundnuts, ragi, whole grains, milk, eggs, meat and nuts, etc.

Role of ANM and MO

- Detection of anaemia by blood testing for Hb
- Provide IFA tablets to the pregnant women as per GOI Guidelines
- Treat pregnant women with mild to moderate anaemia at SC/PHC
- Hb estimation after a month of starting of therapeutic regime of treatment and reassessment to continue or modify the treatment regime as per GOI Guidelines
- Counselling of pregnant women on the common side effects of IFA supplementation, general myths associated with intake of IFA tablets, related risk if anaemia not treated, etc

- Dietary counselling of pregnant women (increase intake of iron-rich foods such as green leafy vegetables, whole pulses, jaggery, meat, poultry and fish. Advise to take fruits and vegetables containing vitamin C in diet as these enhance the absorption of iron in the diet, high protein diet, including items such as black gram, groundnuts, ragi, whole grains, milk, eggs, meat and nuts, etc.)
- Filling of all the information (Hb level and treatment regime – IFA supplementation) in MCP cards
- Line listing of severely anaemic pregnant women for tracking of treatment of anaemia and micro birth planning

Specific role of ASHA

- Preventive IFA supplementation to every pregnant woman
- Identification of anaemic women during pregnancy and post-partum period through routine and outreach activities and VHNDs
- Bringing these identified women to institutions for diagnosis and treatment
- Ensure regular intake of IFA for treatment of anaemia as advised by ANM/MO/Specialist etc
- Ensure follow-up visits by pregnant women at the scheduled time to the health facility/VHND/outreach activity site
- Provide appropriate and supportive care for anaemia
- Counselling pregnant women on the common side effects of IFA supplementation, general myths associated with intake of IFA tablets, related risk if anaemia not treated, etc
- Dietary counselling of pregnant women (increase intake of iron-rich foods such as green leafy vegetables, whole pulses, jaggery, meat, poultry and fish. Advise to take fruits and vegetables containing vitamin C in diet as these enhance the absorption of iron in the diet, high protein diet, including items such as black gram, groundnuts, ragi, whole grains, milk, eggs, meat and nuts, etc.)

Specific role of ANM

- Refer pregnant women to next higher health facility that is equipped to manage complications in pregnancy when:
 - Hb <8 gm/dl
 - There is poor compliance or intolerance to oral iron therapy in mild to moderate anaemic pregnant women
 - Hb level does not rise in spite of taking treatment (IFA tablets in the prescribed dose) for a month.

Specific role of MO

- All mild and moderate anaemic pregnant women to be treated at PHC/CHC and severely anaemic at FRU
- Prepare line list of severely anaemic pregnant women and submit it to district CMO
- Treatment and follow up of line listed pregnant women
- Train and orient ANMs and lady health visitors (LHVs) on the detection and treatment of anaemia and supervise them.

MONTHLY MONITORING OF SEVERE ANAEMIA

(For Health Unit)

State	Nagaland	District	
Block		Health Unit	
Reporting Month		Date of Reporting	

Indicator	Number
Estimated Pregnancies of the Health Unit Area	
Pregnant Women Registered within 12 weeks cumulative since April of the reporting year till reporting month	
Pregnant Women Registered within 12 weeks during the Reporting month	
Total No of 1st ANC done during the Reporting month	
Total No of 2nd ANC done during the Reporting month	
Total No of 3rd ANC done during the Reporting month	
Total No of 4th ANC done during the Reporting month	
Total No of cases identified as High Risk/Complicated during the Reporting month	
Total No of High Risk/Complicated cases referred to Higher Facility during the Reporting month	
Total Deliveries Conducted during the Reporting month	Institutional
	Home
Total Maternal Deaths during the Reporting month	Institutional (Facility)
	Home (Community)

Name Wise Tracking of Severe Anaemia (<7gm%) Amongst Pregnant Women

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(Use a separate sheet for additional cases)

Instructions:

- Record to be compiled from the MCH Register/MCTS.
- The Monthly Report to be submitted to the Block health Unit on or before 7th of Every Month and a copy retained at the Health Unit.
- Supervisor/Monitoring Team visiting the Health Unit should check availability of duly filled sheets.

Note:

On an average in a population of 5000, about 150 women will be pregnant in a year and 75 of them can be anaemic. About 2% to 4% of these i.e. about 3 pregnant women will be suffering from severe anaemia at any given time.

Name & Signature of the In-Charge of the Health Unit

