# Integrated Management of Pregnancy and Childbirth

# Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice



(Revised and adapted to the Somali context)

# Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice

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In modern times, improvements in knowledge and technological advances have greatly improved the health of mother and children. However, the past decade was marked by limited progress in reducing maternal mortality and a slow-down in the steady decline of childhood mortality observed since the mid 1950s in many countries, the latter being largely due to a failure to reduce neonatal mortality.

Every year, over four million babies less than one month of age die, most of them during the critical first week of life; and for every newborn who dies, another is stillborn. Most of these deaths are a consequence of the poor health and nutritional status of the mother coupled with inadequate care before, during, and after delivery. Unfortunately, the problem remains unrecognized or-worse- accepted as inevitable in many societies, in large part because it is so common.

Recognizing the large burden of maternal and neonatal ill-health on the development capacity of individuals, communities and societies, world leaders reaffirmed their commitment to invest in mothers and children by adopting specific goals and targets to reduce maternal and childhood-infant mortality as part of the Millennium Declaration.

There is a widely shared but mistaken idea that improvements in newborn health require sophisticated and expensive technologies and highly specialized staff. The reality is that many conditions that result in perinatal death can be prevented or treated without sophisticated and expensive technology. What is required is essential care during pregnancy, the assistance of a person with midwifery skills during childbirth and the immediate postpartum period, and a few critical interventions for the newborn during the first days of life.

It is against this background that we are proud to present the document Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice, as new additions to the Integrated Management of Pregnancy and Childbirth tool kit. The guide provides a full range of updated, evidence-based norms and standards that will enable health care providers to give high quality care during pregnancy, delivery and in the postpartum period, considering the needs of the mother and her newborn baby.

We hope that the guide will be helpful for decision-makers, programme managers and health care providers in charting out their roadmap towards meeting the health needs of all mothers and children. We have the knowledge, our major challenge now is to translate this into action and to reach those women and children who are most in need.

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Dr. Tomris Türmen Executive director Family and Community Health (FCH)

# Foreword

# ACKNOWLEDGEMENTS

The Guide was prepared by a team of the World Health Organization, Department of Reproductive Health and Research (RHR), led by Jerker Liljestrand and Jelka Zupan.

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- Nutrition for Health and Development
- Essential Drugs and Medicines Policy
- Vaccines and Biologicals
- Mental Health and Substance Dependence
- Gender and Women's Health
- Blindness and Deafness

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This guide represents a common understanding between WHO, UNFPA, UNICEF, and the World Bank of key elements of an approach to reducing maternal and perinatal mortality and morbidity. These agencies co-operate closely in efforts to reduce maternal and perinatal mortality and morbidity. The principles and policies of each agency are governed by the relevant decisions of each agency's governing body and each agency implements the interventions described in this document in accordance with these principles and policies and within the scope of its mandate.

The guide has also been reviewed and endorsed by the International Confederation of Midwives, the International Federation of Gynecology and Obstetrics and International Pediatric Association.





International Confederation of Midwives

International Federation of Gynecology and Obstetrics

International Pediatric Associatior

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### GLOSSARY AND ACRONYMS

The aim of Pregnancy, childbirth, postpartum and newborn care guide for essential practice (PCPNC) is to provide evidence-based recommendations to guide health care professionals in the management of women during pregnancy, childbirth and postpartum, and post abortion, and newborns during their first week of life, including management of endemic diseases like malaria, HIV/AIDS, TB and anaemia.

All recommendations are for skilled attendants working at the primary level of health care, either at the facility or in the community. They apply to all women attending antenatal care, in delivery, postpartum or post abortion care, or who come for emergency care, and to all newborns at birth and during the first week of life (or later) for routine and emergency care.

The PCPNC is a guide for clinical decision-making. It facilitates the collection, analysis, classification and use of relevant information by suggesting key questions, essential observations and/or examinations, and recommending appropriate research-based interventions. It promotes the early detection of complications and the initiation of early and appropriate treatment, including timely referral, if necessary.

Correct use of this guide should help reduce the high maternal and perinatal mortality and morbidity rates prevalent in many parts of the developing world, thereby making pregnancy and childbirth safer.

The guide is not designed for immediate use. It is a generic guide and should first be adapted to local needs and resources. It should cover the most serious endemic conditions that the skilled birth attendant must be able to treat, and be made consistent with national treatment guidelines and other policies. It is accompanied by an adaptation guide to help countries prepare their own national guides and training and other supporting materials.

The first section, How to use the guide, describes how the guide is organized, the overall content and presentation. Each chapter begins with a short description of how to read and use it, to help the reader use the guide correctly.

The Guide has been developed by the Department of Reproductive Health and Research with contributions from the following WHO programmes:

- Child and Adolesscent Health and Development
- HIV/AIDS
- Nutrition for Health and Development
- Essential drugs and Medicines Policy
- Vaccines and Biologicals
- Communicable Diseases Control, Prevention and Eradication (tuberculosis, malaria, helminthiasis)
- Gender and Women's Health
- Mental Health and Substance Dependence
- Blindness and Deafness

# Introduction

# How to read the guide

# HOW TO READ THE GUIDE

### Content

The Guide includes routine and emergency care for women and newborns during pregnancy, labour and delivery, postpartum and post abortion, as well as key preventive measures required to reduce the incidence of endemic and other diseases like malaria, anaemia, HIV/ AIDS and TB, which add to maternal and perinatal morbidity and mortality.

Most women and newborns using the services described in the Guide are not ill and/or do not have complications. They are able to wait in line when they come for a scheduled visit. However, the small proportion of women/newborns who are ill, have complications or are in labour, need urgent attention and care.

The clinical content is divided into six sections which are as follows:

- Quick check (triage), emergency management (called Rapid Assessment and Management or RAM) and referral, followed by a chapter on emergency treatments for the woman.
- Post-abortion care.
- Antenatal care.
- Labour and delivery.
- Postpartum care.
- Newborn care.

In each of the six clinical sections listed above there is a series of flow, treatment and information charts which include:

- Guidance on routine care, including monitoring the well-being of the mother and/or baby.
- Early detection and management of complications.
- Preventive measures.
- Advice and counselling.

In addition to the clinical care outlined above, other sections in the guide include:

- Advice on HIV, prevention and treatment.
- Support for women with special needs.
- Links with the community.
- Drugs, supplies, equipment, universal precautions and laboratory tests.
- Examples of clinical records.
- Counselling and key messages for women and families.

There is an important section at the beginning of the Guide entitled Principles of good care A1-A5. This includes principles of good care for all women, including those with special needs. It explains the organization of each visit to a healthcare facility, which applies to overall care. The principles are not repeated for each visit. Recommendations for the management of complications at secondary (referral) health care level can be found in the following guides for midwives and doctors:

- Managing complications of pregnancy and childbirth (WHO/RHR/00.7)
- Managing newborn problems.

Documents referred to in this Guide can be obtained from the Department of Making Pregnancy Safer, Family and Community Health, World Health Organization, Geneva, Switzerland. E-mail: mpspublications@who. int.

Other related WHO documents can be downloaded from the following links:

- Medical Eligibility Criteria 3rd edition: http://www.who.int/reproductivehealth/publications/mec/mec.pdf.
- Selected Practice Recommendations 2nd edition: http://www.who.int/ reproductive-health/publications/spr/ spr.pdf.
- Guidelines for the Management of Sexually Transmitted Infections: http:// www.who.int/reproductive-health/ publications/rhr\_01\_10\_mngt\_stis/ guidelines\_mngt\_stis.pdf
- Sexually Transmitted and other Reproductive Tract Infections: A Guide to Essential Practice: http://www.who. int/reproductive-health/publications/ rtis\_gep/rtis\_gep.pdf

Antiretroviral treatment of HIV infection in infants and children in resourcelimited settings, towards universal access: Recommendations for a public health approach http://www.who.int/hiv/pub/ prev\_care/en/

http://www.who.int/hiv/pub/prev\_care/en

- WHO consultation on technical and operational recommendations for scale-up of laboratory services and monitoring HIV antiretroviral therapy in resource-limited settings. http://www.who.int/hiv/pub/ prev\_care/en ISBN 92 4 159368 7
- Malaria and HIV Interactions and their Implications for Public Health Policy. http://www.who.int/malaria/publications/ atoz/9241593350/en/
- Interim WHO clinical staging of HIV/ AIDS and HIV/AIDS case definitions for surveillance http://www.who.int/hiv/pub/ guidelines/casedefinitions/en/
- HIV and Infant Feeding. Guidelines for decision-makers http://www. who.int/maternal\_child\_adolescent/ documents/9241591226/en/
- HIV and Infant Feeding. A guide for healthcare managers and supervisors http:// www.who.int/maternal\_child\_adolescent/ documents/9789241599535/en/index. html
- Integrated Management of Adolescent and adult illness

http://www.who.int/maternal\_child\_ adolescent/documents/9789241597388/ en/index.html This Guide is a tool for clinical decisionmaking. The content is presented in a frame work of coloured flow charts supported by information and treatment charts which give further details of care.

The framework is based on a syndromic approach whereby the skilled attendant identifies a limited number of key clinical signs and symptoms, enabling her/him to classify the condition according to severity and give appropriate treatment. Severity is marked in colour: red for emergencies, yellow for less urgent conditions which nevertheless need attention, and green for normal care.

### Flow charts

The flow charts include the following information:

- 1. Key questions to be asked.
- 2. Important observations and examinations to be made.
- 3. Possible findings (signs) based on information elicited from the questions, observations and, where appropriate, examinations.
- 4. Classification of the findings.
- 5. Treatment and advice related to the signs and classification.
- "Treat, advise" means giving the treatment indicated (performing a procedure, prescribing drugs or other treatments, advising on possible side-effects and how to overcome them) and giving advice on other important practices. The treat and advise column is often cross-referenced to other treatment and/ or information charts. Turn to these charts for more information.



### Use of colour

Colour is used in the flow charts to indicate the severity of a condition.

- 6. Green usually indicates no abnormal condition and therefore normal care is given, as outlined in the guide, with appropriate advice for home care and follow up.
- 7. Yellow indicates that there is a problem that can be treated without referral.
- 8. Red highlights an emergency which requires immediate treatment and, in most cases, urgent referral to a higher level health facility.

### Key sequential steps

The charts for normal and abnormal deliveries are presented in a framework of key sequential steps for a clean safe delivery. The key sequential steps for delivery are in a column on the left side of the page, while the column on the right has interventions which may be required if problems arise during delivery. Interventions may be linked to relevant treatment and/or information pages, and are cross-referenced to other parts of the Guide.

# Treatment and information pages

The flow charts are linked (cross-referenced) to relevant treatment and/or information pages in other parts of the Guide. These pages include information which is too detailed to include in the flow charts:

# Structure and presentation

# ASSUMPTIONS UNDERLYING THE GUIDE

Recommendations in the Guide are generic, made on many assumptions about the health characteristics of the population and the health care system (the setting, capacity and organization of services, resources and staffing).

# Population and endemic conditions

**HOW TO READ THE GUIDE** 

- High maternal and perinatal mortality
- Many adolescent pregnancies
- High prevalence of endemic conditions: → Anaemia
  - → Stable transmission of falciparum malaria
  - → Hookworms (Necator americanus and Ancylostoma duodenale)
  - → Sexually transmitted infections, including HIV/AIDS
  - $\rightarrow$  Vitamin A and iron/folate deficiencies.

### Health care system

The Guide assumes that:

Routine and emergency pregnancy, delivery and postpartum care are provided at the primary level of the health care, e.g. at the facility near where the woman lives. This facility could be a health post, health centre or maternity clinic. It could also be a hospital with a delivery ward and outpatient clinic providing routine care to women from the neighbourhood.

- A single skilled attendant is providing care. She may work at the health care centre, a maternity unit of a hospital or she may go to the woman's home, if necessary. However there may be other health workers who receive the woman or support the skilled attendant when emergency complications occur.
- Human resources, infrastructure, equipment, supplies and drugs are limited. However, essential drugs, IV fluids, supplies, gloves and essential equipment are available.
- If a health worker with higher levels of skill (at the facility or a referral hospital) is providing pregnancy, childbirth and postpartum care to women other than those referred, she follows the recommendations described in this Guide.
- Routine visits and follow-up visits are "scheduled" during office hours.
- Emergency services ("unscheduled" visits) for labour and delivery, complications, or severe illness or deterioration are provided 24/24 hours, 7 days a week.
- Women and babies with complications or expected complications are referred for further care to the secondary level of care, a referral hospital.
- Referral and transportation are appropriate for the distance and other circumstances. They must be safe for the mother and the baby.

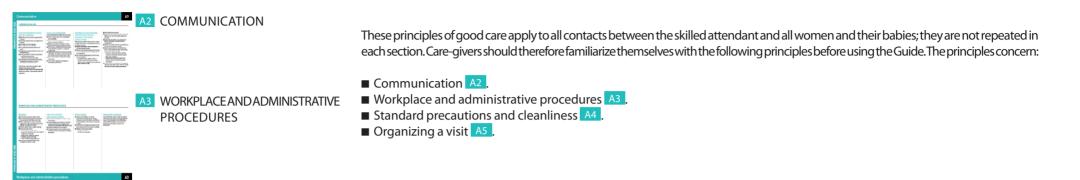
- Some deliveries are conducted at home, attended by traditional birth attendants (TBAs) or relatives, or the woman delivers alone (but home delivery without a skilled attendant is not recommended).
- Links with the community and traditional providers are established.
   Primary health care services and the community are involved in maternal and newborn health issues.
- Other programme activities, such as management of malaria, tuberculosis and other lung diseases, treatment for HIV, and infant feeding counselling, that require specific training, are delivered by a different provider, at the same facility or at the referral hospital. Detection, initial treatment and referral are done by the skilled attendant.
- All pregnant woman are routinely offered HIV testing and counselling at the first contact with the health worker, which could be during the antenatal visits, in early labour or in the postpartum period.
- Women who are first seen by the health worker in late labour are offered the test after the childbirth.

Health workers are trained to provide HIV testing and counselling. HIV testing kits and ARV medicines are available at the Primary health-care

# Knowledge and skills of care providers

This Guide assumes that professionals using it have the knowledge and skills in providing the care it describes. Other training materials must be used to bring the skills up to the level assumed by the Guide.

### PRINCIPLES OF GOOD CARE





A4 STANDARD PRECAUTIONS AND

CLEANLINESS

### A5 ORGANIZING A VISIT

**PRINCIPLES OF GOOD CARE** 

# COMMUNICATION

# Communicating with the woman (and her husband)

- Make the woman (and her husband) feel welcome.
- Be friendly, respectful and nonjudgmental at all times.
- Use simple and clear language.
- Encourage her to ask questions.
- Ask and provide information related to her needs.
- Support her in understanding her options and making decisions.
- At any examination or before any procedure:
  - $\rightarrow$  seek her permission and
  - $\rightarrow$  inform her of what you are doing.
- Summarize the most important information, including the information on routine laboratory tests and treatments.

Verify that she understands emergency signs, treatment instructions, and when and where to return. Check for understanding by asking her to explain or demonstrate treatment instructions.

### Privacy and confidentiality

In all contacts with the woman and her partner:

- Ensure a private place for the examination and counselling.
- Ensure, when discussing sensitive subjects, that you cannot be overheard.
- Make sure you have the woman's consent before discussing with her partner or family.
- Never discuss confidential information about clients with other providers, or outside the health facility.
- Organize the examination area so that, during examination, the woman is protected from the view of other people (curtain, screen, wall).
- Ensure all records are confidential and kept locked away.
- Limit access to logbooks and registers to responsible providers only.

### Prescribing and recommending treatments and preventive measures for the woman and/or her baby

When giving a treatment (drug, vaccine, bednet) at the clinic, or prescribing measures to be followed at home:

- Explain to the woman what the treatment is and why it should be given.
- Explain to her that the treatment will not harm her or her baby, and that not taking it may be more dangerous.
- Give clear and helpful advice on how to take the drug regularly:
  - → for example: take 2 tablets 3 times a day, thus every 8 hours, in the morning, afternoon and evening with some water and after a meal, for 5 days.

- Demonstrate the procedure.
- Explain how the treatment is given to the baby. Watch her as she does the first treatment in the clinic.
- Explain the side-effects to her. Explain that they are not serious, and tell her how to manage them.
- Advise her to return if she has any problems or concerns about taking the drugs.
- Explore any barriers she or her family may have, or have heard from others, about using the treatment, where possible:
  - → Has she or anyone she knows used the treatment or preventive measure before?
  - $\rightarrow$  Were there problems?
  - → Reinforce the correct information that she has, and try to clarify the incorrect information.
- Discuss with her the importance of buying and taking the prescribed amount. Help her to think about how she will be able to purchase this.

### Workplace

- Service hours should be clearly posted.
- Be on time with appointments or inform the woman/women if she/they need to wait.
- Before beginning the services, check that equipment is clean and functioning and that supplies and drugs are in place.
- Keep the facility clean by regular cleaning.
- At the end of the service:
  - → discard litter and dispose sharp objects safely
  - → prepare for disinfection; clean and disinfect equipment and supplies
  - $\rightarrow$  replace linen, prepare for washing
  - $\rightarrow$  replenish supplies and drugs
  - $\rightarrow$  ensure routine cleaning of all areas.
- Hand over essential information to the colleague who follows on duty.

# Daily and occasional administrative activities

- Keep records of equipment, supplies, drugs and vaccines.
- Check availability and functioning of essential equipment (order stocks of supplies, drugs, vaccines and contraceptives before they run out).
- Establish staffing lists and schedules.
- Complete periodic reports on births, deaths and other indicators as required, according to instructions.

### Record keeping

- Always record findings on a clinical record and home-based record. Record treatments, reasons for referral, and follow-up recommendations at the time the observation is made.
- Do not record confidential information on the home-based record if the woman is unwilling.
- Maintain and file appropriately: → all clinical records
  - $\rightarrow$  all other documentation.

### International conventions

The health facility should not allow distribution offree or low-cost suplies or products within the scope of the International Code of Marketing of Breast Milk Substitutes. It should also be tobacco free and support a tobacco-free environment.

# STANDARD PRECAUTIONS AND CLEANLINESS

Observe these precautions to protect the woman and her baby, and you as the health provider, from infections with bacteria and viruses, including HIV.

### Wash hands

- Wash hands with soap and water:
  - → Before and after caring for a woman or newborn, and before any treatment procedure
  - → Whenever the hands (or any other skin area) are contaminated with blood or other body fluids
  - → After removing the gloves, because they may have holes
  - → After changing soiled bedsheets or clothing.
- Keep nails short.

### Wear gloves

- Wear sterile gloves when performing vaginal examination, delivery, cord cutting, repair of episiotomy or tear, blood drawing.
- Wear long sterile gloves for manual removal of placenta.
- Wear clean gloves when:
   → Handling and cleaning instruments
   → Handling contaminated waste
  - $\rightarrow$  Cleaning blood and body fluid spills
- Drawing blood.

### Protect yourself from blood and other body fluids during deliveries

- → Wear gloves; cover any cuts, abrasions or broken skin with a waterproof bandage; take care when handling any sharp instruments (use good light); and practice safe sharps disposal.
- → Wear a long apron made from plastic or other fluid resistant material, and shoes.
- → If possible, protect your eyes from splashes of blood.

### Practice safe sharps disposal

- Keep a safety box container nearby.
- Use each needle and syringe only once.
- Do not recap, bend or break needles after giving an injection.
- Drop all used (disposable) needles, plastic syringes and blades directly into this container, without recapping, and without passing to another person.
- Send for incineration when the container is three-quarters full.

### Practice safe waste disposal

- Dispose of placenta or blood, or body fluid contaminated items, in leak-proof containers.
- Burn or bury contaminated solid waste.
- Wash hands, gloves and containers after disposal of infectious waste.
- Pour liquid waste down a drain or flushable toilet.
- Wash hands after disposal of infectious waste.

# Deal with contaminated laundry

- Collect clothing or sheets stained with blood or body fluids and keep them separately from other laundry, wearing gloves or use a plastic bag.
- DO NOT touch them directly.
- Rinse off blood or other body fluids before washing with soap.

# Sterilize and clean contaminated equipment

- Make sure that instruments which penetrate the skin (such as needles) are adequately sterilized, or that single-use instruments are disposed of after one use.
- Thoroughly clean or disinfect any equipment which comes into

contact with intact skin (according to instructions).

Use bleach for cleaning bowls and buckets, and for blood or body fluid spills.

# **ORGANIZING A VISIT**

# Receive and respond immediately

Receive every woman and newborn baby seeking care immediately after arrival (or organize reception by another provider).

- Perform Quick Check on all new incoming women and babies and those in the waiting room, especially if no-one is receiving them 82.
- At the first emergency sign on Quick Check, begin emergency assessment and management (RAM) B1-B7 for the woman, or examine the newborn J1-J11
- If she is in labour, accompany her to an appropriate place and follow the steps as in Childbirth: labour, delivery and immediate postpartum care <u>D1-D29</u>.
- If she has priority signs, examine her immediately using Antenatal care, Postpartum or Post-abortion care charts C1-C19 E1-E10 B18-B22.
- If no emergency or priority sign on RAM or not in labour, invite her to wait in the waiting room.
- If baby is newly born, looks small, examine immediately. Do not let the mother wait in the queue.

### Begin each emergency care visit

■ Introduce yourself.

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**RINCIPLES OF GOOD** 

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- Ask the name of the woman.
- Encourage the companion to stay with the woman.
- Explain all procedures, ask permission, and keep the woman informed as

much as you can about what you are doing. If she is unconscious, talk to the companion.

- Ensure and respect privacy during examination and discussion.
- If she came with a baby and the baby is well, ask the companion to take care of the baby during the maternal examination and treatment.

### Care of woman or baby referred for special care to secondary level facility

- When a woman or baby is referred to a secondary level care facility because of a specific problem or complications, the underlying assumption of the Guide is that, at referral level, the woman/baby will be assessed, treated, counselled and advised on follow-up for that particular condition/ complication.
- Follow-up for that specific condition will be either:
  - $\rightarrow$  organized by the referral facility or  $\rightarrow$  written instructions will be given to the upper (helps for the chilled
  - to the woman/baby for the skilled attendant at the primary level who referred the woman/baby.
  - → the woman/baby will be advised to go for a follow-up visit within 2 weeks according to severity of the condition.
- Routine care continues at the primary care level where it was initiated.

### Begin each routine visit (for the woman and/or the baby)

- Greet the woman and offer her a seat.
- Introduce yourself.
- Ask her name (and the name of the baby).
- Ask her:
- → What can I do for you and your child? How can I help you?
- $\rightarrow$  For a scheduled (routine) visit?
- → For specific complaints about you or your baby?
- $\rightarrow$  First or follow-up visit?
- → Do you want to include your companion or other family member (parent if adolescent) in the examination and discussion?
- If the woman is recently delivered, assess the baby or ask to see the baby if not with the mother.
- If antenatal care, always revise the birth plan at the end of the visit after completing the chart.
- For a postpartum visit, if she came with the baby, also examine the baby:
  - → Follow the appropriate charts according to pregnancy status/age of the baby and purpose of visit.
  - → Follow all steps on the chart and in relevant boxes.
- Unless the condition of the woman or the baby requires urgent referral to hospital, give preventive measures if due even if the woman has a condition "in yellow" that requires special treatment.

- If follow-up visit is within a week, and if no other complaints:
  - → Assess the woman for the specific condition requiring follow-up only
  - → Compare with earlier assessment and re-classify.
- If a follow-up visit is more than a week after the initial examination (but not the next scheduled visit):
  - → Repeat the whole assessment as required for an antenatal, post-abortion, postpartum or newborn visit according to the schedule
  - $\rightarrow$  If antenatal visit, revise the birth plan.

### During the visit

- Explain all procedures,
- Ask permission before undertaking an examination or test.
- Keep the woman informed throughout. Discuss findings with her (and her partner).
- Ensure privacy during the examination and discussion.

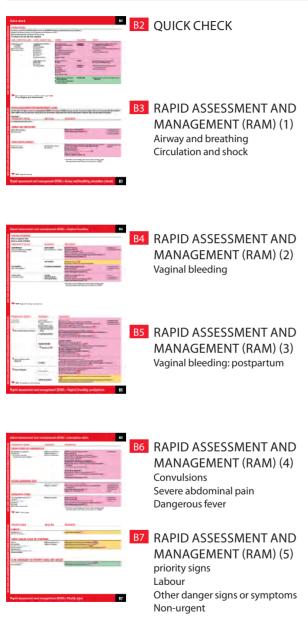
### At the end of the visit

- Ask the woman if she has any questions.
- Summarize the most important messages with her.
- Encourage her to return for a routine visit (tell her when) and if she has any concerns.
- Fill the Home-Based Maternal Record (HBMR) and give her the appropriate information sheet.
- Ask her if there are any points which need to be discussed and would she like support for this.



- |

### QUICK CHECK, RAPID ASSESSMENT AND MANAGEMENT OF WOMEN OF CHILDBEARING AGE



- Perform Quick check immediately after the woman arrives B2. If any danger sign is seen, help the woman and send her quickly to the emergency room.
- Always begin a clinical visit with Rapid assessment and management (RAM) B3-B7:
   → Check for emergency signs first B3-B6.
   If present, provide emergency treatment and refer the woman urgently to hospital.
  - Complete the referral form N2.
  - $\rightarrow$  Check for priority signs. If present, manage according to charts B7.
  - $\rightarrow$  If no emergency or priority signs, allow the woman to wait in line for routine care, according to pregnancy status.

# Quick check

A person responsible for initial reception of women of childbearing age and newborns seeking care should:

- assess the general condition of the careseeker(s) immediately on arrival
- periodically repeat this procedure if the line is long.
- If a woman is very sick, talk to her companion.

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# What can I do for you and your child? How can I help you? Is the woman being wheeled or carried in or: bleeding vaginally

- How old is the baby?
- What is the concern for you and your baby?
- How old are you?
- How many children do you have?
- convulsing
   looking very ill
- unconscious
- in severe pain
- in labourdelivery is imminent

### Check if baby is or has:

- very small
- convulsing
- breathing difficulty
- abdominal distension
- vomiting
- cyanosis
- jaundice
- abdominal distension
- pallor

S **CLASSIFY** TREAT **EMERGENCY** Transfer woman to a treatment room for If the woman is or has: Rapid assessment and management B3-B7 unconscious (does not answer) **FOR WOMAN** Call for help if needed. convulsing Reassure the woman that she will be taken bleeding care of immediately. severe abdominal pain, offensive Ask her husband to stay. discharge or looks very ill headache and visual disturbance severe difficulty breathing fever severe vomiting. Transfer the woman to the labour ward. Imminent delivery or LABOUR Call for immediate assessment. Labour **EMERGENCY** Transfer the baby to the treatment room for If the baby is or has: immediate Newborn care J1-J11 FOR BABY very small convulsions Ask the mother to stay. difficult breathing just born any maternal concern. Keep the woman and baby in the waiting Pregnant woman, or after **ROUTINE CARE** room for routine care. delivery, with no danger signs A newborn with no danger signs or maternal complaints.

IF emergency for woman or baby or labour, go to B3. IF no emergency, go to relevant section

### RAPID ASSESSMENT AND MANAGEMENT (RAM)

Use this chart for rapid assessment and management (RAM) of all women of childbearing age, and also for women in labour, on first arrival and periodically throughout labour, delivery and the postpartum period. Assess for all emergency and priority signs and give appropriate treatments, then refer the woman to hospital.-

FIRST ASSESS EMERGENCY SIGNS	MEASURE	TREATMENT	
Do all emergency steps before referral			
AIRWAY AND BREATHING			
<ul> <li>Very difficult breathing or</li> <li>Central cyanosis</li> </ul>		<ul> <li>Manage airway and breathing B9.</li> <li>Refer woman urgently to hospital, communicate with referral destination and follow up before referral of the patient* B17.</li> </ul>	This may be pneumonia, severa anaemia with heart failure, obstructed breathing, asthma
CIRCULATION (SHOCK)			
<ul> <li>Cold moist skin or</li> <li>Weak and fast pulse</li> </ul>	<ul> <li>Measure blood pressure, temperature and respiratory rate</li> <li>Count pulse</li> <li>insert catheter</li> </ul>	If systolic BP < 90 mmHg or pulse >110 per minute: Position the woman on her left side with legs higher than chest. Insert an IV line, place a IV cannula with wide bore B9. Give fluids rapidly B9. If not able to insert peripheral IV, use alternative B9. Keep her warm (cover her). Refer her urgently to hospital* B17.	Thismaybehaemorrhagicshock septic shock.
		* But if birth is imminent (bulging, thin perineum during contractions, visible fetal head, if the woman has her first pregnancy and circumcised, the head cannot be seen), transfer woman to labour room and proceed as on D1-D28.	
NEXT: Vaginal bleeding			

# VAGINAL BLEEDING

Assess pregnancy status

Assess amount of bleeding

PREGNANCY STATUS	BLEEDING	TREATMENT	
EARLY PREGNANCY not aware of pregnancy, or not pregnant (uterus NOT above umbilicus) Do pregnancy test and vaginal examination	HEAVY BLEEDING Pad or cloth soaked in < 5 minutes.	<ul> <li>Insert an IV line B9.</li> <li>Give fluids rapidly B9.</li> <li>Give 0.2 mg ergometrine IM B10.</li> <li>Repeat 0.2 mg ergometrine IM/IV if bleeding continues.</li> <li>Check for any vesicles, fetal tissue</li> <li>Give Anti D immunoglobulin for negative women</li> <li>If suspect possible complicated abortion, give appropriate IM/IV antibiotics B15.</li> <li>Refer woman urgently to hospital B17.</li> </ul>	This may be abortion, menorrhagia,ectopic pregnancy.
	LIGHT BLEEDING	<ul> <li>Examine woman as on B19.</li> <li>If pregnancy not likely, refer to other clinical guidelines.</li> </ul>	
LATE PREGNANCY (uterus above umbilicus)	ANY BLEEDING IS DANGEROUS	DO NOT do vaginal examination, but: Insert an IV line B9. Give fluids rapidly if heavy bleeding or shock B3. Refer woman urgently to hospital* B17.	This may be placenta previa, abruptio placentae, ruptured uterus. The color of the blood in abruptio placenta is dark red while in placenta previa is bright red.
DURING LABOUR before delivery of baby	BLEEDING MORE THAN 100 ML SINCE LABOUR BEGAN	DO NOT do vaginal examination, but: Insert an IV line B9. Give fluids rapidly if heavy bleeding or shock B3. Refer woman urgently to hospital* B17.	This may be placenta previa, abruptio placenta, ruptured uterus.
		* But if birth is imminent (bulging, thin perineum during contractions, visible fetal head), transfer woman to labour room and proceed as	

on D1-D28.

### **PREGNANCY STATUS BLEEDING** TREATMENT POSTPARTUM HEAVY BI FEDING ■ Call for extra help. This may be uterine atony, Massage uterus until it is hard and give oxytocin 10 IU IM B10. (baby is born) $\blacksquare$ Pad or cloth soaked in < 5 minutes retained placenta, ruptured ■ Insert an IV line B9 and give IV fluids with 20 IU oxytocin at 60 drops/minute. Constant trickling of blood uterus, vaginal or cervical Bleeding > 250 ml or delivered outside Empty bladder. Catheterize if necessary B12. tear. Refer to hospital. Check and record BP and pulse every 15 minutes and treat as on B3. health centre and still bleeding Check and ask if placenta is delivered PLACENTA NOT DELIVERED When uterus is hard, deliver placenta by controlled cord traction D12. If unsuccessful and bleeding continues, remove placenta manually and check placenta B11. Give appropriate IM/IV antibiotics B15 If unable to remove placenta, refer woman urgently to hospital B17. During transfer, continue IV fluids with 20 IU of oxytocin at 30 drops/minute. PLACENTA DELIVERED If placenta is complete: Massage uterus to express any clots B10. Check placenta B11 If uterus remains soft, give ergometrine 0.2 mg IV B10 DO NOT give ergometrine to women with eclampsia, pre-eclampsia or known hypertension. ■ Continue IV fluids with 20 IU oxytocin/litre at 30 drops/minute. Continue massaging uterus till it is hard. If placenta is incomplete (or not available for inspection): Remove placental fragments B11 Give appropriate IM/IV antibiotics B15. If unable to remove, refer woman urgently to hospital B17 Check for perineal and lower IF PRESENT Examine the tear and determine the degree B12. vaginal tears If third degree tear (involving rectum or anus), refer woman urgently to hospital B17. ■ For other tears: apply pressure over the tear with a sterile pad or gauze and put legs together. Do not cross ankles. Check after 5 minutes, if bleeding persists repair the tear B12. HEAVY BLEEDING Continue IV fluids with 20 units of oxytocin at 30 drops/minute. Insert second IV line. Check if still bleeding Apply bimanual uterine or aortic compression B10. ■ Give appropriate IM/IV antibiotics B15 Refer woman urgently to hospital B17 CONTROLLED BLEEDING Continue oxytocin infusion with 20 IU/litre of IV fluids at 20 drops/min for at least one hour after bleeding stops B10. Observe closely (every 30 minutes) for 4 hours. Keep nearby for 24 hours. If severe pallor, refer to health centre. Examine the woman using Assess the mother after delivery D12. NEXT: Convulsions or unconscious

Rapid assessment and management (RAM) > Vaginal bleeding: postpartum B5

# Rapid assessment and management (RAM) • Emergency signs

EMERGENCY SIGNS	MEASURE	TREATMENT		
CONVULSIONS OR UNCONSCIOUS				
<ul> <li>Convulsing (now or recently), or</li> <li>Unconscious If unconscious, ask relative "has there been a recent convulsion?"</li> </ul>	<ul> <li>Measure blood pressure</li> <li>Measure temperature</li> <li>Assess pregnancy status</li> <li>Measure blood sugar</li> </ul>	<ul> <li>Protect woman from fall and injury. Get help.</li> <li>Manage airway B9.</li> <li>After convulsion ends, help woman onto her left side.</li> <li>Insert an IV line and give fluids slowly (30 drops/min) B9.</li> <li>Give magnesium sulphate B13.</li> <li>If early pregnancy, give diazepam IV or rectally B14.</li> <li>If diastolic BP &gt;110mm of Hg, give antihypertensive B14.</li> <li>If temperature &gt;38°C, or history of fever, also give treatment for dangerous fever (below).</li> <li>Refer woman urgently to hospital* B17.</li> </ul>	This may be eclampsia.	
		<ul> <li>Measure BP and temperature</li> <li>If diastolic BP &gt;110mm of Hg, give antihypertensive B14.</li> <li>If temperature &gt;38°C, or history of fever, also give treatment for dangerous fever (below).</li> <li>Refer woman urgently to hospital* B17.</li> </ul>		
SEVERE ABDOMINAL PAIN				
Severe abdominal pain (not normal labour)	<ul> <li>Measure blood pressure</li> <li>Measure temperature</li> </ul>	<ul> <li>Insert an IV line and give fluids B9.</li> <li>If temperature more than 38°C, give first dose of appropriate IM/IV antiobiotics B15.</li> <li>Refer woman urgently to hospital* B17.</li> <li>If systolic BP &lt;90 mm Hg see B3.</li> </ul>	This may be ruptured uterus, obstructed labour, abruptio placenta, puerperal or post- abortion sepsis, ectopic pregnancy.	
DANGEROUS FEVER				
Fever (temperature more than 38°C) and any of: Very fast breathing Stiff neck Lethargy Very weak/not able to stand	Measure temperature	<ul> <li>Insert an IV line B9.</li> <li>Give fluids slowly B9.</li> <li>Give first dose of appropriate IM/IV antibiotics B15.</li> <li>Give quinine IM) and glucose B16.</li> <li>Refer woman urgently to hospital* B17.</li> <li>* But if birth is imminent (bulging, thin perineum during contractions, visible fetal head), transfer woman to labour room and proceed as on D1-D28.</li> </ul>	This may be malaria, meningitis, pneumonia, septicemia.	



### PRIORITY SIGNS

MEASURE

Measure blood pressure

Measure temperature

### TREATMENT

### LABOUR

Labour pains or

Ruptured membranes

Manage as for Childbirth D1-D28.

### **OTHER DANGER SIGNS OR SYMPTOMS**

If any of:

- Severe pallor
- Epigastric or abdominal pain
- Severe headache
- Blurred vision
- Fever (temperature more than 38°C)
- Breathing difficulty
- Restlessness
- Oedema
- Hyper-reflexia/ clonus

# IF NO EMERGENCY OR PRIORITY SIGNS, NON URGENT

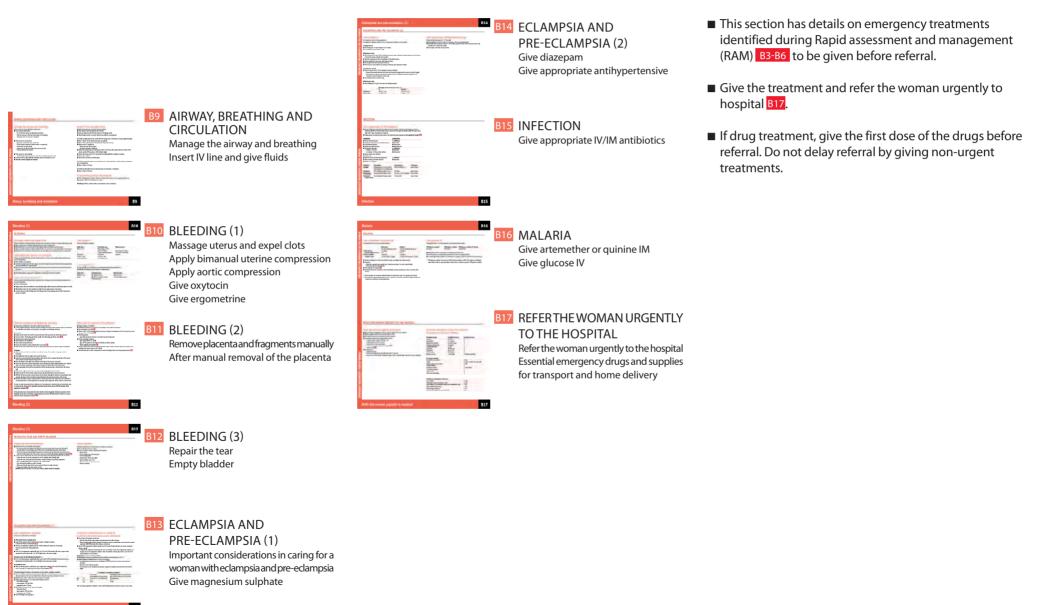
- No emergency signs or
- No priority signs

- If pregnant (and not in labour), provide antenatal care C1-C19.
- If recently given birth, provide postpartum care D21. and E1-E10.
- If recent abortion, provide post-abortion care B20-B21
- If early pregnancy, or not aware of pregnancy, check for ectopic pregnancy B19.

- If pregnant (and not in labour), provide antenatal care C1-C19.
- If recently given birth, provide postpartum care E1-E10.

# **TREATMENTS FOR THE WOMAN** EMERGEN

### EMERGENCY TREATMENTS FOR THE WOMAN



### **AIRWAY, BREATHING AND CIRCULATION**

### Manage the airway and breathing

If the woman has great difficulty breathing and:

- If you suspect obstruction:
- $\rightarrow$  Try to clear the airway and dislodge obstruction
- $\rightarrow$  Help the woman to find the best position for breathing
- $\rightarrow$  Urgently refer the woman to hospital.
- If the woman is unconscious:
  - $\rightarrow$  Keep her on her back, arms at the side
  - → Tilt her head backwards (unless trauma is suspected)
  - $\rightarrow$  Lift her chin to open airway
  - $\rightarrow$  Inspect her mouth for foreign body; remove if found
  - $\rightarrow$  Clear secretions from throat.
- If the woman is not breathing:
- → Ventilate with bag and mask or use mouth piece until she starts breathing spontaneously
- $\rightarrow$  If woman still has great difficulty breathing, keep her propped up, and
- $\rightarrow$  Refer the woman urgently to hospital.

### Insert IV line and give fluids

- Wash hands with soap and water and put on gloves.
- Clean woman's skin with spirit at site for IV line.
- Insert an intravenous line (IV line) using a 16-18 gauge needle.
- Attach Ringer's lactate or normal saline. Ensure infusion is running well.

Give fluids at rapid rate if shock, systolic BP<90 mmHg, pulse>110/minute, or heavy vaginal bleeding:

- Infuse 1 litre in 15-20 minutes (as rapid as possible).
- Infuse 1 litre in 30 minutes at 30 ml/minute. Repeat if necessary.
- Monitor every 15 minutes for:
  - $\rightarrow$  blood pressure (BP) and pulse
  - $\rightarrow$  shortness of breath or puffiness.
- Reduce the infusion rate to 3 ml/minute (1 litre in 6-8 hours) when pulse slows to less than 100/ minute, systolic BP increases to 100 mmHg or higher.
- Reduce the infusion rate to 0.5 ml/minute if breathing difficulty or puffiness develops.
- Monitor urine output.
- Record time and amount of fluids given.
- Insert urinary catheter.

Give fluids at moderate rate if severe abdominal pain, obstructed labour, ectopic pregnancy, dangerous fever or dehydration:

Infuse 1 litre in 2-3 hours.

Give fluids at slow rate if severe anaemia/severe pre-eclampsia or eclampsia: ■ Infuse 1 litre in 6-8 hours.

### If intravenous access not possible

- Give oral rehydration solution (ORS) by mouth if able to drink, or by nasogastric (NG) tube.
   Quantity of ORS: 300 to 500 ml in 1 hour.
- Quantity of ORS: 300 to 500 min 1 hour.

DO NOT give ORS to a woman who is unconscious or has convulsions.

# Airway, breathing and circulation

# Bleeding (1)

# BLEEDING

### Massage uterus and expel clots

If heavy postpartum bleeding persists after placenta is delivered, or uterus is not well contracted (is soft):

- Place cupped palm on uterine fundus and feel for state of contraction.
- Massage fundus in a circular motion with cupped palm until uterus is well contracted.
- When well contracted, place fingers behind fundus and push down in one swift action to expel clots.
- Collect blood in a container placed close to the vulva. Measure or estimate blood loss, and record.

### Apply bimanual uterine compression

Before bimanual compression remove any placental/blood parts from the birth canal. If the heavy postpartum bleeding persists despite uterine massage, oxytocin/ergometrine treatment and removal of placenta:

- Wear sterile gloves.
- Empty the bladder
- Introduce the right hand into the vagina, clenched fist, with the back of the hand directed posteriorly and the knuckles in the anterior fornix.
- Place the other hand on the abdomen behind the uterus and squeeze the uterus firmly between the two hands.
- Continue compression until bleeding stops (no bleeding if the compression is released).
- If bleeding persists, apply aortic compression and transport woman to hospital.

### Apply aortic compression

If heavy postpartum bleeding persists despite uterine massage, oxytocin/ergometrine treatment and removal of placenta:

- Feel for femoral pulse.
- Apply pressure above the umbilicus to stop bleeding. Apply sufficient pressure until femoral pulse is not felt.
- After finding correct site, show assistant or relative how to apply pressure, if necessary.
- Continue pressure until bleeding stops. If bleeding persists, keep applying pressure while transporting woman to hospital.

### Give oxytocin

If heavy postpartum bleeding

Initial dose	Continuing dose	Maximum dose
IM/IV: 10 IU	IM/IV: repeat 10 IU	
5.	after 20 minutes	Not more than 3 litres
	if heavy bleeding persists	of IV fluids containing
IV infusion:	IV infusion:	oxytocin
20 IU in 1 litre	10 IU in 1 litre	
at 60 drops/min	at 30 drops/min	
at 60 drops/min	at 30 drops/min	

### Give ergometrine

If heavy bleeding in early pregnancy or postpartum bleeding (after oxytocin) but DO NOT give if eclampsia, pre-eclampsia, or hypertension

e	Initial dose	Continuing dose	Maximum dose
	IM/IV:0.2 mg	IM: repeat 0.2 mg	Not more than
	slowly	IM after 15 minutes if heavy bleeding persists	5 doses (total 1.0 mg)

### Remove placenta and fragments manually

- If placenta not delivered 1 hour after delivery of the baby, OR
- If heavy vaginal bleeding continues despite massage and oxytocin and placenta cannot be delivered by controlled cord traction, or if placenta is incomplete and bleeding continues.

### Preparation

- Explain to the woman the need for manual removal of the placenta and obtain her consent.
- Insert an IV line. If bleeding, give fluids rapidly. If not bleeding, give fluids slowly B9
- Assist woman to get onto her back.
- Give diazepam (10-mg IM/IV).
- Clean vulva and perineal area.
- Ensure the bladder is empty. Catheterize if necessary B12
- Wash hands and forearms well and put on long sterile gloves (and an apron or gown if available).

### Technique

Bleeding (2)

- With the left hand, hold the umbilical cord with the clamp. Then pull the cord gently until it is horizontal.
- Insert right hand into the vagina and up into the uterus.
- Leave the cord and hold the fundus with the left hand in order to support the fundus of the uterus and to provide counter-traction during removal.
- Move the fingers of the right hand sideways until edge of the placenta is located.
- Detach the placenta from the implantation site by keeping the fingers tightly together and using the edge of the hand to gradually make a space between the placenta and the uterine wall.
- Proceed gradually all around the placental bed until the whole placenta is detached from the uterine wall.
- Withdraw the right hand from the uterus gradually, bringing the placenta with it.
- Explore the inside of the uterine cavity to ensure all placental tissue has been removed.
- With the left hand, provide counter-traction to the fundus through the abdomen by pushing it in the opposite direction of the hand that is being withdrawn. This prevents inversion of the uterus.
- Examine the uterine surface of the placenta to ensure that lobes and membranes are complete. If any placental lobe or tissue fragments are missing, explore again the uterine cavity to remove them.

If hours or days have passed since delivery, or if the placenta is retained due to constriction ring or closed cervix, it may not be possible to put the hand into the uterus. DO NOT persist. Refer urgently to hospital B17.

If the placenta does not separate from the uterine surface by gentle sideways movement of the fingertips at the line of cleavage, suspect placenta accreta. DO NOT persist in efforts to remove placenta. Refer urgently to hospital **B17**.

### After manual removal of the placenta

- Repeat oxytocin 10-IU IM/IV.
- Massage the fundus of the uterus to encourage a tonic uterine contraction.
- Give ampicillin 2 g IV/IM B15.
- If fever >38.5°C, foul-smelling lochia or history of rupture of membranes for 18 or more hours, also give gentamicin 80 mg IM, antipyretic and tepid sponging B15.
- If bleeding stops:
  - $\rightarrow$  give fluids slowly for at least 1 hour after removal of placenta.
- If heavy bleeding continues:
  - $\rightarrow$  give ergometrine 0.2 mg IM
  - ightarrow give 20 IU oxytocin in each litre of IV fluids and infuse rapidly
  - $\rightarrow$  Refer urgently to hospital B17.
- During transportation, feel continuously whether uterus is well contracted (hard and round). If not, massage and repeat oxytocin 10 IU IM/IV.
- Provide bimanual or aortic compression if severe bleeding before and during transportation B10.

# B11

# Bleeding (3)

## REPAIR THE TEAR AND EMPTY BLADDER

### Repair the tear or episiotomy

Examine the tear and determine the degree:

- → The tear is small and involved only vaginal mucosa and connective tissues and underlying muscles (first or second degree tear). Repair the second degree to prevent infection. If the tear is not bleeding, leave the wound open.
- → The tear is long and deep through the perineum and involves the anal sphincter and rectal mucosa (third and fourth degree tear). Cover it with a clean pad and refer the woman urgently to hospital B17.
- If first or second degree tear and heavy bleeding persists after applying pressure over the wound:
  - $\rightarrow$  Suture the tear or refer for suturing if no one is available with suturing skills.
  - $\rightarrow$  Suture the tear using universal precautions, aseptic technique and sterile equipment.
  - $\rightarrow$  Use a needle holder and a 21 gauge, 4 cm, curved needle.
  - $\rightarrow$  Use absorbable polyglycon suture material.
  - $\rightarrow$  Make sure that the apex of the tear is reached before you begin suturing.
  - $\rightarrow$  Ensure that edges of the tear match up well.

DO NOT suture if more than 12 hours since delivery. Refer woman to hospital. DO dressing and give antibiotics.

### Empty bladder

If bladder is distended and the woman is unable to pass urine:

Encourage the woman to urinate.

- If she is unable to urinate, catheterize the bladder:
  - →Wash hands
  - $\rightarrow$  Clean urethral area with antiseptic
  - $\rightarrow$  Put on clean gloves
  - →Clean area again
  - →Use lubricant
  - $\rightarrow$  Insert catheter up to 4 cm
  - → Measure urine and record amount
  - → Remove catheter.

### Give magnesium sulphate

If severe pre-eclampsia and eclampsia

### IV/IM combined dose (loading dose)

- Insert IV line and give fluids slowly (normal saline or Ringer's lactate) 1 litre in 6-8 hours (3-ml/minute)
   B9
- Give 4-g of magnesium sulphate (20 ml of 20% solution) IV slowly over 20 minutes (woman may feel warm during injection).

### AND:

Give 10 g of magnesium sulphate IM: give 5 g (10 ml of 50% solution) IM deep in upper outer quadrant of each buttock with 1 ml of 2% lignocaine in the same syringe.

### If unable to give IV, give IM only (loading dose)

■ Give 10 g of magnesium sulphate IM: give 5 g (10 ml of 50% solution) IM deep in upper outer quadrant of each buttock with 1 ml of 2% lignocaine in the same syringe.

### If convulsions recur

After 15 minutes, give an additional 2 g of magnesium sulphate (10 ml of 20% solution) IV over 20 minutes. If convulsions still continue, give diazepam B14.

If referral delayed for long, or the woman is in late labour, continue treatment:

- Give 5 g of 50% magnesium sulphate solution IM with 1 ml of 2% lignocaine every 4 hours in alternate buttocks until 24 hours after birth or after last convulsion (whichever is later).
- Monitor urine output: collect urine and measure the quantity.
- Before giving the next dose of magnesium sulphate, ensure:
- → knee jerk is present
- $\rightarrow$  urine output >100 ml/4 hrs
- → respiratory rate >16/min.
- DO NOT give the next dose if any of these signs:
  - →knee jerk absent
- $\rightarrow$  urine output <100 ml/4 hrs
- →respiratory rate <16/min.
- Give calcium gluconate 1 g IV (10 ml of 10% solution) over 10 minutes as an antidote for magnesium sulphate toxicity, and refer to the hospital
- Record findings and drugs given.

### Important considerations in caring for a woman with eclampsia or pre-eclampsia

- Do not leave the woman on her own.
  - $\rightarrow$  Help her into the left side position and protect her from fall and injury
  - → Place padded tongue blades between her teeth to prevent a tongue bite, and secure it to prevent aspiration (DO NOT attempt this during a convulsion).
- Give IV 20% magnesium sulphate slowly over 20 minutes. Rapid injection can cause respiratory failure or death.
  - → If respiratory depression (breathing less than 16/minute) occurs after magnesium sulphate, do not give any more magnesium sulphate. Give the antidote: calcium gluconate 1 g IV (10 ml of 10% solution) over 10 minutes.
- DO NOT give intravenous fluids rapidly, and monitor her baby.
- DO NOT give intravenously 50% magnesium sulphate without dilluting it to 20%.
- Refer urgently to hospital unless delivery is imminent.
  - → If delivery imminent, manage as in Childbirth D1-D29 and accompany the woman during transport
  - $\rightarrow$  Keep her in the left side position
  - $\rightarrow$  If a convulsion occurs during the journey, give magnesium sulphate and protect her from fall and injury.

### Formulation of magnesium sulphate

			3 1		
		50% solution:	20% solution: to make 10 ml of 20% solution,		
		vial containing 5 g in 10 ml (1g/2ml)	add 4 ml of 50% solution to 6 ml sterile water		
IM	5 g	10 ml and 1 ml 2% lignocaine	Not applicable		
IV	4 g	8 ml	20 ml		
	2 g	4 ml	10 ml		

After receiving magnesium sulphate a woman feel flushing, thirst, headache, nausea or may vomit.

# Eclampsia and pre-eclampsia (1)

#### ECLAMPSIA AND PRE-ECLAMPSIA (2)

#### Give diazepam

If convulsions occur in early pregnancy or If magnesium sulphate toxicity occurs or magnesium sulphate is not available.

#### Loading dose IV

- Give diazepam 10 mg IV slowly over 2 minutes.
- If convulsions recur, repeat 10 mg.

#### Maintenance dose

- Give diazepam 40 mg in 500 ml IV fluids (normal saline or Ringer's lactate) titrated over 6-8 hours to keep the woman sedated but rousable.
- Stop the maintenance dose if breathing <16 breaths/minute.
- Assist ventilation if necessary with mask and bag.
- Do not give more than 100 mg in 24 hours.
- If IV access is not possible (e.g. during convulsion), give diazepam rectally.
- In case of respiratory depression persist diazepam is contra-indicated.

#### Loading dose rectally

- Give 20 mg (4 ml) in a 10 ml syringe (or urinary catheter):
- → Remove the needle, lubricate the barrel and insert the syringe into the rectum to half its length.
- → Discharge the contents and leave the syringe in place, holding the buttocks together for 10 minutes to prevent expulsion of the drug.
- If convulsions recur, repeat 10 mg.

#### Maintenance dose

■ Give additional 10 mg (2 ml) every hour during transport.

#### Diazepam: vial containing 10 mg in 2 ml

	IV	Rectally
Initial dose	10 mg = 2 ml	20 mg = 4 ml
Second dose	10 mg = 2 ml	10 mg = 2 ml

#### Give appropriate antihypertensive drug

If diastolic blood pressure is > 110-mmHg:

- Give hydralazine 5 mg IV slowly (3-4 minutes). If IV not possible give IM.
- If diastolic blood pressure remains > 90 mmHg, repeat the dose at 30 minute intervals until diastolic BP is around 90 mmHg.
- Do not give more than 20 mg in total.

#### **INFECTION**

#### Give appropriate IV/IM antibiotics

- Give the first dose of antibiotic(s) before referral. If referral is delayed or not possible, continue antibiotics IM/IV for 48 hours after woman is fever free. Then give amoxicillin orally 500 mg 3 times daily until 7 days of treatment completed.
- If signs persist or mother becomes weak or has abdominal pain postpartum, refer urgently to hospital B17.

CONDITION		ANTIBIOTICS		
Severe abdominal pain		3 antibiotics		
-	ever/very severe febrile disease	Ampicillin		
Complicated	abortion	■ Gentamicin		
Uterine and f	etal infection	■ Metronidazole		
Postpartum	oleeding	2 antibiotics:		
$\rightarrow$ lasting > 2	4 hours	Ampicillin		
$\rightarrow$ occurring	> 24 hours after delivery	Gentamicin		
Upper urinar	y tract infection			
Pneumonia				
Manual remo	oval of placenta/fragments	1 antibiotic:		
Risk of uterin	e and fetal infection	Ampicillin		
■ In labour > 2	4 hours			
Antibiotic	Preparation	Dosage/route	Frequency	
Ampicillin	Vial containing 500 mg as powder:	First 2 g IV/IM then 1 g	every 6 hours	
	to be mixed with 2.5 ml sterile water			
Gentamicin	Vial containing 40 mg/ml in 2 ml	80 mg IM	every 8 hours	
Metronidazole DO NOT GIVE IM	Vial containing 500 mg in 100 ml	500 mg or 100 ml IV infusion	every 8 hours	
Erythromycin	Vial containing 500 mg as powder	500 mg IV/IM	every 6 hours	
(if available)				
(if allergy to ampicillin)				

# Infection

# Malaria

#### MALARIA

#### Give quinine IM

If dangerous fever or very severe febrile disease

	Quinine*
	2 ml vial containing 300 mg/ml
Leading dose for	20 mg/kg
assumed weight 50-60 kg	4 ml
Continue treatment	10 mg/kg
if unable to refer	2 ml/8 hours for a total of 7 days**

Give the loading dose of the most effective drug, according to the national policy.
 If guinine:

 $\rightarrow$  divide the required dose equally into 2 injections and give 1 in each anterior thigh  $\rightarrow$  always give glucose with quinine.

Refer urgently to hospital B17.

■ If delivery imminent or unable to refer immediately, continue treatment as above and refer after delivery.

These dosages are for quinine dihydrochloride. If quinine base, give 8.2 mg/kg every 8 hours.

\*\* Discontinue parenteral treatment as soon as woman is conscious and able to swallow. Begin oral treatment according to national guidelines.

For prevention of malaria in pregnancy in Somalia, women with malaria and in their first trimester should be treated with oral quinine, meanwhile all pregnant women in moderate to high transmission areas should receive at least two doses of the recommended antimalarial drug sulfadoxine-pyrimethamine (SP) as Intermittent Preventive Treatment during the second or third trimester of their pregnancy.

#### Give glucose IV

If dangerous fever or very severe febrile disease treated with quinine. Refer to the hospital for treatment with glucose IV

50% glucose solution*	25% glucose solution	10% glucose solution (5 ml/kg)
25-50 ml	50-100 ml	125-250 ml

- Make sure IV drip is running well. Give glucose by slow IV push.
- If no IV glucose is available, give sugar water by mouth or nasogastric tube.
- To make sugar water, dissolve 4 level teaspoons of sugar (20 g) in a 200 ml cup of clean water.
- \* 50% glucose solution is the same as 50% dextrose solution or D50. This solution is irritating to veins. Dilute it with an equal quantity of sterile water or saline to produce 25% glucose solution.

#### **REFER THE WOMAN URGENTLY TO THE HOSPITAL**

#### Refer the woman urgently to hospital

- After emergency management, discuss decision with woman and relatives.
- Quickly organize transport and possible financial aid.
- Inform the referral centre if possible by radio or phone.
- Accompany the woman if at all possible, or send:
  - $\rightarrow$  a health worker trained in delivery care
  - $\rightarrow$  a relative who can donate blood
  - $\rightarrow$  baby with the mother, if possible
  - $\rightarrow$  essential emergency drugs and supplies B17.
  - $\rightarrow$  referral note N2.
- During journey:
  - $\rightarrow$  watch IV infusion
- $\rightarrow$  if journey is long, give appropriate treatment on the way
- → keep record of all IV fluids, medications given, time of administration and the woman's condition.

# Essential emergency drugs and supplies for transport and home delivery

Emergency drugs	Strength and Form	Quantity for carry
Oxytocin	10 IU vial	6
Ergometrine	0.2 mg vial	2
Magnesium sulphate	0.2 mg via	2
(not for home delivery)	5 g vials (20 g)	4
Diazepam (parenteral)	5 9 1103 (20 9)	
(not for home delivery)	10 mg vial	3
Calcium gluconate	i o nig via	5
(not for home delivery)	1 g vial	1
Ampicillin	500 mg vial	4
Gentamicin	80 mg vial	3
Metronidazole	500 mg vial	2
Ringer's lactate	1 litre bottle	4 (if distant referral)
Emergency supplies (adjust the	supplies according to t	he iournev)
IV catheters and tubing	<b>J</b>	2 sets
Gloves		2 pairs, at least, one pair sterile
Sterile syringes and needles		5 sets
Urinary catheter		1
Antiseptic solution		1 small bottle
Container for sharps		1
Bag for trash		1
Torch and extra battery		1
Catheter bag		1
Blood pressure machine		1
Thermometer, gauze and cotto	n	1
If delivery is anticipated on the	way	
Soap, towels		2 sets
Disposable delivery kit (blade, 3 ties)		2 sets
Clean cloths (3) for receiving, d	rying and	

5040, 100013	2 3013	
Disposable delivery kit (blade, 3 ties)	2 sets	
Clean cloths (3) for receiving, drying and		
wrapping the baby	1 set	
Clean clothes for the baby	1 set	
Plastic bag for placenta	1 set	
Resuscitation bag and mask for the baby	1 set	

#### **BLEEDING IN EARLY PREGNANCY AND POST-ABORTION CARE**



21 ADVISE AND COUNSEL ON POST-ABORTION CARE Advise on self-care Advise and counsel on family planning Provide information and support after abortion Advise and counsel during follow-up visits

EXAMINATION OF THE WOMAN WITH BLEEDING IN EARLY PREGNANCY AND

GIVE PREVENTIVE MEASURES

POST-ABORTION CARE

B20

- Always begin with Rapid assessment and management (RAM) B3-B7
- Next use the Bleeding in early pregnancy/post abortion care B19 to assess the woman with light vaginal bleeding or a history of missed periods.
- Use chart on Preventive measures B20 to provide preventive measures due to all women.
- Use Advise and Counsel on post-abortion care B21 to advise on self care, danger signs, follow-up visit, family planning.
- Record all treatment given, positive findings, and the scheduled next visit in the homebased and clinic recording forms.
- If the woman is HIV positive, adolescent or has special needs, use G1-G11 H1-H4.

#### EXAMINATION OF THE WOMAN WITH BLEEDING IN EARLY PREGNANCY, AND POST-ABORTION CARE

Use this chart if a woman has vaginal bleeding in early pregnancy or a history of missed periods

#### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

How old are you?
Have you lost much or little
blood?
Have you ever had a
miscarriage?
When did bleeding start?
Are you still bleeding?
Is the bleeding increasing or

- decreasing?
- Could you be pregnant?
- When was your last period?
- Have you had a recent abortion?
- Did you or anyone else do anything to induce an abortion?
- Have you fainted recently?
- Do you have abdominal pain?
- Do you have any other concerns to discuss?

Look at amount of bleeding.
Note if there is foul-smelling
vaginal discharge.

- Feel for lower abdominal pain.
- Feel for fever. If hot, measure temperature.
- Look for pallor.
- Check vital signs.

Vaginal bleeding and any of:	COMPLICATEDABORTION
→ Foul-smelling vaginal discharge	
$\rightarrow$ Abortion with uterine	

→ Abdominal pain/tenderness → Temperature >38°C.		<ul> <li>Give appropriate in/1v antibiotics bio.</li> <li>Refer urgently to hospital B17.</li> </ul>
Light vaginal bleeding	THREATENED ABORTION	<ul> <li>Observe bleeding for 4-6 hours:         <ul> <li>→ If no decrease, refer to hospital.</li> <li>→ If decrease, let the woman go home.</li> <li>→ Advise the woman to return immediately if bleeding increases.</li> <li>→ Advise the woman to rest and avoid lifting heavy objects .</li> </ul> </li> <li>Follow up in 2 days B21.</li> </ul>
<ul> <li>History of heavy bleeding but:</li> <li>→ now decreasing, or</li> <li>→ no bleeding at present.</li> </ul>	COMPLETE ABORTION	<ul> <li>Check preventive measures B20.</li> <li>Advise on self-care B21.</li> <li>Advise and counsel on family planning B21.</li> <li>Advise to return if bleeding does not stop within 2 days.</li> </ul>
<ul> <li>Two or more of the following signs:</li> <li>→ abdominal pain</li> <li>→ fainting</li> <li>→ pale</li> <li>→ very weak</li> </ul>	ECTOPIC PREGNANCY	<ul> <li>Insert an IV line and give fluids B9.</li> <li>Refer urgently to hospital B17.</li> </ul>

**CLASSIFY** 

**TREAT AND ADVISE** 

■ Insert an IV line and give fluids B9.

■ Give paracetamol for pain F4 Give appropriate IM/IV antibiotics B15



**NEXT:** Give preventive measures

# Give preventive measures

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# ASSESS, CHECK RECORDS

**GIVE PREVENTIVE MEASURES** 

TDEAT			'ICE
TREAT	AND	AUV	IDE

Check tetanus toxoid (TT) immunization status.	<ul> <li>Give tetanus toxoid if due F2.</li> <li>Give 3 month's supply of iron and counsel on compliance F3.</li> </ul>		
Check woman's supply of the prescribed dose of iron/folate.			
■ Check HIV status C6.	<ul> <li>If HIV status is unknown, counsel on HIV testing G3.</li> <li>If HIV-positive:         <ul> <li>refer to HIV services for further assessment and treatment.</li> <li>give support G4.</li> <li>advise on opportunistic infection and need to seek medical help C10.</li> <li>counsel on safer sex including use of condoms G2.</li> </ul> </li> <li>If HIV-negative, counsel on safer sex including use of condoms G4.</li> </ul>		
<ul> <li>Check TPHA status in records C5.</li> <li>If no TPHA results, do the TPHA test.</li> </ul>	If TPHA positive: Treat the woman for syphilis with benzathine penicillin F6. Advise on treating her partner. Encourage HIV testing and counselling G3. Reinforce use of condoms G2.		

Record the findings (including the immunization card)

#### Advise on self-care

- Rest for a few days, especially if feeling tired.
- Advise on hygiene
- $\rightarrow$  change pads every 4 to 6 hours
- $\rightarrow$  wash the perineum daily with warm water.
- Advise woman to return immediately if she has any of the following danger signs:
  - $\rightarrow$  increased bleeding
- $\rightarrow$  continued bleeding for 2 days
- $\rightarrow$  foul-smelling vaginal discharge
- →abdominal pain
- $\rightarrow$  fever, feeling ill, weakness
- $\rightarrow$  dizziness or fainting.
- Advise woman to return in if delay (6 weeks or more) in resuming menstrual periods.

#### Advise and counsel on birth spacing

- Explain to the woman that she can become pregnant soon after the abortion as soon as she has sexual intercourse if she does not use a contraceptive:
  - → Any birth spacing method can be used immediately after an uncomplicated first trimester abortion.
  - → If the woman has an infection or injury: delay IUD insertion or female sterilization until healed. For information on options, see Methods for non-breastfeeding women on D27.
- Make arrangements for her to see abirth spacing counsellor as soon as possible, or counsel her directly.
- Counsel on safer sex including use of condom if she or her husband are at risk of sexually transmitted infection (STI) or HIV G2.
- Give advice to the women to do exclusive breastfeeding and proper nutrition.

#### Provide information and support after abortion

A woman may experience different emotions after an abortion, and may benefit from support:

- Allow the woman to talk about her worries, feelings, health and personal situation. Ask if she has any questions or concerns.
- Give information about postnatal depression.
- Facilitate family and community support, if she is interested (depending on the circumstances, she may not wish to involve others).
  - → Speak to them about how they can best support her, by sharing or reducing her workload, helping out with children, or simply being available to listen.
- → Inform them that post-abortion complications can have grave consequences for the woman's health. Inform them of the danger signs and the importance of the woman returning to the health worker if she experiences any.
- $\rightarrow$  Inform them about the importance of birth spacing if another pregnancy is not desired.
- If the woman is interested, link her to a peer support group or other women's groups or community services which can provide her with additional support.
- If the woman discloses violence or you see unexplained bruises and other injuries which make you suspect she may be suffering abuse, see H4.
- Counsel on safer sex including use of condoms if she or her partner are at risk for STI or HIV G2.

#### Advise and counsel during follow-up visits

If threatened abortion and bleeding stops:

- Reassure the woman that it is safe to continue pregnancy.
- Provide antenatal care C1-C18

If bleeding continues:

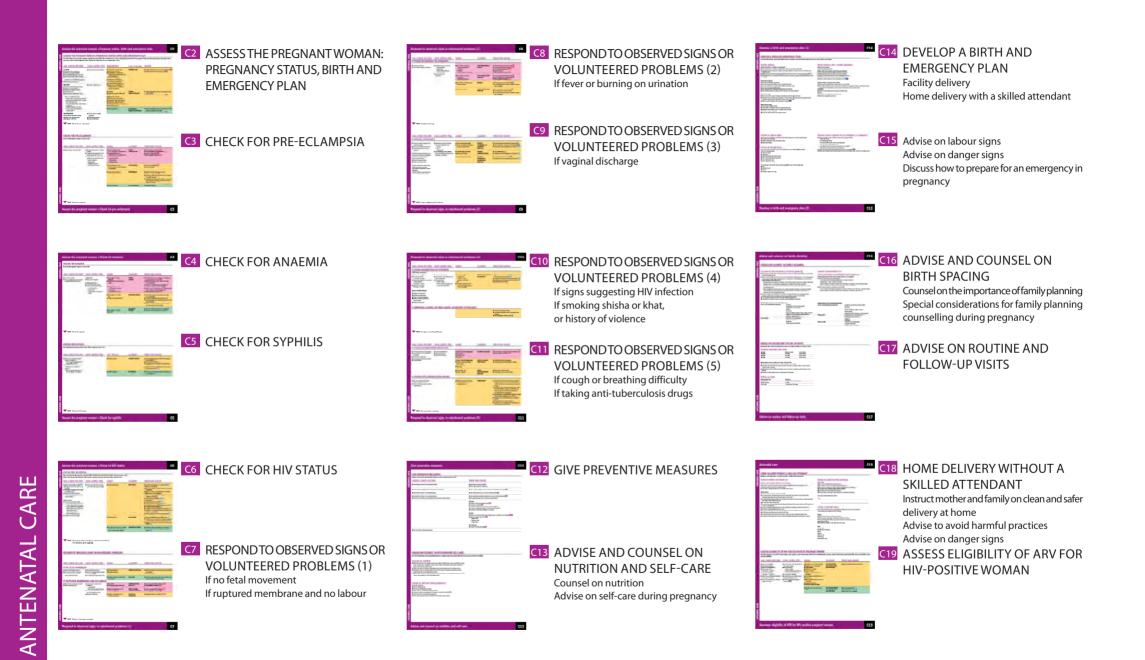
- Assess and manage as in Bleeding in early pregnancy/post-abortion care B18-B22
  - → If fever, foul-smelling vaginal discharge, or abdominal pain, give first dose of appropriate IV/IM antibiotics B15.
  - $\rightarrow$  Refer woman to hospital.

# Advise and counsel on post-abortion care

# Antenatal care

#### ANTENATAL CARE

- Always begin with Rapid assessment and management (RAM) B3-B7. If the woman has no emergency or priority signs and has come for antenatal care, use this section for further care.
- Next use the Pregnancy status and birth plan chart C2 to ask the woman about her present pregnancy status, history of previous pregancies, and check her for general danger signs. Decide on an appropriate place of birth for the woman using this chart and prepare the birth and emergency plan. The birth plan should be reviewed during every follow-up visit.
- Check all women for pre-eclampsia, anaemia, syphilis and HIV status according to the charts C3-C6.
- In cases where an abnormal sign is identified (volunteered or observed), use the charts Respond to observed signs or volunteered problems C7-C11 to classify the condition and identify appropriate treatment(s).
- Give preventive measures due C12
- Develop a birth and emergency plan C14-C15.
- Advise and counsel on nutrition C13, family planning C16, labour signs, danger signs
   C15, routine and follow-up visits C17 using Information and Counselling sheets M1-M19.
- Record all positive findings, birth plan, treatments given and the next scheduled visit in the home-based maternal card/clinic recording form.
- Assess eligibility of ARV for HIV-positive woman C19.
- If the woman is HIV positive, adolescent or has special needs, see G1-G11 H1-H4



## Antenatal care

#### ASSESS THE PREGNANT WOMAN: PREGNANCY STATUS, BIRTH AND EMERGENCY PLAN

Use this chart to assess the pregnant woman at each of the four antenatal care visits. During first antenatal visit, prepare a birth and emergency plan using this chart and review them during following visits. Modify the birth plan if any complications arise.

#### ASK, CHECK RECORD LOOK, LISTEN, FEEL INDICATIONS

#### PLACEOFDELIVERY ADVISE

ALL VISITS Feel for trimester of pregnancy.	<ul> <li>Prior delivery by caesarean.</li> <li>Age less than 14 years.</li> </ul>	REFERRAL LEVEL	Explain why delivery needs to be at referral level C14.
<ul> <li>Check for vital signs, hemoglobin testing, urine analysis for protein and sugar, blood sugar.</li> <li>Where do you plan to deliver?</li> <li>Any vaginal bleeding since last visit?</li> <li>Is the baby moving? (after 4 months listen to fetal heart)</li> <li>Check record for previous complications and treatments received during this pregnancy.</li> <li>Do you have any concerns?</li> </ul>	<ul><li>Fistula repair.</li><li>Transverse lie or other obvious</li></ul>		Develop the birth and emergency plan C14.
FIRST VISIT	<ul> <li>HIV positive women</li> </ul>		
<ul> <li>Register her name and contact information (phone, address)</li> <li>How many months pregnant are you?</li> <li>Look for caesarean scar</li> <li>When was your last period?</li> <li>When do you expect to deliver?</li> <li>How old are you?</li> <li>Have you had a baby before? If yes:</li> <li>Check record for prior pregnancies or if there is no record ask about:</li> <li>→ Number of prior pregnancies/deliveries</li> </ul>	<ul> <li>First birth.</li> <li>Last baby born dead or died in first day.</li> <li>Age less than 16 years or above 35 years.</li> <li>More than six previous births.</li> <li>Prior delivery with heavy bleeding.</li> <li>Prior delivery with convulsions.</li> <li>Prior delivery by forceps or vacuum.</li> </ul>	PRIMARY HEALTH CARE LEVEL	<ul> <li>Explain why delivery needs to be at primary health care level C14.</li> <li>Develop the birth and emergency plan C14.</li> </ul>
<ul> <li>→ Check vaccination history and blood group</li> <li>→ Prior caesarean section, forceps, or vacuum</li> <li>→ Prior third degree tear or fistula repair</li> <li>→ Heavy bleeding during or after delivery</li> <li>→ Convulsions</li> <li>→ Stillbirth or death in first day.</li> </ul>	■ None of the above.	ACCORDING TO WOMAN'S PREFERENCE	<ul> <li>Explain why delivery needs to be with a skilled birth attendant, preferably at a facility.</li> <li>Develop the birth and emergency plan C14.</li> </ul>

THIRD TRIMESTER

Has she been counselled on birth spacing? Does she have a birth plan?

NEXT: Check for pre-eclampsia

#### CHECK FOR PRE-ECLAMPSIA

Screen all pregnant women at every visit.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
Blood pressure at all visits?	<ul> <li>Measure blood pressure in sitting position.</li> <li>If diastolic blood pressure is ≥90 mmHg, repeat after 1 hour rest.</li> <li>If diastolic blood pressure is still ≥90 mmHg, ask the woman if she has:</li> </ul>	<ul> <li>Diastolic blood pressure         ≥110 mmHg and 3+ proteinuria, or</li> <li>Diastolic blood pressure ≥90-mmHg         on two readings and 2+ proteinuria,         and any of:         → severe headache         → blurred vision         → epigastric pain.</li> </ul>	SEVERE PRE-ECLAMPSIA	<ul> <li>Give magnesium sulphate B13.</li> <li>Give appropriate anti-hypertensives B14.</li> <li>Revise the birth plan C2.</li> <li>Refer urgently to hospital B17.</li> </ul>
	<ul> <li>→ severe headache, severe oedema on the face and the limbs</li> <li>→ blurred vision</li> <li>→ epigastric pain and</li> <li>→ check protein in urine.</li> </ul>	<ul> <li>Diastolic blood pressure</li> <li>90-110-mmHg on two readings and</li> <li>2+ proteinuria.</li> </ul>	PRE-ECLAMPSIA	<ul> <li>Revise the birth plan </li> <li>Refer to hospital.</li> </ul>
		■ Diastolic blood pressure ≥90 mmHg on 2 readings.	HYPERTENSION	<ul> <li>Advise to reduce workload and to rest.</li> <li>Advise on danger signs C15.</li> <li>Reassess at the next antenatal visit or in 1 week if &gt;8 months pregnant.</li> <li>If hypertension persists after 1 week or at next visit, refer to hospital or discuss case with the doctor or midwife, if available.</li> </ul>
		None of the above.	NO HYPERTENSION	No treatment required.

NEXT: Check for anaemia

# 

#### **CHECK FOR ANAEMIA**

Screen all pregnant women at every visit.

#### ASK, CHECK RECORD LOOK, LISTEN, FEEL SIGNS CLASSIFY **TREAT AND ADVISE** ■ Haemoglobin <7-g/dl. Do you tire easily, or have any On first visit: Revise birth plan so as to deliver in a facility with SEVERE palpitation or dizziness? Measure haemoglobin AND/OR blood transfusion services C2. ANAEMIA Are you breathless (short Severe palmar and conjunctival ■ Give double dose of iron (1 tablet twice daily) of breath) during routine On subsequent visits: pallor or for 3 months F3 ■ Look for conjunctival pallor. household work? Counsel on compliance with treatment and ■ Look for palmar pallor. If pallor: Any pallor with any of nutrition F3. $\rightarrow$ Is it severe pallor? $\rightarrow$ >30 breaths per minute Give appropriate oral antimalarial after doing $\rightarrow$ Some pallor? $\rightarrow$ tires easily the malaria test F4. $\rightarrow$ Count number of breaths in 1 $\rightarrow$ breathlessness at rest Follow up in 2 weeks to check clinical progress. minute.

Siculiessiessurest		<ul> <li>Follow up in 2 weeks to check clinical progress, test results, and compliance with treatment.</li> <li>Refer urgently to hospital B17.</li> </ul>
Haemoglobin 7-11-g/dl. OR Palmar or conjunctival pallor.	MODERATE ANAEMIA	<ul> <li>Give double dose of iron (1 tablet twice daily) for 3 months F3.</li> <li>Counsel on compliance with treatment after doing the malaria test F3.</li> <li>Give appropriate oral antimalarial and nutrition if not given in the past month F4.</li> <li>Reassess at next antenatal visit (4-6 weeks). If anaemia persists, refer to hospital.</li> </ul>
Haemoglobin >11-g/dl. No pallor.	NO CLINICAL ANAEMIA	<ul> <li>Give iron 1 tablet once daily for 3 months F3.</li> <li>Counsel on compliance with treatment and nutrition F4.</li> </ul>

#### **CHECK FOR SYPHILIS**

Test all pregnant women at first visit. Check status at every visit.

#### ASK, CHECKRECORD LOOK, LISTEN, FEEL TEST RESULT CLASSIFY TREAT AND ADVISE

- Have you been tested for syphilis during this pregnancy? → If not, perform TPHA.
- If test was positive, have you and your partner been treated for syphilis?
- → If not, and test is positive, ask "Are you allergic to penicillin?"

TESTINESOEI	CERSSIII	
TPHA test positive.	POSSIBLE SYPHILIS	<ul> <li>Give benzathine benzylpenicillin IM. If allergy, give erythromycin F6.</li> <li>Plan to treat the newborn K12.</li> <li>Encourage woman to bring her husband for treatment.</li> <li>Counsel on safer sex including use of condoms to prevent new infection G2.</li> </ul>
TPHA test negative.	NO SYPHILIS	Counsel on safer sex including use of condoms to prevent infection G2.



NEXT: Check for HIV status

# 

#### **CHECK FOR HIV STATUS**

Test and counsel all pregnant women for HIV at the first antenatal visit. Check status at every visit. *Inform the women that HIV test will be done routinely and that she may refuse the HIV test.* 

#### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS CLASSIFY TREAT AND ADVISE Provide key information on HIV G2. Positive HIV test. **HIV-POSITIVE** Counsel on implications of a positive test G3 ■ What is HIV and how is HIV If HIV services available: transmitted G2 ? Refer the woman to HIV services for further asses-Advantage of knowing the HIV sment. status in pregnancy G2. Ask her to return in 2 weeks with her documents. Explain about HIV testing If HIV services are not available: and counselling including Determine the severity of the disease and assess confidentiality of the result G3. eligibility for ARVs C19. ■ Give her appropriate ARV G6, G9. Ask the woman: For all women: Have you been tested for HIV? Perform the Rapid HIV test ■ Support adherence to ARV G6. $\rightarrow$ If not: tell her that she will if not performed in this Counsel on infant feeding options G7. be tested for HIV, unless she pregnancy L6. Provide additional care for HIV-positive woman G4. refuses. ■ Counsel on birth spacing G4 $\rightarrow$ If yes: Check result. (Explain ■ Counsel on safer sex including use of condoms G2. to her that she has a right not Counsel on benefits of disclosure (involving) and to disclose the result.) testing her husband G3. $\rightarrow$ Are you taking any ARV? Provide support to the HIV-positive woman G5. $\rightarrow$ Check ARV treatment plan. counsel on proper nutrition and to seek safe Has the husband been tested? delivery practices (Hospital delivery). Negative HIV test. **HIV-NEGATIVE** ■ Counsel on implications of a negative test G3. Counsel on the importance of staying negative by practising safer sex G2. Counsel on benefits of involving and testing the

■ She refuses the test or is not willing to UNKNOWN HIV

STATUS

disclose the result of previous test or

no test results available.

husband G3.

husband G3

■ Counsel on safer sex including use of condoms G2.

Counsel on benefits of involving and testing the

NEXT: Respond to observed signs or volunteered problems If no problem, go to page **C12**.

#### RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS

#### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

#### IF NO FETAL MOVEMENT

- When did the baby last move?
- If no movement felt, ask woman to move around for some time, reassess fetal movement.
- Feel for fetal movements.
   Listen for fetal heart after 6
- months of pregnancy D2.
   If no heart beat, repeat after 1 hour.
- No fetal movement.
   No fetal heart beat.
   PROBABLY DEAD BABY
   Inform the woman and partner about the possibility of dead baby.
   Refer to hospital.
   No fetal movement but fetal heart beat present.
   WELL BABY
   Inform the woman that baby is fine and likely to be well but to return if problem persists.

#### IF RUPTURED MEMBRANES AND NO LABOUR

- When did the membranes rupture?
- When is your baby due?
- Look at pad or underwere evidence of:
  - → amniotic fluid, and check it color
  - → foul-smelling vagina discharge
- If no evidence, ask her to wear a pad. Check again in 1 hour.
- Measure temperature.

	••••		
derwear for and check its	<ul> <li>Fever 38°C.</li> <li>Foul-smelling vaginal discharge.</li> </ul>	UTERINE AND FETAL INFECTION	<ul> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Refer urgently to hospital B17.</li> </ul>
iginal	Rupture of membranes at <=8 months of pregnancy.	RISK OF UTERINE AND FETAL INFECTION	<ul> <li>Give appropriate IM/IV antibiotic B15.</li> <li>Refer urgently to hospital B17.</li> </ul>
ther to wear a in 1 hour.	Rupture of membranes at >8 months of pregnancy.	RUPTURE OF MEMBRANES	Manage as Woman in childbirth D1-D28.



NEXT: If fever or burning on urination

Respond to observed signs or volunteered problems (1)

#### CLASSIFY TREAT AND ADVISE

# Respond to observed signs or volunteered problems (2)

#### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS **CLASSIFY TREAT AND ADVISE IF FEVER OR BURNING ON URINATION** Have you had fever? ■ If history of fever or feels hot:

- Do you have burning on
- urination? Or do you have to go frequently and urgently?
- $\rightarrow$  Measure axillary
  - temperature.  $\rightarrow$  Look or feel for stiff neck.
- $\rightarrow$  Look for lethargy. Percuss flanks for
- tenderness.
- Carry out the Rapid Diagnostic Test (RDT) for malaria.

<ul> <li>Fever &gt;38°C and any of:</li> <li>→ very fast breathing or</li> <li>→ stiff neck</li> <li>→ lethargy</li> <li>→ very weak/not able to stand.</li> </ul>	VERY SEVERE FEBRILE DISEASE	<ul> <li>Insert IV line and give fluids slowly B9.</li> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Give quinine IM B16.</li> <li>Give glucose B16.</li> <li>Refer urgently to hospital B17.</li> </ul>
<ul> <li>Fever &gt;38°C and any of:</li> <li>→ Flank pain</li> <li>→ Burning on urination.</li> </ul>	UPPER URINARY TRACT INFECTION	<ul> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Give appropriate oral antimalarial F4.</li> <li>Refer urgently to hospital B17.</li> </ul>
■ Fever >38°C or history of fever (in last 48 hours).	MALARIA	<ul> <li>Give appropriate oral antimalarial F4.</li> <li>If no improvement in 2 days or condition is worse, refer to hospital.</li> </ul>
Burning on urination.	LOWER URINARY TRACT INFECTION	<ul> <li>Give appropriate oral antibiotics F5.</li> <li>Encourage her to drink more fluids.</li> <li>If no improvement in 2 days or condition is worse, refer to hospital.</li> </ul>



#### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

#### CLASSIFY TREAT AND ADVISE

#### IF VAGINAL DISCHARGE

- Have you noticed changes in your vaginal discharge?
- Do you have itching at the vulva or perineum?
- Has your husband had a urinary problem?

If partner is present in the clinic, ask the woman if she feels comfortable if you ask him similar questions. If yes, ask him if he has:

- urethral discharge or pus.
- burning on passing urine.

If partner could not be approached, explain importance of partner assessment and treatment to avoid reinfection.

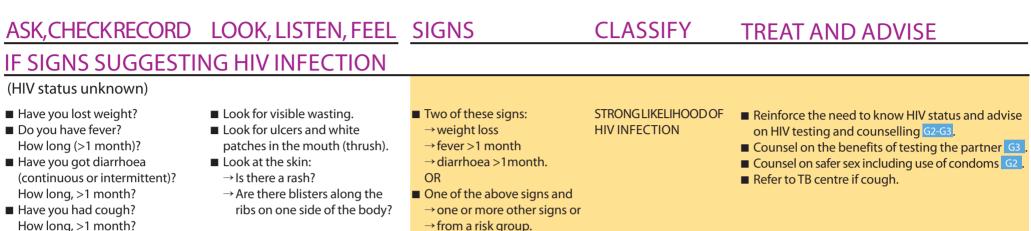
Schedule follow-up appointment for woman and partner (if possible).

<ul> <li>■ Look for abnormal vaginal discharge:</li> <li>→ amount</li> <li>→ colour</li> </ul>	<ul> <li>Abnormal vaginal discharge.</li> <li>Partner has urethral discharge or burning on passing urine.</li> </ul>	POSSIBLE GONORRHOEA OR CHLAMYDIA INFECTION	<ul> <li>Give appropriate oral antibiotics to woman F5.</li> <li>Treat partner with appropriate oral antibiotics F5.</li> <li>Counsel on safer sex including use of condoms G2.</li> </ul>
<ul> <li>→ odour/smell.</li> <li>If no discharge is seen, examine with a gloved finger and look at the discharge on the glove.</li> </ul>	<ul> <li>Curd like vaginal discharge.</li> <li>Intense vulval itching.</li> </ul>	POSSIBLE CANDIDA INFECTION	<ul> <li>Give clotrimazole F5</li> <li>Counsel on safer sex including use of condoms G2</li> </ul>
the discharge on the glove. ■ Look for other vaginal lesions like ulcers.	Abnormal vaginal discharge	POSSIBLE BACTERIAL OR TRICHOMONAS INFECTION	<ul> <li>Give metronidazole to woman F5.</li> <li>Counsel on safer sex including use of condoms G2.</li> </ul>

ANTENATAL CARE

NEXT: If signs suggesting HIV infection

# Respond to observed signs or volunteered problems (4)



#### Assess if in high risk group:

Occupational exposure?

**ANTENATAL CARE** 

- Multiple sexual partner?
- Intravenous drug use?
- History of blood transfusion?
- Illness or death from AIDS in husband?
- History of forced sex?

- $\rightarrow$  from a risk group.

IF SMOKING SHISHA, CHEW KHAT, OR HISTORY OF VIOLENCE

Counsel on stopping smoking shisha.

■ For counselling on violence, see H4.

NEXT: If cough or breathing difficulty

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
coughing?Listen for wheezing.How long have you hadMeasure temperature.	At least 2 of the following signs: ■ Fever >38°C. ■ Breathlessness. ■ Chest pain.	POSSIBLE PNEUMONIA	<ul> <li>Give first dose of appropriate IM/IV antibiotics B15.</li> <li>Refer urgently to hospital B17.</li> </ul>	
<ul> <li>Do you have chest pain?</li> <li>Do you have any blood in sputum?</li> <li>Do you smoke or use shisha?</li> </ul>		At least 1 of the following signs: Cough or breathing difficulty for >3 weeks Blood in sputum Wheezing	POSSIBLE CHRONIC LUNG DISEASE	<ul> <li>Refer to hospital for assessment.</li> <li>If severe wheezing, refer urgently to hospital.</li> </ul>
		<ul> <li>■ Fever &lt;38°C, and</li> <li>■ Cough &lt;3 weeks.</li> </ul>	UPPER RESPIRATORY TRACT INFECTION	<ul> <li>Advise safe, soothing remedy.</li> <li>If smoking, or using shisha, counsel to stop smoking.</li> </ul>
IF TAKING ANTI-TUE	BERCULOSIS DRUGS			
<ul> <li>Are you taking anti-tuberculosis drugs? If yes, since when?</li> <li>Does the treatment include injection (streptomycin)?</li> </ul>		<ul> <li>Taking anti-tuberculosis drugs.</li> <li>Receiving injectable anti- tuberculosis drugs.</li> </ul>	TUBERCULOSIS	<ul> <li>If anti-tubercular treatment includes streptomycin (injection), refer the woman to district hospital for revision of treatment as streptomycin is ototoxic to the fetus.</li> <li>If treatment does not include streptomycin, assure the woman that the drugs are not harmful to her baby, and urge her to continue treatment for a successful outcome of pregnancy.</li> <li>If her sputum is TB positive within 2 months of delivery, plan to give INH prophylaxis to the newborn K13.</li> <li>Reinforce advice on HIV testing and counselling G2-G3.</li> <li>If smoking sisha, counsel to stop smoking.</li> <li>Advise to screen immediate family members and close contacts for tuberculosis.</li> </ul>

NEXT: Give preventive measures

Respond to observed signs or volunteered problems (5)

# Give preventive measures

#### GIVE PREVENTIVE MEASURES

Advise and counsel all pregnant women at every antenatal care visit.

#### ASSESS, CHECK RECORD **TREAT AND ADVISE** Check tetanus toxoid (TT) immunization status. ■ Give tetanus toxoid if due F2 ■ If TT1, plan to give TT2 at next visit. Check woman's supply of the prescribed dose of iron/folate ■ Give 3 month's supply of iron and counsel on compliance and safety F3. Check when last dose of mebendazole given. ■ Give mebendazole once in second or third trimester F3 Give intermittent preventive treatment in second and third trimesters according to the ■ Check when last dose of an antimalarial given. zones F4 Ask if she (and children) are sleeping under insecticide treated bednets. Encourage sleeping under insecticide treated bednets. First visit Develop a birth and emergency plan C14. Counsel on nutrition C13 Counsel on importance of exclusive breastfeeding K2. Counsel on stopping smoking, shisha and khat. All visits Review and update the birth and emergency plan according to new findings C14-C15 ■ Advise on when to seek care: C17 $\rightarrow$ routine visits $\rightarrow$ follow-up visits $\rightarrow$ danger signs. Third trimester Counsel on birth spacing C16

#### ■ Record all visits and treatments given.

NEXT: Go to 🖸 and review the birth and emergency plan.

#### ADVISE AND COUNSEL ON NUTRITION AND SELF-CARE

Use the information and counselling sheet to support your interaction with the woman, her husband and family.

#### **Counsel on nutrition**

- Advise the woman to eat a greater amount and variety of healthy foods, such as meat, fish, oils, nuts, seeds, cereals, beans, vegetables, cheese, milk, to help her feel well and strong (give examples of types of food and how much to eat).
- Spend more time on nutrition counselling with very thin, adolescent and HIV-positive woman.
- Determine if there are important taboos about foods which are nutritionally important for good health. Advise the woman against these taboos.
- Talk to family members such as the husband and mother-in-law, to encourage them to help ensure the woman eats enough and avoids hard physical work.

#### Advise on self-care during pregnancy

Advise the woman to:

- Take iron tablets (p.T3).
- Rest and avoid lifting heavy objects.
- Sleep under an insecticide impregnated bednet.
- Counsel on safer sex including use of condoms, if at risk for STI or HIV G2.
- Avoid smoking, use of shisha and chewing khat during pregnancy.
- NOT to take medication unless prescribed at the health centre/hospital.

# Advise and counsel on nutrition and self-care

#### **DEVELOP A BIRTH AND EMERGENCY PLAN**

Use the information and counselling sheet to support your interaction with the woman, her partner and family.

#### **Facility delivery**

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Explain why birth in a facility is recommended

- Any complication can develop during delivery they are not always predictable.
- A facility has staff, equipment, supplies and drugs available to provide best care if needed, and a referral system.
- If HIV-positive she will need appropriate ARV treatment for herself and her baby during childbirth.
- Complications are more common in HIV-positive women and her newborns. HIV-positive women should deliver in a facility.

#### Advise how to prepare

Review the arrangements for delivery:

- How will she get there? Will she have to pay for transport?
- How much will it cost to deliver at the facility? How will she pay?
- Can she start saving straight away?
- Who will go with her for support during labour and delivery?
- Who will help while she is away to care for her home and other children?

#### Advise when to go

- If the woman lives near the facility, she should go at the first signs of labour.
- If living far from the facility, she should go 2-3 weeks before baby due date and stay either at the maternity waiting home or with family or friends near the facility.
- Advise to ask for help from the community, if needed 12.

#### Advise what to bring

- Home-based maternal record.
- Clean cloths for washing, drying and wrapping the baby.
- Additional clean cloths to use as sanitary pads after birth.
- Clothes for mother and baby.
- Food and water for woman and support person.
- Money.

#### Home delivery with a skilled attendant

#### Advise how to prepare

Review the following with her:

- Who will be the companion during labour and delivery?
- Who will be close by for at least 24 hours after delivery?
- Who will help to care for her home and other children?
- Advise to call the skilled attendant at the first signs of labour.
- Advise to have her home-based maternal record ready.
- Advise to ask for help from the community, if needed 12.

Explain supplies needed for home delivery

- Warm spot for the birth with a clean surface or a clean cloth.
- Clean cloths of different sizes: for the bed, for drying and wrapping the baby, for cleaning the baby's eyes, for the birth attendant to wash and dry her hands, for use as sanitary pads.
- Blankets.
- Buckets of clean water and some way to heat this water.
- Soap.
- Bowls: 2 for washing and 1 for the placenta.
- Plastic for wrapping the placenta.

#### Advise on labour signs

Advise to go to the facility or contact the skilled birth attendant if any of the following signs:

- a bloody sticky discharge.
- painful contractions every 20 minutes or less.
- waters have broken.

#### Advise on danger signs

Advise to go to the hospital/health centre immediately, day or night, WITHOUT waiting if any of the following signs:

- vaginal bleeding.
- convulsions.
- severe headaches with blurred vision.
- fever and too weak to get out of bed.
- severe abdominal pain.
- fast or difficult breathing.

She should go to the health centre as soon as possible if any of the following signs:

- fever.
- abdominal pain.
- feels ill.
- swelling of fingers, face, legs.
- premature ruptured membrane.

#### Discuss how to prepare for an emergency in pregnancy

- Discuss emergency issues with the woman and her partner/family:
  - $\rightarrow$  where will she go?
- $\rightarrow$  how will they get there?
- $\rightarrow$  how much it will cost for services and transport?
- $\rightarrow$  can she start saving straight away?
- $\rightarrow$  who will go with her for support during labour and delivery?
- $\rightarrow$  who will care for her home and other children?
- Advise the woman to ask for help from the community, if needed 11–13
- Advise her to bring her home-based maternal record to the health centre, even for an emergency visit.

### ADVISE AND COUNSEL ON BIRTH SPACING

#### Counsel on the importance of birth spacing

- If appropriate, ask the woman if she would like her partner or another family member to be included in the counselling session.
- Explain that after birth, if she has sex and is not exclusively breastfeeding, she can become pregnant as soon as six weeks after delivery. Therefore it is important to start thinking early on about what birth spacing method they will use.
  - → Ask about plans for having more children. If she (and her husband) want more children, advise that waiting at least 2 years before trying to become pregnant again is good for the mother and for the baby's health.
- → Information on when to start a method after delivery will vary depending whether a woman is breastfeeding or not.
- → Make arrangements for the woman to see a birth spacing counsellor, or counsel her directly.
- Counsel on safer sex including use of condoms for dual protection from sexually transmitted infections (STI) or HIV and pregnancy. Promote especially if at risk for STI or HIV G4.
- For HIV-positive women, see G4 for birth spacing considerations

#### Method options for the non-breastfeeding woman

Can be used immediately postpartum	Condoms Progestogen-only oral contraceptives Progestogen-only injectables Implant Female sterilization (only if there are medical
	indications) Copper IUD (delay 4 weeks)
Delay 3 weeks	Combined oral contraceptives Combined injectables Fertility awareness methods
	Abstinence and coitus interuptus

# Special considerations for birth spacing counselling during pregnancy

Counselling should be given during the third trimester of pregnancy.

- If the woman chooses female sterilization:
  - → can be performed immediately postpartum if no sign of infection (ideally within 7 days, or delay for 6 weeks).
  - → plan for delivery in hospital or health centre where they are trained to carry out the procedure.
  - $\rightarrow$  ensure counselling and informed consent prior to labour and delivery.
- If the woman chooses an intrauterine device (IUD):
- $\rightarrow$  can be inserted immediately postpartum if no sign of infection (up to 48 hours, or delay 4 weeks)
- ightarrow plan for delivery in hospital or health centre where they are trained to insert the IUD.

#### Method options for the breastfeeding woman

Can be used immediately postpartum	Lactational amenorrhoea method (LAM) Condoms
	Female sterilization (within 7 days or
	delay 6 weeks)
	Copper IUD (delay 4 weeks)
Delay 6 weeks	Progestogen-only oral contraceptives
	Progestogen-only injectables
	Implants
Delay 6 months	Combined oral contraceptives
	Combined injectables
	Fertility awareness methods
	Abstinence and coitus interuptus

#### ADVISE ON ROUTINE AND FOLLOW-UP VISITS

Encourage the woman to bring her partner or family member to at least 1 visit.

#### Routine antenatal care visits

1st visit	Before 4 months	Before 16 weeks
2nd visit	6 months	24-28 weeks
3rd visit	8 months	30-32 weeks
4th visit	9 months	36-38 weeks

- All pregnant women should have 4 routine antenatal visits.
- First antenatal contact should be as early in pregnancy as possible.
- During the last visit, inform the woman to return if she does not deliver within 2 weeks after the expected date of delivery.
- More frequent visits or different schedules may be required according to national malaria or HIV policies.
- If women is HIV-positive, or has problems during the pregnancy or she has other concerns, ensure a visit between 26-28 weeks.

#### Follow-up visits

If the problem was:	Return in:
Hypertension	1 week if >8 months pregnant
Severe anaemia	2 weeks
HIV-positive	2 weeks after HIV testing

# Advise on routine and follow-up visits

# Antenatal care

#### HOME DELIVERY WITHOUT A SKILLED ATTENDANT

Reinforce the importance of delivery with a skilled birth attendant

# Instruct mother and family on clean and safer delivery at home

If the woman has chosen to deliver at home without a skilled attendant, review these simple instructions with the woman and family members.

Give them a disposable delivery kit and explain how to use it.

#### Tell her/them:

- To ensure a clean delivery surface for the birth.
- To ensure that the attendant should wash her hands with clean water and soap before/after touching mother/baby. She should also keep her nails clean.
- To, after birth, dry and place the baby on the mother's chest with skin-to-skin contact and wipe the baby's eyes using a clean cloth for each eye. Administer tetracycline ointment to both eyes.
- To cover the mother and the baby.
- To use the ties and razor blade from the disposable delivery kit to tie and cut the cord. The cord is cut when it stops pulsating typically after 1-3 minutes. Apply 4% chlorhexidine on the cord.
- To wipe baby clean but not bathe the baby until after 24 hours.
- To wait for the placenta to deliver on its own.
- To give the baby Vit K 1mg im
- To start breastfeeding within the first hour after birth.
- To NOT leave the mother alone for the first 24 hours.
- To keep the mother and baby warm. To dress or wrap the baby, including the baby's head.
- To dispose of the placenta in a correct, safe and culturally appropriate manner (burn or burry).
- Advice the mother on proper hygiene and good nutrition.

#### Advise to avoid harmful practices

#### For example:

NOT to use local medications to hasten labour. NOT to wait for waters to stop before going to health facility. NOT to insert any substances into the vagina during labour or after delivery. NOT to push on the abdomen during labour or delivery. NOT to pull on the cord to deliver the placenta. NOT to put ashes, cow dung or other substance on umbilical cord/stump. NOT to give the newborn pre-leactal feeds. NOT to do frequent PV exam Use sterile gloves only one time If the cervix closed and the placenta is retained do urgent referral NOT to deliver at home if history Cervical, third degree vaginal tear and fistula repair

#### Encourage helpful traditional practices:



#### Advise on danger signs

If the mother or baby has any of these signs, she/they must go to the health centre immediately, day or night, WITHOUT waiting

Mother

- Waters break and not in labour after 6 hours.
- Labour pains/contractions continue for more than 12 hours.
- Heavy bleeding after delivery (pad/cloth soaked in less than 5 minutes).
- Bleeding increases.
- Placenta not expelled 1 hour after birth of the baby.

#### Baby

- Very small.
- Difficulty in breathing.
- Fits.
- Fever.
- Feels cold.
- Bleeding.
- Not able to feed.

#### ASSESS ELIGIBILITY OF ARV FOR HIV-POSITIVE PREGNANT WOMAN

Use this chart to determine ARV needs for HIV-positive woman and her baby when appropriate HIV services and CD4 count are not available.

#### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

- Have you lost weight?
- Have you got diarrhoea (continuous or intermittent)?
- Do you have fever? How long (>1 month)?
- Have you had cough? How long (> 1 month)?
- Have you any difficulty in breathing? How long (> 1 month)?
- Have you noticed any change in vaginal discharge or vaginal itching?

- Look for ulcers and white patches in the mouth (thrush).
  - Look at the skin:
    - $\rightarrow$  Is there a rash?
    - → Are there blisters along the ribs on one side of the body?
  - Look for visible wasting.
  - Feel the head, neck, and underarm for enlarged lymph nodes.
  - Look for any abnormal vaginal discharge C9.

- HIV-positive and any of the following:
- Weight loss or no weight gain
- Visible wasting
- Diarrhoea > 1 month
- Fever > 1 month
- Cough > 1 month or difficult breathing
- Cracks/ulcers around lips/mouth
- Itching rash
- Blisters along the ribs on one side of the body
- Enlarged lymph nodes
- Abnormal vaginal discharge and itching
- HIV-positive and none of the above HIV-POSITIVE Give appropriate ARVs G9. signs WITHOUT HIV-RELATED SIGNS Revise ANC visit accordingly C17.

AND SYMPTOMS

**CLASSIFY** 

**HIV-POSITIVE WITH** 

**HIV-RELATED SIGNS** 

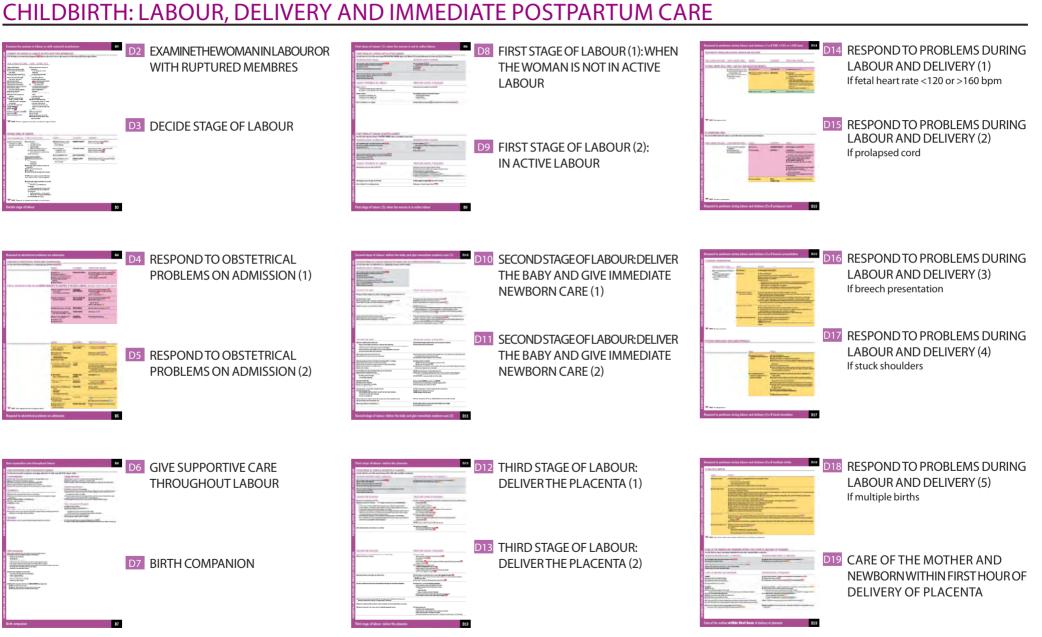
AND SYMPTOMS

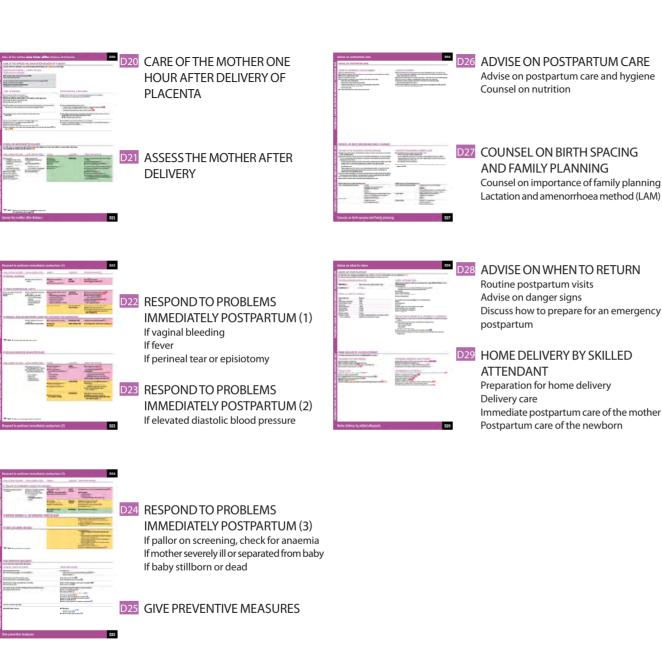
**TREAT AND ADVISE** 

Refer to hospital for further assessment.

# Assesses eligibility of ARV for HIV-positive pregnant woman

# Childbirth: labour, delivery and immediate postpartum care





- Always begin with Rapid assessment and management (RAM) B3-B7.
- Next, use the chart on Examine the woman in labour or with ruptured membranes D2-D3 to assess the clinical situation and obstetrical history, and decide the stage of labour.
- If an abnormal sign is identified, use the charts on Respond to obstetrical problems on admission D4-D5.
- Care for the woman according to the stage of labour D8-D13 and respond to problems during labour and delivery as on D14-D18.
- Use Give supportive care throughout labour D6-D7 to provide support and care throughout labour and delivery.
- Record findings continually on labour record and partograph N4-N6.
- Keep mother and baby in labour room for one hour after delivery and use charts Care of the mother and newborn within first hour of delivery placenta on D19.
- Next use Care of the mother after the first hour following delivery of placenta D20 to provide care until discharge. Use chart on D25 to provide Preventive measures and Advise on postpartum care D26-D28 to advise on care, danger signs, when to seek routine or emergency care, and family planning.
- Examine the mother for discharge using chart on D21.
- Do not discharge mother from the facility before 12 hours.
- If the mother is HIV-positive or adolescent, or has special needs, see <u>G1-G11 H1-H4</u>.
- If attending a delivery at the woman's home, see D29.

## Childbirth: labour, delivery and immediate postpartum care

# D1

CARE

POSTPARTUM (

ELIVERY AND IMMEDIATE

 $\Box$ 

CHILDBIRTH: LABOUR,

#### EXAMINE THE WOMAN IN LABOUR OR WITH RUPTURED MEMBRANES

First do Rapid assessment and management B3-B7. Then use this chart to assess the woman's and fetal status and decide stage of labour.

#### ASK, CHECK RECORD

#### History of this labour:

- When did contractions begin?
- How frequent are contractions? How strong?
- Have your waters broken? If yes, when? Were they clear or green?
- Have you had any bleeding? If yes, when? How much?
- Is the baby moving, or not moving? If yes, since when?
- Do you have any concern?
- Check record, or if no record:
- Ask when the delivery is expected.
- Determine if preterm (less than 8 months pregnant).
- Review the birth plan.
- If prior pregnancies:
- Number of prior pregnancies/deliveries. If multiple pregnancies, still birth, intrauterine fetal death.
- Any prior caesarean section, forceps, or vacuum, or other complication such as postpartum haemorhage, antepartum haemorrhage, Pauperian sepsis?
- Any prior third degree tear?
- Any medical history or fistula repair and any medical problems

Current pregnancy:

- TPHA status C5.
- Hb results C4.
- Tetanus immunization status F2
- HIV status C6
- Infant feeding plan G7-G8
- Receiving any medicine.

#### LOOK, LISTEN, FEEL

- Observe the woman's response to
- contractions:
- $\rightarrow$  Is she coping well or is she distressed?
- $\rightarrow$  Is she pushing or grunting?
- Check abdomen for:
  - $\rightarrow$  caesarean section scar.
  - → horizontal ridge across lower abdomen (if present, empty bladder B12 and observe again).
- Feel abdomen for:
  - → contractions frequency, duration, any continuous contractions?
  - $\rightarrow$  fetal lie—longitudinal or transverse?
  - → fetal presentation—head, breech, other?
  - $\rightarrow$  more than one fetus?
  - $\rightarrow$  fetal movement.
- Listen to the fetal heart beat:
  - $\rightarrow$  Count number of beats in 1 minute.
  - → If less than 100 beats per minute, or more than 180, turn woman on her left side and count again.
- Measure blood pressure.
- Measure vital signs.
- Look for pallor.
- Look for sunken eyes, dry mouth.
- Pinch the skin of the forearm: does it go back quickly?

NEXT: Perform vaginal examination and decide stage of labour

#### DECIDE STAGE OF LABOUR

ASK,CHECKRECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	MANAGE
Explain to the woman that you will give her a vaginal examination and ask for her consent. Explain to her what you are going to do.	<ul> <li>Look at vulva and perineum in case of Female Genitel Mutilation/Cutting (FGM/C) for:         <ul> <li>→ bulging perineum</li> <li>→ any visible fetal parts</li> <li>→ vaginal bleeding</li> <li>→ leaking amniotic fluid; if yes, is it meconium stained, foul-smelling?</li> <li>→ warts, keloid tissue or scars that may interfere with delivery.</li> </ul> </li> <li>In case of women with FGM/C the fetal parts will not be visible until de-infubliation is done.</li> <li>Perform vaginal examination</li> <li>Prepare:         <ul> <li>→ clean gloves</li> </ul> </li> </ul>	<ul> <li>Bulging thin perineum, vagina gaping and head visible, full cervical dilatation.</li> </ul>	IMMINENT DELIVERY	<ul> <li>See second stage of labour D10-D11.</li> <li>Record in partograph N5.</li> </ul>
		■ Cervical dilatation: → multigravida $\geq$ 5 cm → primigravida $\geq$ 6 cm	LATE ACTIVE LABOUR	<ul> <li>See first stage of labour – active labour D9.</li> <li>Start plotting partograph N5.</li> <li>Record in labour record N5.</li> </ul>
		■ Cervical dilatation $\geq$ 4 cm.	EARLY ACTIVE LABOUR	
		Cervical dilatation: 0-3 cm; contractions weak and <2 in 10 minutes.	NOT YET IN ACTIVE LABOUR	<ul> <li>See first stage of labour — not active labour</li> <li>D8</li> <li>Record in labour record</li> </ul>

- $\rightarrow$  swabs, pads.
- Wash hands with soap before and after each examination.
- Wash vulva and perineal areas.
- Put on gloves.
- Position the woman in spine position with legs flexed and apart.

DO NOT perform vaginal examination if bleeding now or at any time after 7 months of pregnancy.

Perform gentle vaginal examination (do not start during a contraction):

 $\rightarrow$  Determine cervical dilatation in centimetres.

→ Feel for presenting part. Is it hard, round and smooth (the head)? If not, identify the presenting part.

- $\rightarrow$  Feel for membranes are they intact?
- $\rightarrow$  Feel for cord is it felt? Is it pulsating? If
- so, act immediately as on D15.

NEXT: Respond to obstetrical problems on admission.

# Decide stage of labour

# Respond to obstetrical problems on admission

#### **RESPOND TO OBSTETRICAL PROBLEMS ON ADMISSION**

Use this chart if abnormal findings on assessing pregnancy and fetal status D2-D3.

	SIGNS	CLASSIFY	TREAT AND ADVISE
	<ul> <li>Transverse lie or other malpresentations</li> <li>Continuous contractions</li> <li>Constant pain between contractions.</li> <li>Sudden and severe abdominal pain.</li> <li>Horizontal ridge across lower abdomen.</li> <li>Labour &gt;24 hours.</li> </ul>	OBSTRUCTED LABOUR	<ul> <li>If distressed, insert an IV line and give fluids. If you refer empty the bladder B9.</li> <li>If in labour &gt;24 hours, give appropriate IM/IV antibiotics B15.</li> <li>Refer urgently to hospital B17.</li> </ul>
FOR ALL SITUATIONS IN RED BELOW, RE ONLY IF IN LATE LABOUR	FER URGENTLY TO HOS	PITAL IF IN EAF	RLY LABOUR, MANAGE

<ul> <li>■ Rupture of membranes and any of:</li> <li>→ Fever &gt;38°C</li> <li>→ Foul-smelling vaginal discharge.</li> </ul>	UTERINE AND FETAL INFECTION	<ul> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Take vaginal swab.</li> <li>Do not do more vaginal exam.</li> <li>If late labour, deliver and refer to hospital after delivery B17.</li> <li>Plan to treat newborn J5.</li> </ul>
Rupture of membranes at <8-months of pregnancy.	RISK OF UTERINE AND FETAL INFECTION	<ul> <li>Give appropriate IM/IV antibiotics B15.</li> <li>If late labour, deliver D10-D28.</li> <li>Discontinue antibiotic for mother after delivery if no signs of infection.</li> <li>Plan to treat newborn J5.</li> </ul>
■ Diastolic blood pressure >90 mmHg.	PRE-ECLAMPSIA	■ Assess further and manage as on D23.
Severe palmar and conjunctival pallor and/or haemoglobin <7-g/dl.	SEVERE ANAEMIA	■ Manage as on D24.
<ul> <li>Breech or other malpresentation D16.</li> <li>Multiple pregnancy D18.</li> <li>Fetal distress D14.</li> <li>Prolapsed cord D15.</li> </ul>	OBSTETRICAL COMPLICATION	Follow specific instructions (see page numbers in left column).

SIGNS	CLASSIFY	TREAT AND ADVISE
<ul> <li>Warts, keloid tissue that may interfere with delivery.</li> <li>Vaginal or cervical scarring from burns, or FGM/C</li> <li>Prior third degree tear.</li> <li>Bleeding any time in third trimester.</li> </ul>	RISK OF OBSTETRICAL COMPLICATION	<ul> <li>Do a generous episiotomy and carefully control delivery of the head D10-D11.</li> <li>If late labour, deliver D10-D28.</li> </ul>
<ul> <li>■ Prior delivery by:</li> <li>→ caesarean section</li> <li>→ forceps or vacuum delivery.</li> </ul>		<ul> <li>Have help available during delivery.</li> <li>Refer to the hospital.</li> </ul>
<ul> <li>Age less than 14 years .</li> <li>Labour before 8 completed months of pregnancy (more than one month before estimated date of delivery).</li> </ul>	PRETERM LABOUR	<ul> <li>Reassess fetal presentation (breech more common).</li> <li>If woman is lying, encourage her to lie on her left side.</li> <li>Call for help during delivery.</li> <li>Conduct delivery very carefully as small baby may pop out suddenly. In particular, control delivery of the head.</li> <li>Prepare equipment for resuscitation of newborn K11.</li> </ul>
Fetal heart rate <120 or >160 beats per minute.	POSSIBLE FETAL DISTRESS	<ul> <li>Manage as on D14.</li> <li>Reassure and counsel the condition of mother</li> <li>Continue to monitor the baby</li> </ul>
<ul> <li>Rupture of membranes at term and before labour.</li> </ul>	RUPTURE OF MEMBRANES	<ul> <li>Give appropriate IM/IV antibiotics if rupture of membrane &gt;18 hours B15.</li> <li>Plan to treat the newborn J5.</li> </ul>
<ul> <li>If two or more of the following signs:</li> <li>→ thirsty</li> <li>→ sunken eyes</li> <li>→ dry mouth</li> <li>→ skin pinch goes back slowly.</li> </ul>	DEHYDRATION	<ul> <li>Give oral fluids.</li> <li>If not able to drink, give 1 litre IV fluids over 3 hours B9.</li> </ul>
<ul> <li>HIV test positive.</li> <li>Taking ARV treatment or prophylaxis.</li> </ul>	HIV-POSITIVE	<ul> <li>Ensure that the woman takes ARV drugs as prescribed</li> <li>G6, G9.</li> <li>Support her choice of infant feeding G7-G8.</li> </ul>
<ul> <li>No fetal movement, and</li> <li>No fetal heart beat on repeated examination</li> </ul>	POSSIBLE FETAL DEATH	Explain to the parents that the baby is not doing well.

NEXT: Give supportive care throughout labour

# DELIVERY AND IMMEDIATE POSTPARTUM CARE CHILDBIRTH: LABOUR,

#### **GIVE SUPPORTIVE CARE THROUGHOUT LABOUR**

Use this chart to provide a supportive, encouraging atmosphere for birth, respectful of the woman's wishes.

#### **Communication**

- Welcome the mother and introduce yourself
- Explain all procedures, seek permission, and discuss findings with the woman.
- Keep her informed about the progress of labour.
- Praise her, encourage and reassure her that things are going well.
- Ensure and respect privacy during examinations and discussions.
- If known HIV positive, find out what she has told the husband. Respect her wishes.

#### **Cleanliness**

- Encourage the woman to bathe or shower or wash herself and genitals at the onset of labour.
- Wash the vulva and perineal areas before each examination.
- Wash your hands with soap before and after each examination. Use sterile gloves for vaginal examination.
- Ensure cleanliness of labour and birthing area(s).
- Clean up spills immediately.
- DO NOT give enema.

#### Mobility

- Encourage the woman to walk around freely during the first stage of labour.
- Support the woman's choice of position (left lateral, squating, kneeling, standing supported by the husband) for each stage of labour and delivery.

#### **Urination**

■ Encourage the woman to empty her bladder frequently. Remind her every 2 hours.

#### Eating, drinking

- Encourage the woman to eat and drink as she wishes throughout labour.
- Nutritious liquid drinks are important, even in late labour.
- If the woman has visible severe wasting or tires during labour, make sure she eats and drinks.
- For those who cannot eat and are weak, give 5% dextrose infusion.

#### Breathing technique

- Teach her to notice her normal breathing.
- Encourage her to breathe out more slowly, making a sighing noise, and to relax with each breath.
- If she feels dizzy, unwell, is feeling pins-and-needles (tingling) in her face, hands and feet, encourage her to breathe more slowly.
- To prevent pushing at the end of first stage of labour, teach her to pant, to breathe with an open mouth, to take in 2 short breaths followed by a long breath out.
- During delivery of the head, ask her not to push but to breathe steadily or to pant.

#### Pain and discomfort relief

- Suggest change of position.
- Encourage mobility, as comfortable for her.
- Encourage companion to:
  - $\rightarrow$  massage the woman's back if she finds this helpful.
  - $\rightarrow$  hold the woman's hand and sponge her face between contractions.
- Encourage her to use the breathing technique.
- Encourage warm bath or shower, if available.
- If woman is distressed or anxious, investigate the cause D2-D3
- If pain is constant (persisting between contractions) and very severe or sudden in onset D4

#### Birth companion must be a husband or close relative

- Encourage support from the chosen birth companion throughout labour.
- Describe to the birth companion what she or he should do:
  - $\rightarrow$  Always be with the woman.
  - $\rightarrow$  Encourage her.
  - $\rightarrow$  Help her to breathe and relax.
  - $\rightarrow$  Rub her back, wipe her brow with a wet cloth, do other supportive actions.
  - $\rightarrow$  Give support using local practices which do not disturb labour or delivery.
  - $\rightarrow$  Encourage woman to move around freely as she wishes and to adopt the position of her choice.
  - $\rightarrow$  Encourage her to drink fluids and eat as she wishes.
  - $\rightarrow$  Assist her to the toilet when needed.
- Ask the birth companion to call for help if:
- $\rightarrow$  The woman is bearing down with contractions.
- $\rightarrow$  There is vaginal bleeding.
- $\rightarrow$  She is suddenly in much more pain.
- $\rightarrow$  She loses consciousness or has fits.
- $\rightarrow$  There is any other concern.

 Tell the birth companion what she or he SHOULD NOT DO and explain why: DO NOT encourage woman to push.
 DO NOT give advice other than that given by the health worker.
 DO NOT keep woman in bed if she wants to move around.

## **Birth companion**

### First stage of labour (1): when the woman is not in active labour

### FIRST STAGE OF LABOUR: NOT IN ACTIVE LABOUR

Use this chart for care of the woman when NOT IN ACTIVE LABOUR, when cervix dilated 0-3 cm and contractions are weak, less than 2 in 10 minutes.

### **MONITOR EVERY HOUR:**

- For emergency signs, using rapid assessment (RAM) B3-B7
- Frequency, intensity and duration of contractions.
- Fetal heart rate D14
- Mood and behaviour (distressed, anxious) D6.

### **MONITOR EVERY 4 HOURS:**

- Cervical dilatation D3 D15. Unless indicated, DO NOT do vaginal examination more frequently than every 4 hours. Temperature. Pulse B3 Blood pressure D23. Record findings regularly in Labour record and Partograph N4-N6 Empty the bladder frequently. ■ Record time of rupture of membranes and colour of amniotic fluid. TREAT AND ADVISE, IF REQUIRED Refer the woman urgently to hospital B17.

■ Give Supportive care D6-D7 Never leave the woman alone.

### **ASSESS PROGRESS OF LABOUR**

- After 8 hours if:
  - $\rightarrow$  Contractions stronger and more frequent but
  - $\rightarrow$  No progress in cervical dilatation with or without membranes ruptured.
- After 8 hours if:
  - $\rightarrow$  no increase in contractions, and
  - $\rightarrow$  membranes are not ruptured, and
- $\rightarrow$  no progress in cervical dilatation.
- Cervical dilatation 4 cm or greater.

- Discharge the woman and advise her to return if:
  - $\rightarrow$  pain/discomfort increases
  - $\rightarrow$  vaginal bleeding
  - $\rightarrow$  membranes rupture.
- Begin plotting the partograph N5 and manage the woman as in Active labour D9.

### FIRST STAGE OF LABOUR: IN ACTIVE LABOUR

Use this chart when the woman is IN ACTIVE LABOUR, when cervix dilated 4 cm or more.

### **MONITOR EVERY 30 MINUTES:**

- For emergency signs, using rapid assessment (RAM) B3-B7
- Frequency, intensity and duration of contractions.
- Fetal heart rate D14.
- Mood and behaviour (distressed, anxious) D6.

### **MONITOR EVERY 4 HOURS:**

Cervical dilatation and effacement D3 D15.

Unless indicated, do not do vaginal examination more frequently than every 4 hours.

- Temperature.
- Pulse B3.
- Blood pressure D23.

- Record findings regularly in Labour record and Partograph N4-N6
- Record time of rupture of membranes and colour of amniotic fluid.
- Give Supportive care D6-D7.
- Never leave the woman alone.

### ASSESS PROGRESS OF LABOUR

Partograph passes to the right of ALERT LINE.

Partograph passes to the right of ACTION LINE.

■ Cervix dilated 10 cm or bulging perineum.

### TREAT AND ADVISE, IF REQUIRED

- Reassess woman and consider criteria for referral.
  - Call senior person if available. Alert emergency transport services.
  - Encourage woman to empty bladder.
  - Ensure adequate hydration but omit solid foods.
  - Encourage upright position and walking if woman wishes.
  - Monitor intensively. Reassess in 2 hours and refer if no progress. If referral takes a long time, refer immediately (DO NOT wait to cross action line).
- Refer urgently to hospital B17 unless birth is imminent.
  - Manage as in Second stage of labour D10-D11.

■ If the woman is circumcised, infiltrate the midline area along the original scar line with local anaesthesia (1% lidocaine) prior to de-infibulation.

### Second stage of labour: deliver the baby and give immediate newborn care (1) D10

### SECOND STAGE OF LABOUR: DELIVER THE BABY AND GIVE IMMEDIATE NEWBORN CARE

Use this chart when cervix dilated 10 cm or bulging thin perineum and head visible.

### MONITOR EVERY 5 MINUTES:

- For emergency signs, using rapid assessment (RAM) B3-B7
- Frequency, intensity and duration of contractions.
- Fetal heart rate D14.
- Perineum thinning and bulging.
- Visible descent of fetal head or during contraction.
- Mood and behaviour (distressed, anxious) D6
- Record findings regularly in Labour record and Partograph N4-N6
- Give Supportive care D6-D7.
- Never leave the woman alone.

### **DELIVER THE BABY**

### TREAT AND ADVISE IF REQUIRED

■ Ensure all delivery equipment and supplies, including newborn resuscitation equipment, are available, and place of delivery is clean and warm (25°C) 13.

<ul> <li>Ensure bladder is empty.</li> <li>Assist the woman into a comfortable position of her choice, as upright as possible.</li> <li>Stay with her and offer her emotional and physical support D10-D11.</li> </ul>	<ul> <li>If unable to pass urine and bladder is full, empty bladder B12.</li> <li>DO NOT let her lie flat (horizontally) on her back.</li> <li>If the woman is distressed, encourage pain discomfort relief D6.</li> </ul>
Allow her to push as she wishes with contractions.	<ul> <li>DO NOT urge her to push.</li> <li>If, after 30 minutes of spontaneous expulsive efforts, the perineum does not begin to thin and stretch with contractions, do a vaginal examination to confirm full dilatation of cervix.</li> <li>If cervix is not fully dilated, await second stage. Place woman on her left and discourage pushing. Encourage breathing technique D6.</li> </ul>
<ul> <li>Wait until head visible and perineum distending.</li> <li>Wash hands with clean water and soap. Put on gloves just before delivery.</li> <li>See Universal precautions during labour and delivery A4.</li> <li>If there is any degree of tightness, or evidence of severe scarring after de-infibulation, perform medio-lateral episiotomy during the second stage of labour to help deliver the baby.</li> </ul>	<ul> <li>If second stage lasts for 2 hours or more without visible steady descent of the head, call for staff trained to use vacuum extractor or refer urgently to hospital B17.</li> <li>If obvious obstruction to progress (warts/scarring/keloid tissue/previous third degree tear), do a generous episiotomy. DO NOT perform episiotomy routinely.</li> <li>In case of fistula repair refer the woman for caesarian section delivery.</li> <li>If breech or other malpresentation, manage as on D16.</li> </ul>

### DELIVER THE BABY

CHILDBIRTH: LABOUR, DELIVERY AND IMMEDIATE POSTPARTUM CARE

### TREAT AND ADVISE, IF REQUIRED

<ul> <li>Ensure controlled delivery of the head:         <ul> <li>→ Keep one hand gently on the head as it advances with contractions.</li> <li>→ Support perineum with other hand and cover anus with pad held in position by side of hand during delivery.</li> <li>→ Leave the perineum visible (between thumb and first finger).</li> <li>→ Ask the mother to breathe steadily and not to push during delivery of the head.</li> <li>→ Encourage rapid breathing with mouth open.</li> </ul> </li> </ul>	<ul> <li>If potentially damaging expulsive efforts, exert more pressure on perineum.</li> <li>Discard soiled pad to prevent infection.</li> </ul>
<ul> <li>Feel gently around baby's neck for the cord.</li> <li>Check if the face is clear of mucus and membranes.</li> </ul>	<ul> <li>If cord present and loose, deliver the baby through the loop of cord or slip the cord ove the baby's head; if cord is tight, clamp and cut cord, then unwind.</li> <li>Gently wipe face clean with gauze or cloth, if necessary.</li> </ul>
<ul> <li>Await spontaneous rotation of shoulders and delivery (within 1-2 minutes).</li> <li>Apply gentle downward pressure to deliver top shoulder.</li> <li>Then lift baby up, towards the mother's abdomen to deliver lower shoulder.</li> <li>Place baby on abdomen or in mother's arms.</li> <li>Note time of delivery.</li> </ul>	<ul> <li>If delay in delivery of shoulders:</li> <li>→DO NOT panic but call for help and ask companion to assist</li> <li>→Manage as in Stuck shoulders D17.</li> <li>If placing newborn on abdomen is not acceptable, or the mother cannot hold the baby place the baby in a clean, warm, safe place close to the mother.</li> </ul>
<ul> <li>Thoroughly dry the baby immediately. Wipe eyes. Discard wet cloth.</li> <li>Assess baby's breathing while drying.</li> <li>If the baby is not crying, observe breathing: <ul> <li>→ breathing well (chest rising)?</li> <li>→ not breathing or gasping?</li> </ul> </li> </ul>	<ul> <li>DO NOT leave the baby wet - she/he will become cold.</li> <li>If the baby is not breathing or gasping (unless baby is dead, macerated, severely malformed):</li> <li>→ Cut cord quickly: transfer to a firm, warm surface; start Newborn resuscitation K11.</li> <li>CALL FOR HELP - one person should care for the mother.</li> </ul>
<ul> <li>Exclude second baby.</li> <li>Palpate mother's abdomen.</li> <li>Give 10 IU oxytocin IM to the mother.</li> <li>Watch for vaginal bleeding.</li> </ul>	<ul> <li>If second baby, DO NOT give oxytocin now. GET HELP.</li> <li>Deliver the second baby. Manage as in Multiple pregnancy D18.</li> <li>If heavy bleeding, repeat oxytocin 10-IU-IM.</li> </ul>
<ul> <li>Change gloves. If not possible, wash gloved hands.</li> <li>Clamp and cut the cord.</li> <li>→ put ties tightly around the cord at 2 cm and 5 cm from baby's abdomen.</li> <li>→ cut between ties with sterile instrument.</li> <li>→ observe for oozing blood.</li> </ul>	If blood oozing, place a second tie between the skin and the first tie. DO NOT bandage or bind the stump.
<ul> <li>Put 4% chlorohexidin on the cord and leave the baby on the mother's chest in skin-to-skin contact. Place identification label.</li> <li>Cover the baby, cover the head with a hat.</li> </ul>	■ If room cool (less than 25°C), use additional blanket to cover the mother and baby.
<ul> <li>Put tetracycline ointment in both baby's eyes. Give the newborn Vit K 1mg im.</li> <li>Encourage initiation of breastfeeding and attachment K2.</li> </ul>	<ul> <li>If HIV-positive mother has chosen replacement feeding, feed accordingly.</li> <li>Check ARV treatment needed <a href="mailto:G6">G6</a>.</li> </ul>

### Third stage of labour: deliver the placenta

### CARE **STPARTUM** Öd **DELIVERY AND IMMEDIATE** DBIRTH: LABOUR,

### THIRD STAGE OF LABOUR: DELIVER THE PLACENTA

Use this chart for care of the woman between birth of the baby and delivery of placenta.

### MONITOR MOTHER EVERY 5 MINUTES:

- For emergency signs, using rapid assessment (RAM) B3-B7.
- Feel if uterus is well contracted.
   Mood and behaviour (distressed, anxious) D6

- MONITOR BABY EVERY 15 MINUTES:
- Breathing: listen for grunting, look for chest in-drawing and fast breathing <u>J2</u>.
- Warmth: check to see if feet are cold to touch J2.
- Record findings, treatments and procedures in Labour record and Partograph (pp.
- N4-N6). Give Supportive care D6-D7.
- Never leave the woman alone.

### **DELIVER THE PLACENTA**

Time since third stage began (time since birth).

- Ensure 10-IU oxytocin IM is given D11.
- Await strong uterine contraction (2-3 minutes) and deliver placenta by controlled cord traction:
  - → Place side of one hand (usually left) above symphysis pubis with palm facing towards the mother's umbilicus. This applies counter traction to the uterus during controlled cord traction. At the same time, apply steady, sustained controlled cord traction.
  - → If placenta does not descend during 30-40 seconds of controlled cord traction, release both cord traction and counter traction on the abdomen and wait until the uterus is well contracted again. Then repeat controlled cord traction with counter traction.
  - $\rightarrow$  As the placenta is coming out, catch in both hands to prevent tearing of the membranes.
- → If the membranes do not slip out spontaneously, gently twist them into a rope and move them up and down to assist separation without tearing them.

Check that placenta and membranes are complete.

### TREAT AND ADVISE IF REQUIRED

- If, after 30 minutes of giving oxytocin, the placenta is not delivered and the woman is NOT bleeding: → Empty bladder B12
  - $\rightarrow$  Encourage breastfeeding
  - $\rightarrow$  Repeat controlled cord traction.
- If woman is bleeding, manage as on B5
- If placenta is not delivered in another 30 minutes (1 hour after delivery):
  - $\rightarrow$  Remove placenta manually B11  $\rightarrow$  Give appropriate IM/IV antibiotic B15
- If in 1 hour unable to remove placenta:
  - $\rightarrow$  Refer the woman to hospital B17
  - → Insert an IV line and give fluids with 20 IU of oxytocin at 30 drops per minute during transfer B9.
- DO NOT exert excessive traction on the cord.

DO NOT squeeze or push the uterus to deliver the placenta.

- If placenta is incomplete:
  - → Remove placental fragments manually B11
  - $\rightarrow$  Give appropriate IM/IV antibiotic B15

### **DELIVER THE PLACENTA**

### TREAT AND ADVISE, IF REQUIRED

<ul> <li>Check that uterus is well contracted and there is no heavy bleeding.</li> <li>Repeat check every 5 minutes.</li> </ul>	<ul> <li>If heavy bleeding: <ul> <li>Massage uterus to expel clots if any, until it is hard B10.</li> <li>Give oxytocin 10 IU IM B10.</li> <li>Call for help.</li> <li>Start an IV line B9, add 20 IU of oxytocin to IV fluids and give at 60 drops per minute N9.</li> <li>Empty the bladder B12.</li> </ul> </li> <li>If bleeding persists and uterus is soft: <ul> <li>Continue massaging uterus until it is hard.</li> <li>Apply bimanual or aortic compression B10.</li> <li>Continue IV fluids with 20 IU of oxytocin at 30 drops per minute.</li> <li>Refer woman urgently to hospital B17.</li> </ul> </li> </ul>
Examine perineum, lower vagina and vulva for tears.	<ul> <li>If third degree tear (involving rectum or anus), refer urgently to hospital B17.</li> <li>For other tears: apply pressure over the tear with a sterile pad or gauze and put legs together.</li> <li>Check after 5 minutes. If bleeding persists, repair the tear B12.</li> </ul>
Collect, estimate and record blood loss throughout third stage and immediately afterwards.	<ul> <li>If blood loss ≈ 250-ml, but bleeding has stopped:</li> <li>→ Plan to keep the woman in the facility for 24 hours.</li> <li>→ Monitor intensively (every 30 minutes) for 4 hours:</li> <li>→ BP, pulse</li> <li>→ vaginal bleeding</li> <li>→ uterus, to make sure it is well contracted.</li> <li>→ Assist the woman when she first walks after resting and recovering.</li> <li>→ If not possible to observe at the facility, refer to hospital B17.</li> </ul>
Clean the woman and the area beneath her. Put sanitary pad or folded clean cloth under her buttocks to collect blood. Help her to change clothes if necessary.	
Keep the mother and baby in delivery room for a minimum of one hour after delivery of placenta.	
Dispose of placenta in the correct, safe and culturally appropriate manner.	<ul> <li>If disposing placenta:</li> <li>→ Use gloves when handling placenta.</li> <li>→ Put placenta into a bag and place it into a leak-proof container.</li> <li>→ Always carry placenta in a leak-proof container.</li> <li>→ Incinerate the placenta or bury it at least 10 m away from a water source, in a 2 m deep pit, when available.</li> </ul>

### RESPOND TO PROBLEMS DURING LABOUR AND DELIVERY

ASK, CHECKRECORD LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
IF FETAL HEART RATE (FHR) <120 OR >16	60 BEATS PER MINUT	E	
Position the woman on her left	Cord seen at vulva.	PROLAPSED CORD	Manage urgently as on D15.
side. If membranes have ruptured, look at vulva for prolapsed cord. See if liquor was meconium stained. Repeat FHR count after 15 minutes.	FHR remains >160 or <120 after 30 minutes observation.	BABY NOT WELL	<ul> <li>If early labour:         <ul> <li>→ Inform the mother before referral</li> <li>→ Refer the woman urgently to hospital B17</li> <li>→ Keep her lying on her left side.</li> </ul> </li> <li>If late labour:         <ul> <li>→ Call for help during delivery</li> <li>→ Monitor after every contraction. If FHR does not return to normal in 15 minutes explain to the woman (and her companion) that the baby may not be well.</li> <li>→ Prepare for newborn resuscitation K11.</li> </ul> </li> </ul>
	■ FHR returns to normal.	BABYWELL	■ Monitor FHR every 15 minutes.

NEXT: If prolapsed cord

The cord is visible outside the vagina or can be felt in the vagina below the presenting part.

ASK, CHECKRECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT
	Look at or feel the cord gently for pulsations.	Transverse lie	OBSTRUCTED LABOUR	Refer urgently to hospital B17.
	<ul> <li>Feel for transverse lie.</li> <li>Do vaginal examination to determine status of labour.</li> </ul>	Cord is pulsating	FETUS ALIVE	<ul> <li>If early labour:</li> <li>Push the head or presenting part out of the pelvis and hold it above the brim/pelvis with your hand on the abdomen until caesarean section is performed.</li> <li>Instruct assistant (family, staff) to position the woman's buttocks higher than the shoulder.</li> <li>Refer urgently to hospital B17.</li> <li>If transfer not possible, allow labour to continue.</li> <li>If late labour:</li> <li>Call for additional help if possible (for mother and baby).</li> <li>Prepare for Newborn resuscitation K11.</li> <li>Ask the woman to assume an upright or squatting position to help progress.</li> <li>Expedite delivery by encouraging woman to push with contraction.</li> </ul>
		Cord is not pulsating	FETUS PROBABLY DEAD	Explain to the parents that baby may not be well.

NEXT: If breech presentation

Respond to problems during labour and delivery (2) If prolapsed cord

D15

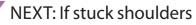
### Respond to problems during labour and delivery (3) If breech presentation D16

### IF BREECH PRESENTATION

### LOOK, LISTEN, FEEL

<ul> <li>On external examination fetal head felt in fundus.</li> </ul>	■ If early labour	■ Refe ■ If pri
<ul> <li>Soft body part (leg or buttocks) felt on vaginal examination.</li> <li>Legs or buttocks presenting at perineum.</li> </ul>	■ If late labour	Call f Conf Ensu Prep Deliv $\rightarrow$ As pr $\rightarrow$ W $\rightarrow$ AI $\rightarrow$ Af
	If the head does not deliver after several contractions	<ul> <li>Place</li> <li>Place</li> <li>gent</li> <li>Keep</li> <li>shou</li> <li>Whe</li> <li>abdo</li> </ul>
	<ul> <li>If trapped arms or shoulders</li> </ul>	<ul> <li>Feel</li> <li>Hold</li> <li>Gent was</li> <li>Ther</li> </ul>
	If trapped head (and baby is dead)	■ Ther NEVER DO NC to be t

SIGN	TREAT
If early labour	<ul> <li>Refer urgently to hospital B17.</li> <li>If primigravida, advise C-section</li> </ul>
■ If late labour	<ul> <li>Call for additional help.</li> <li>Confirm full dilatation of the cervix by vaginal examination D3.</li> <li>Ensure bladder is empty. If unable to empty bladder see Empty bladder B12.</li> <li>Prepare for newborn resuscitation K11.</li> <li>Deliver the baby: <ul> <li>Assist the woman into a position that will allow the baby to hang down during delivery, for example propped up with buttocks at edge of bed or onto her hands and knees (all fours position).</li> <li>→ When buttocks are distending, make an episiotomy.</li> <li>→ Allow buttocks, trunk and shoulders to deliver spontaneously during contractions.</li> <li>→ After delivery of the shoulders allow the baby to hang until next contraction.</li> </ul> </li> </ul>
If the head does not deliver after several contractions	<ul> <li>Place the baby astride your left forearm with limbs hanging on each side.</li> <li>Place the middle and index fingers of the left hand over the malar cheek bones on either side to apply gentle downwards pressure to aid flexion of head.</li> <li>Keeping the left hand as described, place the index and ring fingers of the right hand over the baby's shoulders and the middle finger on the baby's head to gently aid flexion until the hairline is visible.</li> <li>When the hairline is visible, raise the baby in upward and forward direction towards the mother's abdomen until the nose and mouth are free.</li> </ul>
If trapped arms or shoulders	<ul> <li>Feel the baby's chest for arms. If not felt:</li> <li>Hold the baby gently with hands around each thigh and thumbs on sacrum.</li> <li>Gently guiding the baby down, turn the baby, keeping the back uppermost until the shoulder which was posterior (below) is now anterior (at the top) and the arm is released.</li> <li>Then turn the baby back, again keeping the back uppermost to deliver the other arm.</li> <li>Then proceed with delivery of head as described above.</li> </ul>
<ul> <li>If trapped head (and baby is dead)</li> </ul>	Then proceed with delivery of head as described above. NEVER pull on the breech DO NOT allow the woman to push until the cervix is fully dilated. Pushing too soon may cause the head to be trapped.



### IF STUCK SHOULDERS (SHOULDER DYSTOCIA)

SIGN	TREAT
Fetal head is delivered, but shoulders are stuck and cannot be delivered.	<ul> <li>Call for additional help.</li> <li>Prepare for newborn resuscitation.</li> <li>Explain the problem to the woman and her companion.</li> <li>Ask the woman to lie on her back while gripping her legs tightly flexed against her chest, with knees wide apart. Ask the companion or other helper to keep the legs in that position.</li> <li>Perform an adequate episiotomy.</li> <li>Ask an assistant to apply continuous pressure downwards, with the palm of the hand on the abdomen directly above the pubic area, while you maintain continuous downward traction on the fetal head.</li> </ul>
If the shoulders are still not delivered and surgical help is not available immediately.	<ul> <li>Remain calm and explain to the woman that you need her cooperation to try another position.</li> <li>Assist her to adopt a kneeling on "all fours" position and ask her companion to hold her steady - this simple change of position is sometimes sufficient to dislodge the impacted shoulder and achieve delivery.</li> <li>Introduce the right hand into the vagina along the posterior curve of the sacrum.</li> <li>Attempt to deliver the posterior shoulder or arm using pressure from the finger of the right hand to hook the posterior shoulder and arm downwards and forwards through the vagina.</li> <li>Complete the rest of delivery as normal.</li> <li>If not successful, refer urgently to hospital B17.</li> </ul>
	DO NOT pull excessively on the head.

D17



NEXT: If multiple births

### Respond to problems during labour and delivery (5) If multiple births

### IF MULTIPLE BIRTHS

SIGN	TREAT
Prepare for delivery	<ul> <li>Prepare delivery room and equipment for birth of 2 or more babies. Include:         <ul> <li>→ more warm cloths</li> <li>→ two sets of cord ties and forceps scissors.</li> <li>→ resuscitation equipment for 2 babies.</li> </ul> </li> <li>Arrange for a helper to assist you with the births and care of the babies.</li> </ul>
Second stage of labour	<ul> <li>Deliver the first baby following the usual procedure. Resuscitate if necessary. Label her/him Twin 1.</li> <li>Ask helper to attend to the first baby.</li> <li>Palpate uterus immediately to determine the lie of the second baby. If transverse or oblique lie, gently turn the baby by abdominal manipulation to head or breech presentation.</li> <li>Check the presentation by vaginal examination. Check the fetal heart rate.</li> <li>Await the return of strong contractions and spontaneous rupture of the second bag of membranes, usually within 1 hour of birth of first baby, but may be longer.</li> <li>Stay with the woman and continue monitoring her and the fetal heart rate intensively.</li> <li>Remove wet cloths from underneath her. If feeling chilled, cover her.</li> <li>When the membranes rupture, perform vaginal examination D3 to check for prolapsed cord. If present, see Prolapsed cord D15.</li> <li>When strong contractions restart, ask the mother to bear down when she feels ready.</li> <li>Deliver the second baby. Resuscitate if necessary. Label her/him Twin 2.</li> <li>After cutting the cord, ask the helper to attend to the second baby.</li> <li>Palpate the uterus for a third baby. If a third baby is felt, proceed as described above. If no third baby is felt, go to third stage of labour.</li> <li>DO NOT attempt to deliver the placenta until all the babies are born.</li> <li>DO NOT give the mother oxytocin until after the birth of all babies.</li> </ul>
Third stage of labour	<ul> <li>Give oxytocin 10 IU IM after making sure there is not another baby.</li> <li>When the uterus is well contracted, deliver the placenta and membranes by controlled cord traction, applying traction to all cords together D12-D23.</li> <li>Before and after delivery of the placenta and membranes, observe closely for vaginal bleeding because this woman is at greater risk of postpartum haemorrhage. If bleeding, see B5.</li> <li>Examine the placenta and membranes for completeness. There may be one large placenta with 2 umbilical cords, or a separate placenta with an umbilical cord for each baby.</li> </ul>
Immediate postpartum care	<ul> <li>Monitor intensively as risk of bleeding is increased.</li> <li>Provide immediate Postpartum care D19-D20.</li> <li>In addition:         <ul> <li>→ Keep mother in health centre for longer observation</li> <li>→ Plan to measure haemoglobin postpartum if possible</li> <li>→ Give special support for care and feeding of babies J11 and K4.</li> <li>→ Educate the mother on infection prevention</li> </ul> </li> </ul>

NEXT: Care of the mother and newborn within first hour of delivery of placenta

111

### CARE OF THE MOTHER AND NEWBORN WITHIN FIRST HOUR OF DELIVERY OF PLACENTA

Use this chart for woman and newborn during the first hour after complete delivery of placenta.

### MONITOR MOTHER EVERY 15 MINUTES:

- For emergency signs, using rapid assessment (RAM) B3-B7
- Feel if uterus is hard and round.

- MONITOR BABY EVERY 15 MINUTES:
- Breathing: listen for grunting, look for chest in-drawing and fast breathing 12.
- Warmth: check to see if feet are cold to touch 12.
- Record findings, treatments and procedures in Labour record and Partograph <u>N4-N6</u>
- Keep mother and baby in delivery room do not separate them.
- Never leave the woman and newborn alone.

### CARE OF MOTHER AND NEWBORN

### WOMAN

- Assess the amount of vaginal bleeding.
- Encourage the woman to eat and drink.
- Ask the companion to stay with the mother.
- Encourage the woman to pass urine.

### NEWBORN

- Wipe the eyes.
- Apply an antimicrobial within 1 hour of birth.
  - $\rightarrow$  1% tetracycline ointment.
- DO NOT wash away the eye antimicrobial.
- If blood or meconium, wipe off with wet cloth and dry.
- DO NOT remove vernix or bathe the baby.
- Continue keeping the baby warm and in skin-to-skin contact with the mother.
- Encourage the mother to initiate breastfeeding when baby shows signs of readiness. Offer her help.
- DO NOT give artificial teats or pre-lacteal feeds to the newborn: no water, sugar water, or local feeds.
- Give the newborn vitamin K im.
- Examine the mother and newborn one hour after delivery of placenta. Use Assess the mother after delivery D21 and Examine the newborn J2-J8.

### **INTERVENTIONS, IF REQUIRED**

- If pad soaked in less than 5 minutes, or constant trickle of blood, manage as on D22.
- If uterus soft, manage as on B10.
- If bleeding from a perineal tear, repair if required B12 or refer to hospital B17.
- If breathing with difficulty grunting, chest in-drawing or fast breathing, examine the baby as on J2-J8.
- If feet are cold to touch or mother and baby are separated:
  - $\rightarrow$  Ensure the room is warm. Cover mother and baby with a blanket
  - $\rightarrow$  Reassess in 1 hour. If still cold, measure temperature. If less than 36.5°C, manage as on K9.
- If unable to initiate breastfeeding (mother has complications):
  - $\rightarrow$  Plan for alternative feeding method K5-K6.
  - $\rightarrow$  If mother HIV-positive: refer and newborn to counseling and treatment according to the national guidelines G9.
  - $\rightarrow$  Support the mother's choice of newborn feeding G8
- If baby is stillborn or dead, give supportive care to mother and her family D24.
- Refer to hospital now if woman had serious complications at admission or during delivery but was in late labour.

### Care of the mother and newborn within first hour of delivery of placenta

D19

### Care of the mother one hour after delivery of placenta

### CARE OF THE MOTHER ONE HOUR AFTER DELIVERY OF PLACENTA

Use this chart for continuous care of the mother until discharge. See 110 for care of the baby.

### MONITOR MOTHER AT 2, 3 AND 4 HOURS, THEN EVERY 4 HOURS:

- For emergency signs, using rapid assessment (RAM).
- Feel uterus if hard and round.
- Monitor vital signs, record findings, treatments and procedures in Labour record and Partograph N4-N6.

■ Ensure the mother has sanitary napkins or clean material to collect vaginal blood.

- Keep the mother and baby together.
- Never leave the woman and newborn alone.

Accompany the mother and baby to ward.

Advise on Postpartum care and hygiene D26.

Encourage the mother to eat, drink and rest.

DO NOT discharge before 12 hours.

### CARE OF MOTHER

■ Ensure the room is warm (25°C).

### INTERVENTIONS, IF REQUIRED

■ Make sure the woman has someone with her and they know when to call for help.

If HIV-positive: give her appropriate treatment according to the national guidelines
G6, G9.

■ If heavy vaginal bleeding, palpate the uterus. Ask the mother's companion to watch her and call for help if bleeding or pain increases,  $\rightarrow$  If uterus not firm, massage the fundus to make it contract and expel any clots B6. if mother feels dizzy or has severe headaches, visual disturbance or epigastric distress.  $\rightarrow$  If pad is soaked in less than 5 minutes, manage as on B5.  $\rightarrow$  If bleeding is from perineal tear, repair or refer to hospital B17. Encourage the mother to empty her bladder and ensure that she has ■ If the mother cannot pass urine or the bladder is full (swelling over lower abdomen) passed urine. and she is uncomfortable, help her by gently pouring water on vulva. DO NOT catheterize unless you have to. Check record and give any treatment or prophylaxis which is due. ■ If IUD desired, make plans before discharge. Advise the mother on postpartum care and nutrition D26. ■ If mother is on antibiotics because of rupture of membranes >18 hours but shows no Advise when to seek care D28 signs of infection now, discontinue antibiotics. Counsel on birth spacing and personal hygiene methods D27. ■ Repeat examination of the mother before discharge using Assess the mother after delivery D21. For baby, see J2-J8

### ASSESS THE MOTHER AFTER DELIVERY

Use this chart to examine the mother the first time after delivery (at 1 hour after delivery or later) and for discharge. For examining the newborn use the chart on 12-18.

### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

### Check record:

- $\rightarrow$  bleeding more than 250 ml?
- → completeness of placenta and membranes?
- → complications during delivery or postpartum?
- $\rightarrow$  special treatment needs?
- $\rightarrow$  needs IUD?
- How are you feeling?
- Do you have any pains?
- Do you have any concerns?
- How is your baby?
- How do your breasts feel?
- Is there any tenderness or breast engorgement?
- Is the baby being breastfed?

- Measure temperature and look for vital signs.
- Feel the uterus. Is it hard and round?
- Look for vaginal bleeding
- Look at perineum.
  - → Is there a tear or cut?
    → Is it red, swollen or draining pus?
- Look for conjunctival pallor.
- Look for palmar pallor.

Little bleeding.No perineal problem.

Uterus hard.

- No perineal pro
   No pallor.
- No parlor.
   No fever.
- Blood pressure normal.
- Pulse normal.

### CLASSIFY TREAT AND ADVISE

MOTHER WELL Keep the mother at the facility for 12 hours

- after delivery.
- Ensure preventive measures D25.
- Advise on postpartum care and hygiene D26.
- Counsel on nutrition D26.
  - Counsel on birth spacing D27.
  - Advise on danger signs of the mother and her newborn and on when to seek care and next routine postpartum visit D28.
  - Reassess for discharge D21.
  - Continue any treatments initiated earlier.
  - If tubal ligation is medically recommended, refer to hospital within 7 days of delivery.
     If birth spacing desired, give appropriate services.

Assess the mother after delivery

NEXT: Respond to problems immediately postpartum If no problems, go to page D25.



### Respond to problems immediately postpartum (1)

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
IF VAGINAL BLEEDING				
	A pad is soaked in less than 5 minutes.	<ul> <li>More than 1 pad soaked in</li> <li>5 minutes</li> <li>Uterus not hard and not round</li> </ul>	HEAVY BLEEDING	<ul> <li>See B5 for treatment.</li> <li>Refer urgently to hospital B17.</li> </ul>
IF FEVER (TEMPERATUR	E >38°C)			
<ul> <li>Time since rupture of membranes</li> <li>Abdominal pain</li> <li>Chills</li> <li>Gestational age</li> <li>Repeat temperature measurement after 2 hours</li> <li>If temperature is still &gt;38°C</li> <li>→ Look for abnormal vaginal discharge.</li> <li>→ Look at color of the liquor</li> <li>→ feel lower abdomen for tenderness</li> </ul>	<ul> <li>measurement after 2 hours</li> <li>If temperature is still &gt;38°C</li> <li>→ Look for abnormal vaginal discharge.</li> <li>→ Look at color of the liquor</li> </ul>	<ul> <li>■ Temperature still &gt;38°C and any of:</li> <li>→ Chills</li> <li>→ Foul-smelling vaginal discharge</li> <li>→ Low abdomen tenderness</li> <li>→ rupture of membranes &gt;18 hours before labour</li> </ul>	UTERINE AND NEWBORN INFECTION	<ul> <li>Insert an IV line and give fluids rapidly B9.</li> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Refer woman urgently to hospital B17.</li> <li>Assess the newborn J2-J8. Treat if any sign of infection.</li> </ul>
	■ Temperature still >38°C	RISK OF UTERINE INFECTION	<ul> <li>Encourage woman to drink plenty of fluids.</li> <li>Measure temperature every 4 hours.</li> <li>If temperature persists for &gt;12 hours, is very high or rises rapidly, give appropriate antibiotic and refer to hospital B15.</li> <li>Do Rapid Test Diagnostic (RDT) for Malaria</li> </ul>	

### IF PERINEAL TEAR OR EPISIOTOMY (DONE FOR LIFESAVING CIRCUMSTANCES)

- Is there bleeding from the tear or episiotomy
- Check the perineum if there is infection in the episiotomy or the site of de-infibulation
- Does it extend to anus or rectum?

Tear extending to anus or rectum.	THIRD DEGREE TEAR	Refer woman urgently to hospital B15.
<ul> <li>Perineal tear</li> <li>Episiotomy</li> </ul>	SMALL PERINEAL TEAR	<ul> <li>If bleeding persists, repair the tear or episiotomy B12.</li> </ul>

### IF ELEVATED DIASTOLIC BLOOD PRESSURE

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
	<ul> <li>If diastolic blood pressure is ≥90 mmHg, repeat after 1 hour rest.</li> <li>If diastolic blood pressure is still ≥90-mmHg, ask the woman if she has:         <ul> <li>→ severe headache</li> <li>→ blurred vision</li> <li>→ epigastric pain and</li> <li>→ check protein in urine.</li> <li>→ nausea vomiting</li> <li>→ oedema in the face, around</li> </ul> </li> </ul>	<ul> <li>Diastolic blood pressure         ≥110 mmHg OR</li> <li>Diastolic blood pressure         ≥90 mmHg and 2+ proteinuria         and any of:         → severe headache         → blurred vision         → epigastric pain         → oedema in the face, around         the eyes, or hands         → hyper-reflexia.</li> </ul>	SEVERE PRE-ECLAMPSIA	<ul> <li>Give magnesium sulphate B13.</li> <li>If in early labour or postpartum, refer urgently to hospital B17.</li> <li>If late labour:         <ul> <li>→ continue magnesium sulphate treatment B13</li> <li>→ monitor blood pressure every hour.</li> <li>→ DO NOT give ergometrine after delivery.</li> </ul> </li> <li>Refer urgently to hospital after delivery and monitor the fetus B17.</li> </ul>
	the eyes, or hands	<ul> <li>Diastolic blood pressure 90-110 mmHg on two readings.</li> <li>2+ proteinuria (on admission).</li> </ul>	PRE-ECLAMPSIA	<ul> <li>If early labour, refer urgently to hospital E17.</li> <li>If late labour:         <ul> <li>→ monitor blood pressure every hour</li> <li>→ DO NOT give ergometrine after delivery and monitor the fetus.</li> </ul> </li> <li>If BP remains elevated after delivery, refer to hospital E17.</li> </ul>
		■ Diastolic blood pressure ≥90 mmHg on 2 readings.	HYPERTENSION	<ul> <li>Monitor blood pressure every hour.</li> <li>DO NOT give ergometrine after delivery.</li> <li>If blood pressure remains elevated after delivery, refer woman to hospital E17.</li> </ul>

NEXT: If pallor on screening, check for anaemia

### Respond to problems immediately postpartum (2)

### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS CLASSIFY TREAT AND ADVISE IF PALLOR ON SCREENING, CHECK FOR ANAEMIA Bleeding during labour, Measure haemoglobin, if SEVERE ■ Haemoglobin <7 g/dl. If early labour or postpartum, refer urgently to hospital B17 delivery or postpartum. possible. AND/OR ANAEMIA ■ If late labour: Check antenatal record. ■ Look for conjunctival pallor. Severe palmar and conjunctival $\rightarrow$ monitor intensively ■ Look for palmar pallor. If pallor: pallor or $\rightarrow$ minimize blood loss $\rightarrow$ Is it severe pallor? ■ Any pallor with >30 breaths per $\rightarrow$ refer urgently to hospital after delivery B17. $\rightarrow$ Some pallor? minute. $\rightarrow$ Count number of breaths in DO NOT discharge before 24 hours. 1-minute MODERATE Any bleeding. Check haemoglobin after 3 days. Look for palpitation and ANAEMIA ■ Haemoglobin 7-11-g/dl. ■ Give double dose of iron for 3 months F3. dizziness Palmar or conjunctival pallor. ■ Follow up in 4 weeks. ■ Give nutritional advice. NO ANAEMIA ■ Give iron/folate for 3 months F3 ■ Haemoglobin >11-g/dl ■ No pallor.

### IF MOTHER SEVERELY ILL OR SEPARATED FROM THE BABY

- Teach mother to express breast milk every 3 hours K5.
- Help her to express breast milk if necessary. Ensure baby receives mother's milk only if proper handling of the expressed milk K8.
- Help her to establish or re-establish breastfeeding as soon as possible. See K2-K3.

### IF BABY STILLBORN OR DEAD

- Give supportive care:
  - → Inform the parents as soon as possible after the baby's death.
  - → Show the baby to the mother, give the baby to the mother to hold, where culturally appropriate.
  - → Discuss with them the events before the death and the possible causes of death.
- Advise the mother on breast care K8
- Counsel on appropriate birth spacing method D27.

NEXT: Give preventive measures

### **GIVE PREVENTIVE MEASURES**

Ensure that all are given before discharge.

### ASSESS, CHECK RECORDS

### TREAT AND ADVISE

<ul> <li>Check TPHA status in records.</li> <li>If no TPHA during this pregnancy, do the RPR test L5.</li> </ul>	■ If TPHA positive: → Treat woman and the husband with benzathine penicillin F6. → Treat the newborn $\frac{K12}{K12}$ .
<ul> <li>Check tetanus toxoid (TT) immunization status.</li> <li>Check when last dose of mebendazole was given.</li> </ul>	<ul> <li>Give tetanus toxoid if due F2.</li> <li>Give mebendazole once in 6 months F3.</li> </ul>
<ul> <li>Check woman's supply of prescribed dose of iron/folate.</li> <li>Check if vitamin A given.</li> </ul>	<ul> <li>Give 3 month's supply of iron and counsel on compliance F3.</li> <li>Give vitamin A if due F2.</li> </ul>
<ul> <li>Ask whether woman and baby are sleeping under insecticide treated bednet.</li> <li>Counsel and advise all women.</li> </ul>	<ul> <li>Encourage sleeping under insecticide treated bednet F4.</li> <li>Advise on postpartum care D26.</li> <li>Counsel on nutrition D26.</li> <li>Counsel on birth spacing D27.</li> <li>Counsel on breastfeeding K2.</li> <li>Advise on routine and follow-up postpartum visits D28.</li> <li>Advise on danger signs of the mother and newborn D28.</li> <li>Advice mother on cord care and discuss with the mother how to prepare for an emergency in postpartum D28.</li> </ul>

### Record all treatments given N6.

■ Check HIV status in records.

- If HIV-positive:
  - $\rightarrow$  Support adherence to ARV G6.
  - $\rightarrow$  Treat the newborn G9.
- If HIV test not done, offer her the test E5.

### Advise on postpartum care

### ADVISE ON POSTPARTUM CARE

### Advise on postpartum care and hygiene

Advise and explain to the woman:

- To always have someone near her for the first 24 hours to respond to any change in her condition.
- Not to insert anything into the vagina.
- To have enough rest and sleep.
- The importance of washing to prevent infection of the mother and her baby:
- $\rightarrow$  wash hands before handling baby
- $\rightarrow$  wash perineum daily and after faecal excretion
- $\rightarrow$  change perineal pads every 4 to 6 hours, or more frequently if heavy lochia
- $\rightarrow$  wash used pads or dispose of them safely
- $\rightarrow$  wash the body daily.
- To avoid sexual intercourse until 6 weeks postpartum.

### **Counsel on nutrition**

- Advise the woman to eat a greater amount and variety of healthy foods, such as meat, fish, oils, nuts, seeds, cereals, beans, vegetables, cheese, milk, to help her feel well and strong (give examples of types of food and how much to eat).
- Reassure the mother that she can eat any normal foods these will not harm the breastfeeding baby.
- Spend more time on nutrition counselling with very thin women and adolescents.
- Determine if there are important taboos about foods which are nutritionally healthy. Advise the woman against these taboos.
- Talk to family members such as partner and mother-in-law, to encourage them to help ensure the woman eats enough and avoids hard physical work.
- Encourage exclusive breastfeeding

### COUNSEL ON BIRTH SPACING

### Counsel on the importance of birth spacing

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### ■ If appropriate, ask the woman if she would like her partner or another family member to be included in the counselling session. Explain that after birth, if she has sex and is not exclusively breastfeeding, she can become pregnant as soon as 4 weeks after delivery. Therefore it is important to start thinking early about what family planning method they will use. $\rightarrow$ Ask about plans for having more children. If she (and her husband) want more children, advise that waiting at least 2 years before trying to become pregnant again is good for the mother and for the baby's health.

- →Information on when to start a method after delivery will vary depending on whether a woman is breastfeeding or not.
- $\rightarrow$  Make arrangements for the woman to see a birth spacing counsellor, or counsel her directly.
- Councel on safer sex including use of condoms for dual protection from sexually transmitted infection (STI) or HIV and pregnancy. Promote their use, especially if at risk for sexually transmitted infection (STI) or HIV G2.

■ For HIV-positive women, see G4 for birth spacing considerations

Method options for the non-breastfeeding woman

Can be used after postpartum

Delay 3 weeks

### Lactational amenorrhoea method (LAM)

- A breastfeeding woman is protected from pregnancy only if:
- $\rightarrow$  she is no more than 6 months postpartum, and
- $\rightarrow$  she is breastfeeding exclusively (8 or more times a day, including at least once at night: no daytime feedings more than 4 hours apart and no night feedings more than 6 hours apart; no complementary foods or fluids), and
- $\rightarrow$  her menstrual cycle has not returned.
- A breastfeeding woman can also choose any other birth spacing method, either to use alone or together with LAM.

### Method options for the breastfeeding woman

Progestogen-only oral contraceptives	Can be used after postpartum	Lactational amenorrhoea method (LAM)
Progestogen-only injectables		Copper IUD
Implant		Condoms
Copper IUD	Delay 6 weeks	Progestogen-only oral contraceptives
Condoms		Progestogen-only injectables
		Implants
Combined oral contraceptives	Delay 6 months	Combined oral contraceptives
Combined injectables		Combined injectables
Fertility awareness methods		Fertility awareness methods
,		

### Counsel on birth spacing

### Advise on when to return

# CARE CHILDBIRTH: LABOUR, DELIVERY AND IMMEDIATE POSTPARTUM (

### ADVISE ON WHEN TO RETURN

Use this chart for advising on postpartum care on D21 or E2. For newborn babies see the schedule on K14. Encourage woman to bring her partner or family member to at least one visit.

### Routine postpartum care visits

FIRST VISIT D19	

Within the first 24 hours

SECOND VISIT E2

Within 2-3 days

### Follow-up visits for problems

If the problem was:	Return in:
Fever	2 days
Lower urinary tract infection	2 days
Perineal infection or pain	2 days
Hypertension	1 week
Urinary incontinence	1 week
Severe anaemia	2 weeks
Postpartum blues	2 weeks
HIV-positive	2 weeks
Moderate anaemia	4 weeks
If treated in hospital	According to hospital instructions or according to national
for any complication	guidelines, but no later than in 2 weeks.
Post partum psychosis or depre	ssion

### Advise on danger signs

Advise to go to a hospital or health centre immediately, day or night, WITHOUT WAITING, if any of the following signs:

- vaginal bleeding:
  - $\rightarrow$  more than 2 or 3 pads soaked in 20-30 minutes after delivery OR
  - $\rightarrow$  bleeding increases rather than decreases after delivery.
- convulsions.
- fast or difficult breathing, sever headache, blurred vision.
- fever and too weak to get out of bed.
- severe abdominal pain.

Go to health centre as soon as possible if any of the following signs:

- fever
- abdominal pain
- feels ill
- breasts swollen, red or tender breasts, or sore nipple
- urine dribbling or pain on micturition
- pain in the perineum or draining pus
- foul-smelling lochia

### Discuss how to prepare for an emergency in postpartum

- Advise to always have someone near for at least 24 hours after delivery to respond to any change in condition.
- Discuss with woman and her partner and family about emergency issues:
  - $\rightarrow$  where to go if danger signs
  - $\rightarrow$  how to reach the hospital
  - $\rightarrow$  costs involved
- $\rightarrow$  family and community support.
- Advise the woman to ask for help from the community, if needed 11-13.
- Advise the woman to bring her home-based maternal record to the health centre, even for an emergency visit.

### HOME DELIVERY BY SKILLED ATTENDANT

Use these instructions if you are attending delivery at home.

### Preparation for home delivery

- Check emergency arrangements.
- Keep emergency transport arrangements up-to-date.
- Carry with you all essential drugs B17, records, and the delivery kit.
- Ensure that the family prepares, as on C18

### **Delivery** care

- Follow the labour and delivery procedures D2-D28 K11.
- Observe universal precautions A4.
- Give Supportive care. Involve the husband or a close family member in care and support D6-D7
- Maintain the partograph and labour record <u>N4-N6</u>.
- Provide newborn care J2-J8
- Refer to facility as soon as possible if any abnormal finding in mother or baby B17 K14.

### Immediate postpartum care of mother

- Stay with the woman for first two hours after delivery of placenta C2 C13-C14.
- Examine the mother before leaving her D21.
- Advise on postpartum care within 24 hours D26-D27.
- Ensure that someone will stay with the mother for the first 24 hours.
- Advice on proper nutrition.

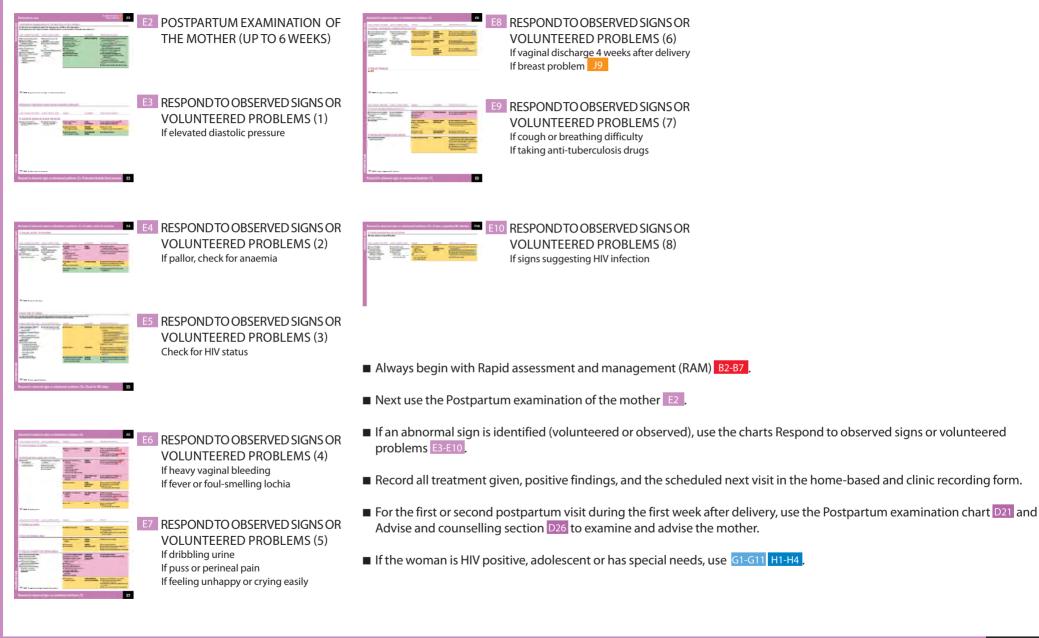
### Postpartum care of newborn

- Stay until baby has had the first breastfeed and help the mother good positioning and attachment K3.
- Advise on breastfeeding and breast care K2-K3.
- Examine the baby before leaving N2-N8
- Immunize the baby if possible, give Vit K injection K13.
- Advise on newborn care and give newborn care K10.
- Advise the family about danger signs and when and where to seek care K14.
- Return within a day to check the mother and baby.
- Advise a second postpartum visit for the mother and baby within 2-3 days K14.



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### **POSTPARTUM CARE**



### Postpartum care

### POSTPARTUM EXAMINATION OF THE MOTHER (UP TO 6 WEEKS)

Use this chart for examining the mother after discharge from a facility or after home delivery If she delivered less than a week ago without a skilled attendant, use the chart Assess the mother after delivery D21.

### ASK, CHECK RECORD

- When and where did you deliver? Feel uterus. Is it hard and
- How are you feeling?
- Have you had any pain or fever or Look at vulva and perineum for: bleeding since delivery?
- Do you have any problem with passing urine?
- Have you decided on any birth spacing method?
- How do your breasts feel?
- Are you breastfeeding?
- Do you have any other concerns?
- Check records:
- $\rightarrow$  Any complications during delivery?
- $\rightarrow$  Receiving any treatments?
- $\rightarrow$  HIV status.
- Check for immunization:
- Do you have any problem with healing of the wound if done?
- Had you experienced any constipation?
- Have you seen or felt any hemorrhoid?
- Do you have loss of appetite?

- Measure blood pressure and temperature.
- round?
- →tear → swelling
  - →pus
  - $\rightarrow$  episiotomy
- Look at pad for bleeding and lochia.
- $\rightarrow$  Does it smell?
- $\rightarrow$  Is it profuse?
- Look for pallor.
- Look for nutritional status.

- LOOK, LISTEN, FEEL SIGNS
  - Mother feeling well.
  - Did not bleed >250 ml.
  - Uterus well contracted and hard
  - No perineal swelling.
  - Blood pressure, pulse and
  - temperature normal.
  - No infection at the de-infiblutaiotn
  - No pallor.
  - No breast problem, is breastfeeding well.

### ■ No fever or pain or concern.

No problem with urination.

### **CLASSIFY**

NORMAL POSTPARTUM

### TREAT AND ADVISE

- Make sure woman and family know what to watch for and when to seek care D28.
- Advise on Postpartum care and hygiene, and counsel on nutrition D26.
- Counsel on the importance of birth spacing D27. Refer for counselling.
- Dispense 3 months iron supply and folic acid and counsel on compliance F3
- Give any treatment or prophylaxis due:  $\rightarrow$  tetanus immunization if she has not had full course F2
- Promote use of impregnated bednet for the mother and baby.
- Record on the mother's home-based maternal record.
- If the mother is on any medication she should continue taking it.
- Advise to return to health centre within 4-6 weeks.

### RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS

### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

CLASSIFY

### TREAT AND ADVISE

### IF ELEVATED DIASTOLIC BLOOD PRESSURE

- History of pre-eclampsia or eclampsia in pregnancy, delivery or after delivery?
- If diastolic blood pressure is ≥90 mmHg, repeat after a 1 hour rest.

■ Diastolic blood pressure ≥110 mmHg.	SEVERE HYPERTENSION	<ul> <li>Give appropriate antihypertensive B14.</li> <li>Refer urgently to hospital B17.</li> </ul>
■ Diastolic blood pressure ≥90 mmHg on 2 readings.	MODERATE HYPERTENSION	Reassess in 1 week. If hypertension persists, refer to hospital. Advice on nutrition, on compliance with medications
<ul> <li>Diastolic blood pressure</li> <li>&lt;90 mmHg after 2 readings.</li> </ul>	BLOOD PRESSURE NORMAL	No additional treatment.



NEXT: If pallor, check for anaemia

### IF PALLOR, CHECK FOR ANAEMIA

### ASK, CHECKRECORD Check record for bleeding in pregnancy, delivery or postpartum.

- Have you had heavy bleeding since delivery?
- Do you tire easily?
- Are you breathless (short of breath) during routine housework?
- Ask about her appetite,
- Any history of worms?
- Are you taking the iron and folic acid tablets?

Measure haemoglobin if history	
of bleeding.	

LOOK, LISTEN, FEEL

- Look for conjunctival pallor.
- Look for palmar pallor. If pallor:
  - $\rightarrow$  is it severe pallor?
  - $\rightarrow$  some pallor?
- Count number of breaths in 1 minute.

- Haemoglobin <7-g/dl
- A р
- A

SIGNS

<ul> <li>AND/OR</li> <li>Severe palmar and conjunctival pallor or</li> <li>Any pallor and any of: <ul> <li>→ &gt;30 breaths per minute</li> <li>→ tires easily</li> <li>→ breathlessness at rest.</li> </ul> </li> </ul>	ANAEMIA	<ul> <li>(1 tablet 60 mg twice daily for 3 months) F3.</li> <li>Refer urgently to hospital B17.</li> <li>Follow up in 2 weeks to check clinical progress and compliance with treatment.</li> </ul>
<ul> <li>Haemoglobin 7-11-g/dl OR</li> <li>Palmar or conjunctival pallor.</li> </ul>	MODERATE ANAEMIA	<ul> <li>Give double dose of iron for 3 months F3.</li> <li>Reassess at next postnatal visit (in 4 weeks). If anaemia persists, refer to hospital.</li> </ul>
■ Haemoglobin >11-g/dl. ■ No pallor.	NO ANAEMIA	Continue treatment with iron for 3 months altogether F3.

TREAT AND ADVISE

Give double dose of iron

**CLASSIFY** 

SEVERE



### CHECK FOR HIV STATUS

Use this chart for HIV testing and counselling during postpartum visit if the woman is not previously tested. If the women has taken ARV during pregnancy or childbirth refer her to HIV services for further assessment.

### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

<ul> <li>Provide key information on HIV G2.</li> <li>What is HIV and how is HIV transmitted G2?</li> <li>Advantage of knowing the HIV status G2.</li> <li>Explain about HIV testing and counselling including confidentiality of the result G3.</li> <li>Ask the woman:</li> <li>Have you been tested for HIV? → If not: tell her that she will be tested for HIV, unless she unforce.</li> </ul>	Perform the Rapid HIV test if not performed in this pregnancy 16.	Positive HIV test	HIV-POSITIVE	<ul> <li>Counsel on implications of a positive test G3.</li> <li>Refer the woman to HIV services for further assessment.</li> <li>→ Counsel on infant feeding options G7.</li> <li>→ Provide additional care for HIV-positive woman G4.</li> <li>→ Counsel on birth spacing G4.</li> <li>→ Counsel on safer sex including use of condoms G2.</li> <li>→ Counsel on benefits of disclosure (involving) and testing her husband G3.</li> <li>→ Provide support to the HIV-positive woman G5.</li> <li>Treat opportunistic infections</li> <li>Follow up in 2 weeks.</li> </ul>
refuses. → If yes: check result. (Explain to her that she has a right not to disclose the result.) → Are you taking any ARV treatment?		Negative HIV test	HIV-NEGATIVE	<ul> <li>Counsel on implications of a negative test G3.</li> <li>Counsel on the importance of staying negative by practising safer sex, including use of condoms G2.</li> <li>Counsel on benefits of involving and testing the husband G3.</li> </ul>
<ul> <li>→ Check treatment plan.</li> <li>■ Has the husband been tested?</li> </ul>		She refuses the test or is not willing to disclose the result of previous test or no test results available	UNKNOWN HIV STATUS	<ul> <li>Counsel on safer sex including use of condoms G2.</li> <li>Counsel on benefits of involving and testing the husband G3.</li> </ul>

**CLASSIFY** 

**TREAT AND ADVISE** 

NEXT: If heavy vaginal bleeding

Respond to observed signs or volunteered problems (3) • Check for HIV status

### Respond to observed signs or volunteered problems (4)

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
IF HEAVY VAGINAL	BLEEDING			
IF FEVER OR FOUL-	SMELLINGLOCHIA	More than 1 pad soaked in 5 minutes.	POSTPARTUM BLEEDING	<ul> <li>Give 0.2 mg ergometrine IM B10.</li> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Manage as in Rapid assessment and management B3-B7.</li> <li>Refer urgently to hospital B17.</li> </ul>
<ul> <li>■ Have you had:</li> <li>→ heavy bleeding?</li> <li>→ foul-smelling lochia?</li> <li>→ burning on urination?</li> </ul>	<ul> <li>Feel lower abdomen and flanks for tenderness.</li> <li>Look for abnormal lochia colour.</li> <li>Measure temperature.</li> <li>Look or feel for stiff neck.</li> <li>Look for lethargy.</li> </ul>	<ul> <li>■ Temperature &gt;38°C and any of:</li> <li>→ very weak</li> <li>→ abdominal tenderness</li> <li>→ foul-smelling lochia</li> <li>→ profuse lochia</li> <li>→ uterus not well contracted</li> <li>→ lower abdominal pain</li> <li>→ history of heavy vaginal bleeding.</li> </ul>	UTERINE INFECTION	<ul> <li>Insert an IV line and give fluids rapidly B9.</li> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Refer urgently to hospital B17.</li> </ul>
		■ Fever >38°C and any of: → burning on urination → flank pain.	UPPER URINARY TRACT INFECTION	<ul> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Refer urgently to hospital B17.</li> </ul>
		Burning on urination.	LOWER URINARY TRACT INFECTION	<ul> <li>Give appropriate oral antibiotic F5.</li> <li>Encourage her to drink more fluids.</li> <li>Follow up in 2 days. If no improvement, refer to hospital.</li> </ul>
		■ Temperature >38°C and any of: → stiff neck → lethargy.	VERY SEVERE FEBRILE DISEASE	<ul> <li>Insert an IV line B9.</li> <li>Give appropriate IM/IV antibiotics B15.</li> <li>Give artemether IM (or quinine IM if artemether not available) and glucose B16.</li> <li>Refer urgently to hospital B17.</li> </ul>
		■ Fever >38°C.	MALARIA	<ul> <li>Give oral antimalarial F4.</li> <li>Follow up in 2 days.</li> <li>If no improvement, refer to hospital.</li> </ul>

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NEXT: If dribbling urine

### ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

### IF DRIBBLING URINE

POSTPARTUM CARE

IF PUS OR PERINEAL PAIN	Dribbling or leaking urine.	URINARY INCONTINENCE	<ul> <li>Check perineal trauma.</li> <li>Give appropriate oral antibiotics for lower urinary tract infection F5.</li> <li>Refer the woman to hospital for management, it can be fistula.</li> </ul>
	Excessive swelling of vulva or perineum.	PERINEAL TRAUMA	Refer the woman to hospital.
	<ul> <li>Pus in perineum.</li> <li>Pain in perineum.</li> </ul>	PERINEAL INFECTION OR PAIN	<ul> <li>Remove sutures, if present.</li> <li>Clean wound. Counsel on care and hygiene D26.</li> <li>Give paracetamol for pain F4.</li> <li>Follow up in 2 days. If no improvement, refer to hospital.</li> </ul>
IF FEELING UNHAPPY OR CRYING EA	ASILY		
<ul> <li>How have you been feeling recently?</li> <li>Have you been in low spirits?</li> <li>Have you been able to enjoy the things you usually enjoy?</li> <li>Have you had your usual level of energy, or have you been feeling tired?</li> <li>How has your sleep been?</li> <li>Have you been able to concentrate?</li> <li>Do you have any previous</li> </ul>	<ul> <li>Two or more of the following symptoms during the same 2 week period representing a change from normal:</li> <li>Inappropriate guilt or negative feeling towards self.</li> <li>Cries easily.</li> <li>Decreased interest or pleasure.</li> <li>Feels tired, agitated all the time.</li> <li>Disturbed sleep (sleeping too much or too little, waking early).</li> <li>Diminished ability to think or concentrate.</li> <li>Marked loss of appetite.</li> </ul>	POSTPARTUM DEPRESSION (USUALLY AFTER FIRST WEEK)	<ul> <li>Provide emotional support.</li> <li>Refer urgently the woman to hospital B7.</li> </ul>
<ul> <li>Do you have any emotional condition?</li> <li>NEXT: If vaginal discharge 4 weeks after definition</li> </ul>	Any of the above, for less than 2 weeks. elivery	POSTPARTUM BLUES (USUALLY IN FIRST WEEK)	<ul> <li>Assure the woman that this is very common.</li> <li>Listen to her concerns. Give emotional encouragement and support.</li> <li>Counsel partner and family to provide assistance to the woman. Explain to the family it is a serious problem and the mother need support from her family</li> <li>Avoid leaving the mother alone. Separate her from the baby if she shows aggressive behavior</li> <li>Follow up in 2 weeks, and refer if no improvement.</li> </ul>

Respond to observed signs or volunteered problems (5)

### ASK, CHECK RECORD LOOK, LISTEN, FEEL SIGNS CLASSIFY TREAT AND ADVISE IF VAGINAL DISCHARGE 4 WEEKS AFTER DELIVERY Separate the labia and look for Do you have itching at the vulva? Give appropriate oral antibiotics to woman F5 Abnormal vaginal discharge, POSSIBLE abnormal vaginal discharge: Has your husband had a urinary and partner has urethral GONORRHOEA OR Treat husband with appropriate oral antibiotics F5 problem? →amount discharge or burning on **CHLAMYDIA** Counsel on safer sex including use of condoms G2. →colour INFECTION passing urine. If husband is present in the clinic, ask the $\rightarrow$ odour/smell. woman if she feels comfortable if you ■ If no discharge is seen, examine POSSIBLE ■ Give clotrimazole F5 ask him similar questions. with a gloved finger and look at Counsel on safer sex including use of condoms G2. Curd-like vaginal discharge CANDIDA If ves, ask him if he has: the discharge on the glove. ■ If no improvement, refer the woman to hospital. and/or INFECTION urethral discharge or pus Intense vulval itching. burning on passing urine. ■ Give metronidazole to woman F5. POSSIBLE If husband could not be approached, **BACTERIAL OR** Counsel on safer sex including use of condoms G2. explain importance of husband Treat all the family (the other wives if more than one) Abnormal vaginal discharge. TRICHOMONAS assessment and treatment to avoid INFECTION reinfection. Check for: $\rightarrow$ Lower back pain, → Treatment of dysparunia (painful

- intercourse)
- $\rightarrow$  Irregular period
- $\rightarrow$  How many other wives with her

### **IF BREAST PROBLEM**

See J9

POSTPARTUM CARE

### ASK, CHECK RECORD LOOK, LISTEN, FEEL SIGNS

■ Look for breathlessness.

■ Listen for wheezing.

Measure temperature.

### CLASSIFY TREAT AND ADVISE

### **IF COUGH OR BREATHING DIFFICULTY**

- How long have you been coughing?
- How long have you had difficulty in breathing?
- Do you have chest pain?
- Do you have any blood in sputum?
- Do you smoke?

At least 2 of the following: Temperature >38°C. Breathlessness. Chest pain.	POSSIBLE PNEUMONIA	<ul> <li>Give first dose of appropriate IM/IV antibiotics</li> <li>Refer urgently to hospital B17.</li> </ul>
<ul> <li>At least 1 of the following:</li> <li>Cough or breathing difficulty for &gt;3 weeks.</li> <li>Blood in sputum.</li> <li>Wheezing.</li> </ul>	POSSIBLE CHRONIC LUNG DISEASE	<ul> <li>Refer to hospital for assessment.</li> <li>If severe wheezing, refer urgently to hospital.</li> </ul>
<ul> <li>■ Temperature &lt;38°C.</li> <li>■ Cough for &lt;3 weeks.</li> </ul>	UPPER RESPIRATORY TRACT INFECTION	<ul> <li>Advise safe, soothing remedy.</li> <li>If smoking, counsel to stop smoking.</li> </ul>

### **IF TAKING ANTI-TUBERCULOSIS DRUGS**

Taking anti-tuberculosis drugs.	TUBERCULOSIS	<ul> <li>Assure the woman that the drugs are not harmful to her baby, and of the need to continue treatment.</li> <li>If her sputum is TB-positive within 2 months of</li> </ul>
		<ul> <li>In her spatialities to positive within 2 months of delivery, plan to give INH prophylaxis to the newborn K13.</li> <li>Reinforce advice for HIV testing G3.</li> <li>If smoking, counsel to stop smoking.</li> <li>Advise to screen immediate family members and close contacts for tuberculosis.</li> </ul>

Do you have night sweating?

- Did you loss weight recently?
- Does any member of your family has TB or taking treatment recently?
- Are you taking anti-tuberculosis drugs? If yes, since when?
- What type of treatment are you on?
- Do you feel any improvement or not since you started the treatment ?

Respond to observed signs or volunteered problems (7)

## POSTPARTUM CARE

### **IF SIGNS SUGGESTING HIV INFECTION**

HIV status unknown or known HIV-positive.

### Have you lost weight? Do you have fever? How long (>1 month)? Have you got diarrhoea

ASK, CHECKRECORD

- Have you got diarrhoea (continuous or intermittent)? How long (>1 month)?
- Have you had cough? How long (>1 month)?
- Did you have any blood transfusion?

- Look for visible wasting.
- Look for ulcers and white patches in the mouth (thrush).

LOOK, LISTEN, FEEL

- Look at the skin:
  - $\rightarrow$  Is there a rash?
  - → Are there blisters along the ribs on one side of the body?
- Two of the following:
- → weight loss

SIGNS

- $\rightarrow$  fever >1 month
- $\rightarrow$  diarrhoea >1 month. OR
- One of the above signs and
  - $\rightarrow$  one or more other sign or
  - $\rightarrow$  from a high-risk group.

STRONG

LIKELIHOOD OF

**HIV INFECTION** 

### CLASSIFY TREAT AND ADVISE

- Reinforce the need to know HIV status and counsel for HIV testing G3.
- Counsel on the benefits of testing her partner G3.
- Counsel on safer sex including use of condoms G2.
- Examine further and manage according to national HIV guidelines or refer to appropriate HIV services.
- Refer to TB centre if cough.
- Reinforce the need of the HIV status of whole family including the other wives children

### PREVENTIVE MEASURES AND ADDITIONAL TREATMENTS FOR THE WOMAN



F2 PREVENTIVE MEASURES (1)
 Give tetanus toxoid
 Give vitamin A postpartum

Give mebendazole

F3 PREVENTIVE MEASURES (2) Give iron and folic acid

Motivate on compliance with iron treatment

- This section has details on preventive measures and treatments prescribed in pregnancy and postpartum.
- General principles are found in the section on good practice A2.
- For emergency treatment for the woman see B8-B17.
- For treatment for the newborn see K9-K13

F4 ADDITIONAL TREATMENTS FOR THE WOMAN (1)

Give preventive intermittent treatment for falciparum malaria Advise to use insecticide-treated bednet Give paracetamol

F5 ADDITIONAL TREATMENTS FOR THE WOMAN (2) Give appropriate oral antibiotics

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F6 ADDITIONAL TREATMENTS FOR THE WOMAN (3) Give benzathine penicillin IM Observe for signs of allergy

### Preventive measures (1)

### **PREVENTIVE MEASURES**

### Give tetanus toxoid

- Immunize all women
- Check the woman's tetanus toxoid (TT) immunization status:
- →When was TT last given?
- $\rightarrow$  Which dose of TT was this?
- If immunization status unknown, give TT1. Plan to give TT2 in 4 weeks.

### If due:

- Explain to the woman that the vaccine is safe to be given in pregnancy; it will not harm the baby.
- The injection site may become a little swollen, red and painful, but this will go away in a few days.
- If she has heard that the injection has contraceptive effects, assure her it does not, that it only protects her from disease.
- Give 0.5 ml TT IM, upper arm.
- Advise woman when next dose is due.
- Record on mother's card.

### Tetanus toxoid schedule

At first contact with woman of childbearing age or		
at first antenatal care visit, as early as possible.		
At least 4 weeks after TT1 (at next antenatal care visit).		
At least 6 months after TT2.		
At least 1 year after TT3.	TT4	
At least 1 year after TT4.	TT5	

### Give vitamin A postpartum

- Give 200-000-IU vitamin A capsules after delivery or within 6 weeks of delivery:
- Explain to the woman that the capsule with vitamin A will help her to recover better, and that the baby will receive the vitamin through her breast milk.
  - $\rightarrow$  ask her to swallow the capsule in your presence.
  - $\rightarrow$  explain to her that if she feels nauseated or has a headache, it should pass in a couple of days.
- DO NOT give capsules with high dose of vitamin A during pregnancy.

### Vitamin A

1 capsule 200-000 IU 1 capsule after delivery or within 6 weeks of delive
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### Give iron and folic acid

- To all pregnant, postpartum and post-abortion women:
  - $\rightarrow$  Routinely once daily in pregnancy and until 3 months after delivery or abortion.
- $\rightarrow$  Twice daily as treatment for anaemia (double dose).
- Check woman's supply of iron and folic acid at each visit and dispense 3 months supply.

Advise to store iron safely:

- $\rightarrow$  Where children cannot get it
- $\rightarrow$  In a dry place.

### Iron and folate

1 tablet = 60-mg, folic acid =  $400-\mu g$ 

	All women	Women with anaemia
	1 tablet	2 tablets
In pregnancy	Throughout the pregnancy	3 months
Postpartum and	3 months	3 months
post-abortion		

### Give mebendazole

Give 500 mg to every woman once in 6 months.
 DO NOT give it in the first trimester.

### Mebendazole

500 mg tablet	100 mg tablet
1 tablet	5 tablets

### Motivate on compliance with iron treatment

Explore local perceptions about iron treatment (examples of incorrect perceptions: making more blood will make bleeding worse, iron will cause too large a baby).

- Explain to mother and her family:
  - $\rightarrow$  Iron is essential for her health during pregnancy and after delivery
  - $\rightarrow$  The danger of anaemia and need for supplementation.
- Discuss any incorrect perceptions.
- Explore the mother's concerns about the medication:
  - $\rightarrow$  Has she used the tablets before?
  - $\rightarrow$  Were there problems?
  - →Any other concerns?
- Advise on how to take the tablets
  - $\rightarrow$  With meals or, if once daily, at night
  - ightarrow Iron tablets may help the patient feel less tired. Do not stop treatment if this occurs
  - $\rightarrow$  Do not worry about black stools. This is normal.
- Advice the mother not to take iron tablets with tea. Give advice on how to manage side-effects:
  - $\rightarrow$  If constipated, drink more water
  - $\rightarrow$  Take tablets after food or at night to avoid nausea
  - $\rightarrow$  Explain that these side effects are not serious
  - $\rightarrow$  Advise her to return if she has problems taking the iron tablets.
- If necessary, discuss with family member, TBA, other community-based health workers or other women, how to help in promoting the use of iron and folate tablets.
- Counsel on eating iron-rich foods see C16 D26.

# ANTIMALARIAL TREATMENT AND PARACETAMOL

### Give preventive intermittent treatment for falciparum malaria only in places where malaria is endemic

- Give sulfadoxine-pyrimethamine at the beginning of the second and third trimester to all women according to national policy.
- Check when last dose of sulfadoxine-pyrimethamine given:
  - $\rightarrow$  If no dose in last month, give sulfadoxine-pyrimethamine, 3 tablets in clinic.
- Advise woman when next dose is due.
- Monitor the baby for jaundice if given just before delivery.
- Record on home-based record.

#### Sulfadoxine pyrimethamine

1 tablet = 500 mg + 25 mg pyrimethamine sulfadoxine	
Second trimester	Third trimester
3 tablets	3 tablets

## Advise to use insecticide-treated bednet

- Ask whether woman and newborn will be sleeping under a bednet.
- If yes,
  - $\rightarrow$  Has it been dipped in insecticide?
  - $\rightarrow$  When?
  - $\rightarrow$  Advise to dip every 6 months.
- If not, advise to use insecticide-treated bednet, and provide information to help her do this.

### Give appropriate oral antimalarial treatment

A highly effective antimalarial (even if second-line) is preferred during pregnancy

	Sulfadoxine + Pyrimethamine
	Give single dose in clinic
	Tablet
	500 mg sulfadoxine +
	25 mg pyrimethamine
Pregnant woman (for	
weight around 50 kg)	3

### Give paracetamol

If severe pain

Paracetamol	Dose	Frequency
1 tablet = 500 mg	1-2 tablets	every 4-6 hours

**F4** 

# GIVE APPROPRIATE ORAL ANTIBIOTICS

INDICATION	ANTIBIOTIC	DOSE	FREQUENCY	DURATION	COMMENT
Mastitis	CLOXACILLIN 1 capsule (500 mg)	500 mg	every 6 hours	10 days	
Lower urinary tract infection	AMOXYCILLIN 1 tablet (500 mg) OR	500 mg	every 8 hours	3 days	
	TRIMETHOPRIM+ SULPHAMETHOXAZOLE 1 tablet (80 mg + 400 mg)	80 mg trimethoprim + 400 mg sulphamethoxazole	two tablets every 12 hours	3 days	Avoid in late pregnancy and two weeks after delivery when breastfeeding.
Gonorrhoea Woman	CEFTRIAXONE (Vial=250 mg)	250 mg IM injection	once only	once only	
Husband only, and other if there are other wives	CIPROFLOXACIN (1 tablet=250 mg)	500 mg (2 tablets)	once only	once only	Not safe for pregnant or lactating women.
Chlamydia Woman	ERYTHROMYCIN (1 tablet=250 mg)	500 mg (2 tablets)	every 6 hours	7 days	
Husband only, and other if	TETRACYCLINE (1 tablet=250 mg) OR	500 mg (2 tablets)	every 6 hours	7 days	Not safe for pregnant or lactating woman.
there are other wives	DOXYCYCLINE (1 tablet=100 mg)	100 mg	every 12 hours	7 days	
Trichomonas or bacterial vaginal infection	METRONIDAZOLE (1 tablet=500 mg)	2 g or 500 mg	once only every 12 hours	once only 7 days	Do not use in the first trimester of pregnancy.
Vaginal candida infection	CLOTRIMAZOLE 1 pessary 200 mg	200 mg	every night	3 days	Teach the woman how to insert a pessary into vagina
	or 500 mg	500 mg	once only	once only	and to wash hands before and after each application.

# Additional treatments for the woman (3) • Give benzathine penicillin IM

# GIVE BENZATHINE PENICILLIN IM

Treat the partner. Rule out history of allergy to antibiotics.

INDICATION	ANTIBIOTIC	DOSE	FREQUENCY	DURATION	COMMENT
Syphilis TPHA test positive	BENZATHINE PENICILLIN IM (2.4 million units in 5 ml) Do penicillin skin test before giving penicillin injection	2.4 million units IM injection	once only	once only	Give as two IM injections at separate sites. Plan to treat newborn K12. Counsel on correct and consistent use of condoms G2.
If woman has allergy to penicillin	ERYTHROMYCIN (1 tablet = 250 mg)	500 mg (2 tablets)	every 6 hours	15 days	
If partner has allergy to penicillin	TETRACYCLINE (1 tablet = 250 mg) OR	500 mg (2 tablets)	every 6 hours	15 days	Not safe for pregnant or lactating woman.
	DOXYCYCLINE (1 tablet = 100 mg)	100 mg	every 12 hours	15 days	

## **OBSERVE FOR SIGNS OF ALLERGY**

After giving penicillin injection, keep the woman for a few minutes and observe for signs of allergy.

ASK, CHECKRECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT
<ul> <li>How are you feeling?</li> <li>Do you feel tightness in the chest and throat?</li> <li>Do you feel dizzy and confused?</li> </ul>	<ul> <li>Look at the face, neck and tongue for swelling.</li> <li>Look at the skin for rash or hives.</li> <li>Look at the injection site for swelling and redness.</li> <li>Look for difficult breathing.</li> <li>Listen for wheezing.</li> </ul>	<ul> <li>Any of these signs:</li> <li>Tightness in the chest and throat.</li> <li>Feeling dizzy and confused.</li> <li>Swelling of the face, neck and tongue.</li> <li>Injection site swollen and red.</li> <li>Rash or hives.</li> <li>Difficult breathing or wheezing.</li> </ul>	ALLERGY TO PENICILLIN	<ul> <li>Open the airway B9.</li> <li>Insert IV line and give fluids B9.</li> <li>Give 0.5 ml adrenaline 1:1000 in 10 ml saline solution IV slowly. Repeat in 5-15 minutes, if required.</li> <li>DO NOT leave the woman on her own.</li> <li>Refer urgently to hospital B17.</li> </ul>

# **INFORM AND COUNSEL ON HIV**



G2 PROVIDE KEY INFORMATION ON HIV What is HIV and how is HIV transmitted? Advantage of knowing the HIV status in pregnancy

Counsel on safer sex including use of condoms

HIV TESTING AND COUNSELLING HIV testing and counselling Discuss confidentiality of HIV infection Counsel on implications of the HIV test result Benefits of disclosure (involving) and testing the male partner(s)



#### G8 SUPPORT THE MOTHER'S CHOICE OF INFANT FEEDING

If mother chooses replacement feeding: Teach her replacement feeding. Explain the risks of replacement feeding Follow-up for replacement feeding Give special counselling to the mother who is HIV-positive and chooses breastfeeding

GIVE APPROPRIATE ANTIRETROVIRAL TO HIV-POSITIVE WOMAN AND THE NEWBORN

#### RESPOND TO OBSERVED SIGNS AND VOLUNTEERED PROBLEMS If a woman is taking antiretroviral medicines and develops new signs/symptoms, respond to her problems

### PREVENT HIV INFECTION IN HEALTH-CARE WORKERS AFTER ACCIDENTALEXPOSUREWITHBODY FLUIDS (POST EXPOSURE PROPHYLAXIS)

If a health-care worker is exposed to body fluids by cuts/pricks/splashes, give him/her appropriate care

- Use this section when accurate information on HIV must be given to the woman and her family.
- Provide key information on HIV to all women and explain at the first antenatal care visit how HIV transmitted and the advantages of knowing the HIV status in pregnancy G2.
- Explain about HIV testing and counselling, the implications of the test result and benefits of involving and testing the male partner(s). Discuss confidentiality of HIV infection G3.
- If the woman is HIV-positive:
  - → provide additional care during pregnancy, childbirth and postpartum G4.
  - $\rightarrow$  give any particular support that she may require G5
  - → If antiretroviral treatment is indicated give appropriate treatment G6, G9.
- Counsel the woman on infant feeding options G7.
- Support the mothers choice of infant feeding G8.
- Counsel all women on safer sex including use of condoms during and after pregnancy G2.
- If the woman taking antiretroviral treatment is having complaints, respond to her problems G10.
- If the health-care worker is accidentally exposed to HIV infection, give her/him appropriate care G11.

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#### G4 CARE AND COUNSELLING FOR THE HIV-POSTITIVE WOMAN Additional care for the HIV-positive woman Counsel the HIV-positive woman on family

Counsel the HIV-positive woman on fam planning
5 SUPPORT TO THE

HIV-POSITIVE WOMAN Provide emotional support to the woman How to provide support

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	Legit shares S.W.

G6 GIVE ANTIRETROVIRAL (ARV) MEDICINE(S) TO TREAT HIV INFECTION Support the initiation of ARV

G7 COUNS OPTION Explain th breastfee

Inform and counsel on HIV

	Support the initiation of Arry
	Support adherence to ARV
7	COUNSEL ON INFANT FEEDING
	OPTIONS

Explain the risks of HIV transmission through breastfeeding and not breastfeeding If a woman does not know her HIV status If a woman knows that she is HIV-positive

NFORM AND COUNSEL ON HIV

# PROVIDE KEY INFORMATION ON HIV

# What is HIV (human immunodeficiency virus) and how is HIV transmitted?

- HIV is a virus that destroys parts of the body's immune system. A person infected with HIV may not feel sick at first, but slowly the body's immune system is destroyed. The person becomes ill and unable to fight infection. Once a person is infected with HIV, she or he can give the virus to others.
- HIV can be transmitted through:
  - → Exchange of HIV-infected body fluids such as semen, vaginal fluid or blood during unprotected sexual intercourse.
  - $\rightarrow$  HIV-infected blood transfusions or contaminated needles.
  - $\rightarrow$  From an infected mother to her child (MTCT) during:
    - $\rightarrow$  pregnancy
    - $\rightarrow$  labour and delivery
    - $\rightarrow$  postpartum through breastfeeding.
- Almost four out of 20 babies born to HIV positive women may be infected without any intervention.
- HIV cannot be transmitted through hugging or mosquito bites.
- A blood test is done to find out if the person is infected with HIV.
- All pregnant women are offered this test. They can refuse the test.

# Advantage of knowing the HIV status in pregnancy

Knowing the HIV status during pregnancy is important so that:

- the woman knows her HIV status
- can share information with her husband
- encourage her husband to be tested

If the woman is HIV-positive she can:

- get appropriate medical care to treat and/or prevent HIV-associated illnesses.
- reduce the risk of transmission of infection to the baby:
  - $\rightarrow$  by taking antiretroviral drugs in pregnancy, and during labour G6, G9
  - $\rightarrow$  by practicing safer infant feeding options G9
  - $\rightarrow$  by adapting birth and emergency plan and delivery practices G4.
- protect herself and her husband from infection or reinfection.
- make a choice about future pregnancies.

# Counsel on safer sex including use of condoms

SAFER SEX IS ANY SEXUAL PRACTICE THAT REDUCES THE RISK OF TRANSMITTING HIV AND SEXUALLY TRANSMITTED INFECTIONS (STIs) FROM ONE PERSON TO ANOTHER

MAKE PEOPLE AWARE ABOUT ISLAMIC MORALS (ABSTINENCE)

# **HIV TESTING AND COUNSELLING**

# HIV testing and Counselling services

Explain about HIV testing:

- HIV test is used to determine if the woman is infected with HIV.
- It includes blood testing and counselling .
- Result is available on the same day.
- The test is offered routinely to every woman at every pregnancy to help protect her and her baby's health. She may decline the test.

If HIV testing is not available in your setting, inform the woman about:

- Where to go.
- How the test is performed.
- How confidentiality is maintained (see below).
- When and how results are given.
- When she should come back to the clinic with the test result
- Costs involved.
- Provide the address of HIV testing in your area's nearest site :

### ■ Ask her if she has any questions or concerns.

# **Discuss confidentiality of HIV infection**

- Assure the woman that her test result is confidential and will be shared only with herself and any person chosen by her.
- Ensure confidentiality when discussing HIV results, status, treatment and care related to HIV, opportunistic infections, additional visits and infant feeding options A2.
- Ensure all records are confidential and kept locked away and only health care workers taking care of her have access to the records.
- DO NOT label records as HIV-positive.

# Counsel on implications of the HIV test result

- Discuss the HIV results when the woman is alone or with the person of her choice.
- State test results in a neutral tone.
- Give the woman time to express any emotions.

### IF TEST RESULT IS NEGATIVE:

- Explain to the woman that a negative result can mean either that she is not infected with HIV or that she is infected with HIV but has not yet made antibodies against the virus (this is sometimes called the "window" period).
- Counsel on the importance of staying negative by safer sex including use of condoms G2.

### IF TEST RESULT IS POSITIVE:

- Explain to the woman that a positive test result means that she is carrying the infection and has the possibility of transmitting the infection to her unborn child without any intervention.
- Let her talk about her feelings. Respond to her immediate concerns.
- Inform her that she will need further assessment to determine the severity of the infection, appropriate care and treatment needed for herself and her baby. Treatment will slow down the progression of her HIV infection and will reduce the risk of infection to the baby.
- Provide information on how to prevent HIV re-infection.
- Inform her that support and counselling is available if needed, to cope on living with HIV infection.
- Discuss disclosure and partner testing.
- Ask the woman if she has any concerns.

# Benefits of disclosure (involving) and testing the male partner(s)

Encourage the women to disclose the HIV results to her husband or another person she trusts. By disclosing her HIV status to her partner and family, the woman may be in a better position to:

- Encourage husband to be tested for HIV.
- Prevent the transmission of HIV to her husband.
- Prevent transmission of HIV to her baby.
- Protect herself from HIV reinfection.
- Access HIV treatment, care and support services.
- Receive support from her husbandand family when accessing antenatal care and HIV treatment, care and support services.
- Help to decrease the risk of suspicion and violence.

# HIV testing and counselling

# CARE AND COUNSELLING FOR THE HIV-POSITIVE WOMAN

# Additional care for the HIV- positive woman

- Determine how much the woman has told her partner, labour companion and family, then respect this confidentiality.
- Be sensitive to her special concerns and fears. Give her additional support G5.
- Advise on the importance of good nutrition C13 D26.
- Use standard precautions as for all women A4.
- Advise her that she is more prone to infections and should seek medical help as soon as possible if she has:
  - → fever
  - $\rightarrow$  persistent diarrhoea
  - $\rightarrow$  cold and cough respiratory infections
  - $\rightarrow$  burning urination
  - $\rightarrow$  vaginal itching/foul-smelling discharge
  - → no weight gain
  - $\rightarrow$  skin infections
- → foul-smelling lochia.

### **DURING PREGNANCY:**

- Revise the birth plan C2 C13.
  - $\rightarrow$  Advise her to deliver in a facility.
  - $\rightarrow$  Advise her to go to a facility as soon as her membranes rupture or labour starts.  $\rightarrow$  Tell her to take ARV medicine at the onset of labour as instructed G6.
- Discuss the infant feeding options G8-G9
- Modify preventive treatment for malaria, according to national strategy F4

### DURING CHILDBIRTH:

- Check if ARV is taken at onset of labour.
- Give ARV medicines as prescribed G6 G9
- Adhere to standard practice for labour and delivery.
- Respect confidentiality when giving ARV to the mother and baby.
- Record all ARV medicines given on labour record, postpartum record and on referral record, if woman is referred.

### DURING THE POSTPARTUM PERIOD:

- Tell her that lochia can cause infection in other people and therefore she should dispose of blood stained sanitary pads safely (list local options).
- Counsel her on birth spacing G4.
- If not breastfeeding, advise her on breast care <u>K8</u>.
- Visit HIV services 2 weeks after delivery for further assessment.

# Counsel the HIV-positive woman on family planning

- Use the advice and counselling sections on C16 during antenatal care and D27 during postpartum visits. The following advice should be highlighted:
  - → Explain to the woman that future pregnancies can have significant health risks for her and her baby. These include: transmission of HIV to the baby (during pregnancy, delivery or breastfeeding), miscarriage, preterm labour, stillbirth, low birth weight, ectopic pregnancy and other complications.
  - → If she wants more children, advise that waiting at least 2 years before trying to become pregnant again is good for the mother and for the baby's health.
  - → Discuss her options for preventing both pregnancy and infection with other sexually transmitted infections or HIV reinfection.
- Condoms may be the best option for the woman with HIV. Counsel the woman on safer sex including the use of condoms G2.
- If the woman think that her partner will not use condoms, she may wish to use an additional method for pregnancy protection. However, not all methods are appropriate for the HIV-positive woman:
  - → Given the woman's HIV status, she may not choose to breastfeed and lactational amenorrhoea method (LAM) may not be a suitable method.
  - $\rightarrow$  Spermicides are not recommended for HIV-positive women.
  - → Intrauterine device (IUD) use is not recommended for women with AIDS who are not on ARV therapy.
  - → Due to changes in the menstrual cycle and elevated temperatures fertility awareness methods may be difficult if the woman has AIDS or is on treatment for HIV infections.
  - → If the woman is taking pills for tuberculosis (rifampin), she usually cannot use contraceptive pills, monthly injectables or implants.

The birth spacing counsellor will provide more information.

## SUPPORT TO THE HIV-POSITIVE WOMAN

Pregnant women who are HIV- positive benefit greatly from the following support after the first impact of the test result has been overcome.

### Provide emotional support to the woman

- Empathize with her concerns and fears.
- Use good counselling skills A2.
- Help her to assess her situation and decide which is the best option for her, her (unborn) child and her sexual partner. Support her choice.
- Connect her with other existing support services including support groups, incomegeneratingactivities, religious support groups, orphan care, home care.
- Help her to find ways to involve her partner and/or extended family members in sharing responsibility, to identify a figure from the community who will support and care for her.
- Discuss how to provide for the other children and help her identify a figure from the extended family or community who will support her children.
- Confirm and support information given during HIV testing and counselling, the possibility of ARV treatment, safe sex, infant feeding and family planning advice (help her to absorb the information and apply it in her own case).
- If the woman has signs of AIDS and/or of other illness, refer her to appropriate services.

## How to provide support

- Conduct peer support groups for women who have HIV-infection and couples affected by HIV/AIDS:
- → Led by a social worker and/or woman who has come to terms with her own HIVinfection.
- Establish and maintain constant linkages with other health, social and community workers support services:
  - $\rightarrow$  To exchange information for the coordination of interventions
  - $\rightarrow$  To make a plan for each family involved.
- Refer individuals or couples for counselling by community counsellors.

# GIVE ANTIRETROVIRAL (ARV) MEDICINE(S) TO TREAT HIV INFECTION

Use these charts when starting ARV medicine(s) and to support adherence to ARV

# Support the initiation of ARV

- If the woman is already on ARV treatment continue the treatment during pregnancy, as prescribed. If she is in the first trimester of pregnancy and treatment includes efavirenz, replace it with nevirapine.
- If the woman is not on ARV treatment and is tested HIV-positive, choose appropriate ARV regimens C19, G9 according to the stage of the disease.
- If treatment with Zidovudine (AZT) is planned: measure haemoglobin; if less than 8 g/dl, refer to hospital C4.
- Write the treatment plan in the Home Based Maternal Record.
- Give written instructions to the woman on how to take the medicines.
- Give prophylaxis for opportunistic infections according to national guidelines.
- Modify preventive treatment for malaria according to national guidelines F4.

# Explore local perceptions about ARVs

Explain to the woman and family that:

- ARV treatment will improve the woman's health and will greatly reduce the risk of infection to her baby. The treatment will not cure the disease.
- The choice of regimen depends on the stage of the disease C19
  - → If she is in early stage of HIV infection, she will need to take medicines during pregnancy, childbirth and only for a short period after delivery to prevent mother-tochild transmission of HIV infection (PMTCT). Progress of disease will be monitored to determine if she needs additional treatment.
  - → If she has mild-severe HIV disease she will need to continue the treatment even after childbirth and postpartum period.
- She may have some side effects but not all women have them. Common side effects like nausea, diarrohea, headache or fever often occur in the beginning but they usually disappear within 2–3 weeks. Other side effects like yellow eyes, pallor, severe abdominal pain, shortness of breath, skin rash, painful feet, legs or hands may appear at any time. If these signs persist, she should come to the clinic.
- Give her enough ARV tablets for 2 weeks or till her next ANC visit.
- Ask the woman if she has any concerns. Discuss any incorrect perceptions.

# Support adherence to ARV

### For ARV medicine to be effective:

- Advise woman on:
  - → which tablets she needs to take during pregnancy, when labour begins (painful abdominal contractions and/or membranes rupture) and after childbirth.
  - → taking the medicine regularly, every day, at the right time. If she chooses to stop taking medicines during pregnancy, her HIV disease could get worse and she may pass the infection to her child.
  - $\rightarrow$  if she forgets to take a dose, she should not double the next dose.
  - → continue the treatment during and after the childbirth (if prescribed), even if she is breastfeeding.
  - $\rightarrow$  taking the medicine(s) with meals in order to minimize side effects.
- For newborn:
  - $\rightarrow$  Give the first dose of medicine to the newborn soon after birth.
  - $\rightarrow$  Teach the mother how to give treatment to the newborn.
  - → Tell the mother that the baby must complete the full course of treatment and will need regular visits throughout the infancy.
  - → If the mother received less than 4 weeks of Zidovudine (AZT) during pregnancy, give the treatment to the newborn for 4 weeks.
- Record all treatment given. If the mother or baby is referred, write the treatment given and the regimen prescribed on the referral card.
- DO NOT label records as HIV-Positive
- DO NOT share drugs with family or friends.

# **COUNSEL ON INFANT FEEDING OPTIONS**

# Explain the risks of HIV transmission through breastfeeding and not breastfeeding

- Four out of 20 babies born to known HIV-positive mothers will be infected during pregnancy and delivery without ARV medication. Three more may be infected by breastfeeding.
- The risk may be reduced if the baby is breastfed exclusively using good technique, so that the breasts stay healthy.
- Mastitis and nipple fissures increase the risk that the baby will be infected.
- The risk of not breastfeeding may be much higher because replacement feeding carries risks too:
  - $\rightarrow$  diarrhoea because of contamination from unclean water, unclean utensils or because the milk is left out too long.
  - → malnutrition because of insufficient quantity given to the baby, the milk is too watery, or because of recurrent episodes of diarrhoea.
- Mixed feeding increases the risk of diarrhoea. It may also increase the risk of HIV transmission.

## If a woman does not know her HIV status

- Counsel on the importance of exclusive breastfeeding 102.
- Encourage exclusive breastfeeding.
- Counsel on the need to know the HIV status and where to go for HIV testing and counselling G3.
- Explain to her the risks of HIV transmission:
  - $\rightarrow$  even in areas where many women have HIV, most women are negative
  - $\rightarrow$  the risk of infecting the baby is higher if the mother is newly infected
  - $\rightarrow\,$  explain that it is very important to avoid  $\,$  infection during pregnancy and the breastfeeding period.

# If a woman knows that she is HIV-positive

- Inform her about the most appropriate infant feeding option. It will depend on her individual circumstances, her disease status and the local situation:
  - → Exclusive breastfeeding for 6 months, she can stop as soon as replacement feeding becomes acceptable, feasible, affordable, sustainable and safe.
  - → If acceptable, feasible, affordable, sustainable and safe, she might choose replacement feeding with commercial formula.
  - → If replacement feeding is not acceptable, feasible, affordable, sustainable and safe, she can continue breastfeeding after 6 months and give in addition complementary foods, as recommended for HIV-negative women and women who do not know their status.
- In some situations additional possibilities are:
  - → expressing and heat-treating her breast milk
  - $\rightarrow$  wet nursing by an HIV-negative woman, if culturally acceptable.
- Help her to assess her situation and decide which is the best option for her, and support her choice.
- If the mother chooses breastfeeding, give her special counselling G8
- All babies receiving replacement feeding need regular follow-up, and their mothers need support to provide correct replacement feeding.
  - → If this cannot be ensured, exclusive breastfeeding, stopping early when replacement feeding is feasible, is an alternative.
  - → All babies receiving replacement feeding need regular follow-up, and their mothers need support to provide correct replacement feeding.

# Counsel on infant feeding options

# SUPPORT THE MOTHERS CHOICE OF INFANT FEEDING

# If the mother chooses replacement feeding, teach her replacement feeding

- Ask the mother what kind of replacement feeding she chose.
- For the first few feeds after delivery, prepare the formula for the mother, then teach her how to prepare the formula and feed the baby by cup K9:
  - $\rightarrow$  Wash hands with water and soap
  - $\rightarrow$  Boil the water for few minutes
  - → Clean the cup thoroughly with water, soap and, if possible, boil or pour boiled water in it
  - $\rightarrow$  Decide how much milk the baby needs from the instructions
  - $\rightarrow$  Measure the milk and water and mix them
  - $\rightarrow$  Teach the mother how to feed the baby by cup
  - → Let the mother feed the baby 8 times a day (in the first month). Teach her to be flexible and respond to the baby's demands
  - → If the baby does not finish the feed within 1 hour of preparation, give it to an older child or add to cooking. DO NOT give the milk to the baby for the next feed
  - $\rightarrow$  Wash the utensils with water and soap soon after feeding the baby  $\rightarrow$  Make a new feed every time.
- Give her written instructions on safe preparation of formula.
- Explain the risks of replacement feeding and how to avoid them.
- Advise when to seek care.
- Advise about the follow-up visit.

# Explain the risks of replacement feeding

- Her baby may get diarrhoea if:
  - $\rightarrow$  hands, water, or utensils are not clean
  - $\rightarrow$  the milk stands out too long.
- Her baby may not grow well if:
  - $\rightarrow$  she/he receives too little formula each feed or too few feeds
  - $\rightarrow$  the milk is too watery
  - → she/he has diarrhoea.

### Follow-up for replacement feeding

- Ensure regular follow-up visits for growth monitoring.
- Ensure the support to provide safe replacement feeding.
- Advise the mother to return if:
  - ightarrow the baby is feeding less than 6 times, or is taking smaller quantities K6
- $\rightarrow$  the baby has diarrhoea
- $\rightarrow$  there are other danger signs.

### Give special counselling to the mother who is HIV-positive and chooses breastfeeding

- Support the mother in her choice of breastfeeding.
- Ensure good attachment and suckling to prevent mastitis and nipple damage <u>13</u>.
- Advise the mother to return immediately if:
  - → she has any breast symptoms or signs
  - $\rightarrow$  the baby has any difficulty feeding.
- Ensure a visit in the first week to assess attachment and positioning and the condition of the mother's breasts.
- Arrange for further counselling to prepare for the possibility of stopping breastfeeding early.
- Give psychosocial support G5.

# ANTIRETROVIRALS FOR HIV-POSITIVE WOMAN AND HER INFANT

Below are examples of ARV regimens. Use national guidelines for local protocols.

For longer regimens to further reduce the risk of transmission follow national guidelines.

Record the ARV medicine prescribed and given in the appropriate records – facility and home-based. DO NOT write HIV-positive.

		Woman					١	lewborn infar	nt			
		Pregr	nancy	Labour, delivery Postpartum**								
	ARVs	Before 28 weeks	Starting at 28 weeks	At onset of labour*	Until birth of the bal		r birth he baby	ARVs	Dose (syrup)	Give first dose	Then give	Duration
HIV-positive with HIV-AIDS related signs and symptoms	Triple therapy		የVtreatment pres Nevirapine (200	· · · ·			•	Zidovudine	4 mg/kg	8–12 hours after birth	every 12 hours	7 days***
HIV-positivewithout HIV- related signs	ted signs		7 days									
and symptoms	Zidovudine		300 mg every 12 hours	300 mg	every 3 hours	every 12 hours	7 days	Zidovudine	4 mg/kg	8–12 hours after birth	every 12 hours	7 days***
	Nevirapine			200 mg once				Nevirapine	2 mg/kg	within 72 hours	once	
ARVs during labour	Zidovudine			300 mg	every 3 hours			Zidovudine	4 mg/kg	8–12 hours after birth	every 12 hours	4 weeks
				Or 600 mg								
	Nevirapine			200 mg once				Nevirapine	2 mg/kg	within 72 hours	once	
Onlyminimal range of ARV treatment	Nevirapine			200 mg once				Nevirapine	2 mg/kg	within 72 hours	once	

\* At onset of contractions or rupture of membranes, regardless of the previous schedule

\*\*Arrange follow-up for further assessment and treatment within 2 weeks after delivery

\*\*\* Treat the newborn infant with Zidovudine for 4 weeks if mother received Zidovudine for less than 4 weeks during pregnancy,

### **RESPOND TO OBSERVED SIGNS OR VOLUNTEERED PROBLEMS**

Use this chart to manage the woman who has a problem while taking ARV medicines. These problems may be side effects of ARV medicines or of an underlying disease. Rule out serious pregnancy-related diseases before assuming that these are side effects of the drugs. Follow up in 2 weeks or earlier if condition worsens. In no improvement, refer the woman to hospital for further management.

### IF WOMAN HAS ANY PROBLEM SIGNS

### **ADVISE AND TREAT**

Headache	<ul> <li>Measure blood pressure and manage as in C2 and E3.</li> <li>If DBP ≤ 90mm give paracetamol for headache F4.</li> </ul>
Nausea or vomiting	<ul> <li>Measure blood pressure and manage as in C2 and E3.</li> <li>Advise to take medicines with food.</li> <li>If in the first 3 months of pregnancy, reassure that the morning nausea and vomiting will disappear after a few weeks.</li> <li>Refer to hospital if not passing urine.</li> </ul>
Fever	<ul> <li>Measure temperature.</li> <li>Manage according to C7-C8, C10-C11 if during pregnancy, and E6-E8 if in postpartum period.</li> </ul>
Diarrhoea	<ul> <li>Advise to drink one cup of fluid after every stool.</li> <li>Refer to hospital if blood in stool, not passing urine or fever &gt;38°C.</li> </ul>
Rash or blisters/ulcers	<ul> <li>If rash is limited to skin, follow up in 2 weeks.</li> <li>If severe rash, blisters and ulcers on skin, and mouth and fever &gt;38°C refer to hospital for further assessment and treatment.</li> </ul>
Yellow eyes or mucus membrane	Refer to hospital for further assessment and treatment.

# PREVENT HIV INFECTION IN HEALTH-CARE WORKERS AFTER ACCIDENTAL EXPOSURE WITH BODY FLUIDS (POST EXPOSURE PROPHYLAXIS)

## If you are accidentally exposed to blood or body fluids by cuts or pricks or splashes on face/eyes do the following steps:

- If blood or bloody fluid splashes on intact skin, immediately wash the area with soap and water.
- If the glove is damaged, wash the area with soap and water and change the glove.
- If splashed in the face (eye, nose, mouth) wash with water only.
- If a finger prick or a cut occurred during procedures such as suturing, allow the wound to bleed for a few seconds, do not squeeze out the blood. Wash with soap and water. Use regular wound care. Topical antiseptics may be used.
- Check records for the HIV status of the pregnant woman.\*
  - $\rightarrow$  If woman is HIV-negative no further action is required.
  - → If woman is HIV-positive take ARV medicines within 2 hours (see national guidelines for choice and duration of medicine).
  - $\rightarrow$  If the HIV status of the pregnant woman is unknown:
    - → Start the ARV medicine. Start PEP as soon as possible or within 72 hours before the virus has time to rapidly duplicate. (see national guidelines for choice and duration of medicine).
  - → Explain to the woman what has happened and seek her consent for rapid HIV test. DO NOT test the woman without her consent. Maintain confidentiality A2
  - $\rightarrow$  Perform the HIV test L6
    - $\rightarrow$  If the woman's HIV test is negative, discontinue the ARV medicines.
    - → If the woman's HIV test is positive, manage the woman as in C2 and E3. The health worker (yourself) should complete the ARV treatment and be tested after 6 weeks.
- Inform the supervisor of the exposure type and the action taken for the health-care worker (yourself). Retest the health-care worker 6 weeks after the exposure.

\* If the health-care worker (yourself) is HIV-positive no PEP is required. DO NOT test the woman.



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# THE WOMAN WITH SPECIAL NEEDS

 Image: Image:

H2 EMOTIONAL SUPPORT FOR THE WOMAN WITH SPECIAL NEEDS Sources of support Emotional support

H3 SPECIAL CONSIDERATIONS IN MANAGING THE PREGNANT ADOLESCENT When interacting with the adolescent Help the girl consider her options and to make decisions which best suit her needs



H4 SPECIAL CONSIDERATIONS FOR SUPPORTING THE WOMAN LIVING WITH VIOLENCE Support the woman living with violence Support the health service response to the

needs of women living with violence

If a woman is an adolescent or living with violence, she needs special consideration. During interaction with such women, use this section to support them.

# The woman with special needs

H1

# EMOTIONAL SUPPORT FOR THE WOMAN WITH SPECIAL NEEDS

You may need to refer many women to another level of care or to a support group. However, if such support is not available, or if the woman will not seek help, counsel her as follows. Your support and willingness to listen will help her to heal.

## Sources of support

A key role of the health worker includes linking the health services with the community and other support services available. Maintain existing links and, when possible, explore needs and alternatives for support through the following:

- Community groups, women's groups, leaders.
- Peer support groups.
- Other health service providers.
- Community counsellors.
- Traditional providers.
- Midwives, nurses or doctors

# **Emotional support**

Principles of good care, including suggestions on communication with the woman and her family, are provided on A2. When giving emotional support to the woman with special needs it is particularly important to remember the following:

- Create a comfortable environment:
  - ightarrow Be aware of your attitude
  - $\rightarrow$  Be open and approachable
  - $\rightarrow$  Use a gentle, reassuring tone of voice.
- Guarantee confidentiality and privacy:
  - → Communicate clearly about confidentiality. Tell the woman that you will not tell anyone else about the visit, discussion or plan.
- → If brought by a husband, parent or other family member, make sure you have time and space to talk privately. Ask the woman if she would like to include her family members in the examination and discussion. Make sure you seek her consent first.
- $\rightarrow$  Make sure the physical area allows privacy.
- Convey respect:
  - →Do not be judgmental
  - $\rightarrow$  Be understanding of her situation
  - $\rightarrow$  Overcome your own discomfort with her situation.
- Give simple, direct answers in clear language:
  - $\rightarrow$  Verify that she understands the most important points.
- Provide information according to her situation which she can use to make decisions.
- Be a good listener:
  - → Be patient. Women with special needs may need time to tell you their problem or make a decision
  - $\rightarrow$  Pay attention to her as she speaks.
- Follow-up visits may be necessary.

# SPECIAL CONSIDERATIONS IN MANAGING THE PREGNANT ADOLESCENT

Special training is required to work with adolescent girls and this guide does not substitute for special training. However, when working with an adolescent, whether married or unmarried, it is particularly important to remember the following.

## When interacting with the adolescent

- Do not be judgemental. You should be aware of, and overcome, your own discomfort with adolescent sexuality.
- Encourage the girl to ask questions and tell her that all topics can be discussed.
- Use simple and clear language.
- Repeat guarantee of confidentiality A2 G3.
- Understand adolescent difficulties in communicating about topics related to sexuality (fears of parental discovery, adult disapproval, social stigma, etc).

Support her when discussing her situation and ask if she has any particular concerns:

- Does she live with her parents, can she confide in them? Has she been subject to violence or coercion?
- Determine who knows about this pregnancy she may not have revealed it openly.
- Support her concerns related to puberty, social acceptance, peer pressure, forming relationships, social stigmas and violence.

# Help the girl consider her options and to make decisions which best suit her needs.

- Birth planning: delivery in a hospital or health centre is highly recommended. She needs to understand why this is important, she needs to decide if she will do it and and how she will arrange it.
- Prevention of STI or HIV/AIDS is important for her and her baby. If she or her husband are at risk of STI or HIV/AIDS, they should use a condom in all sexual relations. She may need advice on how to discuss condom use with her husband.
- Spacing of the next pregnancy for both the woman and baby's health, it is recommended that any next pregnancy be spaced by at least 2 or 3 years. The girl, with her husband if applicable, needs to decide if and when a second pregnancy is desired, based on their plans. Healthy adolescents can safely use any contraceptive method. The girl needs support in knowing her options and in deciding which is best for her. Be active in providing birth spacing counselling and advice.

# SPECIAL CONSIDERATIONS FOR SUPPORTING THE WOMAN LIVING WITH VIOLENCE

Violence against women by their husbands affects women's physical and mental health, including their reproductive health. While you may not have been trained to deal with this problem, women may disclose violence to you or you may see unexplained bruises and other injuries which make you suspect she may be suffering abuse. The following are some recommendations on how to respond and support her.

# Support the woman living with violence

- Provide a space where the woman can speak to you in privacy where her husband or others cannot hear. Do all you can to guarantee confidentiality, and reassure her of this.
- Gently encourage her to tell you what is happening to her. You may ask indirect questions to help her tell her story.
- Listen to her in a sympathetic manner. Listening can often be of great support. Do not blame her or make a joke of the situation. She may defend her husband's action. Reassure her that she does not deserve to be abused in any way.
- Help her to assess her present situation. If she thinks she or her children are in danger, explore together the options to ensure her immediate safety (e.g. can she stay with her parents or friends? Does she have, or could she borrow, money?)
- Explore her options with her. Help her identify local sources of support, either within her family, friends, and local community or through NGOs, shelters or social services, if available. Remind her that she has legal recourse, if relevant.
- Offer her an opportunity to see you again. Violence by husbands is complex, and she may be unable to resolve her situation quickly.
- Document any forms of abuse identified or concerns you may have in the file.
- Discuss with her the option of community support groups

## Support the health service response to needs of women living with violence

- Help raise awareness among health care staff about violence against women and its prevalence in the community the clinic serves.
- Find out what if training is available to improve the support that health care staff can provide to those women who may need it.
- Display posters, leaflets and other information that condemn violence, and information on groups that can provide support.
- Make contact with organizations working to address violence in your area. Identify those that can provide support for women in abusive relationships. If specific services are not available, contact other groups such as religious people, women's groups, elders, or other local groups and discuss with them support they can provide or other what roles they can play, like resolving disputes. Ensure you have a list of these resources available.

# COMMUNITY SUPPORT FOR MATERNAL AND NEWBORN HEALTH

<sup>12</sup> ESTABLISH LINKS

Coordinate with other health care providers and community groups Establish links with traditional birth attendants and traditional healers

- I3 INVOLVE THE COMMUNITY IN QUALITY OF SERVICES
- Everyone in the community should be informed and involved in the process of improving the health of their community members. This section provides guidance on how their involvement can help improve the health of women and newborns.
- Different groups should be asked to give feedback and suggestions on how to improve the services the health facilities provide.

Use the following suggestions when working with families and communities to support the care of women and newborns during pregnancy, delivery, post-abortion and postpartum periods.

Community support for maternal and newborn health

# Establish links

# Coordinate with other health care providers and community groups

- Meet with others in the community to discuss and agree messages related to pregnancy, delivery, postpartum and post-abortion care of women and newborns.
- Work together with leaders and community groups to discuss the most common health problems and find solutions. Groups to contact and establish relations which include: → other health care providers
  - $\rightarrow$  traditional birth attendants and healers
  - $\rightarrow$  maternity waiting homes
  - $\rightarrow$  adolescent health services
  - $\rightarrow$  schools
  - $\rightarrow$  nongovernmental organizations
  - → breastfeeding support groups
  - $\rightarrow$  district health committees
  - →women's groups
  - $\rightarrow$  agricultural associations
  - $\rightarrow$  neighbourhood committees
  - →youth groups
  - $\rightarrow$  religious groups.
- Establish links with peer support groups and referral sites for women with special needs, including women living with HIV, adolescents and women living with violence. Have available the names and contact information for these groups and referral sites, and encourage the woman to seek their support.
- Create a group of health professionals including educators to support victims of rape and violence.

# Establish links with traditional birth attendants and traditional healers

- Contact traditional birth attendants and healers who are working in the health facility's catchment area. Discuss how you can support each other.
- Respect their knowledge, experience and influence in the community.
- Share with them the information you have and listen to their opinions on this. Provide copies of health education materials that you distribute to community members and discuss the content with them. Have them explain knowledge that they share with the community. Together you can create new knowledge which is more locally appropriate.
- Review how together you can provide support to women, families and groups for maternal and newborn health.
- Involve TBAs and healers in counselling sessions in which advice is given to families and other community members. Include TBAs in meetings with community leaders and groups.
- Discuss the recommendation that all deliveries should be performed by a skilled birth attendant. When not possible or not preferred by the woman and her family, discuss the requirements for safer delivery at home, postpartum care, and when to seek emergency care.
- Invite TBAs to act as labour companions for women they have followed during pregnancy, if this is the woman's wish.
- Make sure TBAs are included in the referral system.
- Clarify how and when to refer, and provide TBAs with feedback on women they have referred.

# **INVOLVE THE COMMUNITY IN QUALITY OF SERVICES**

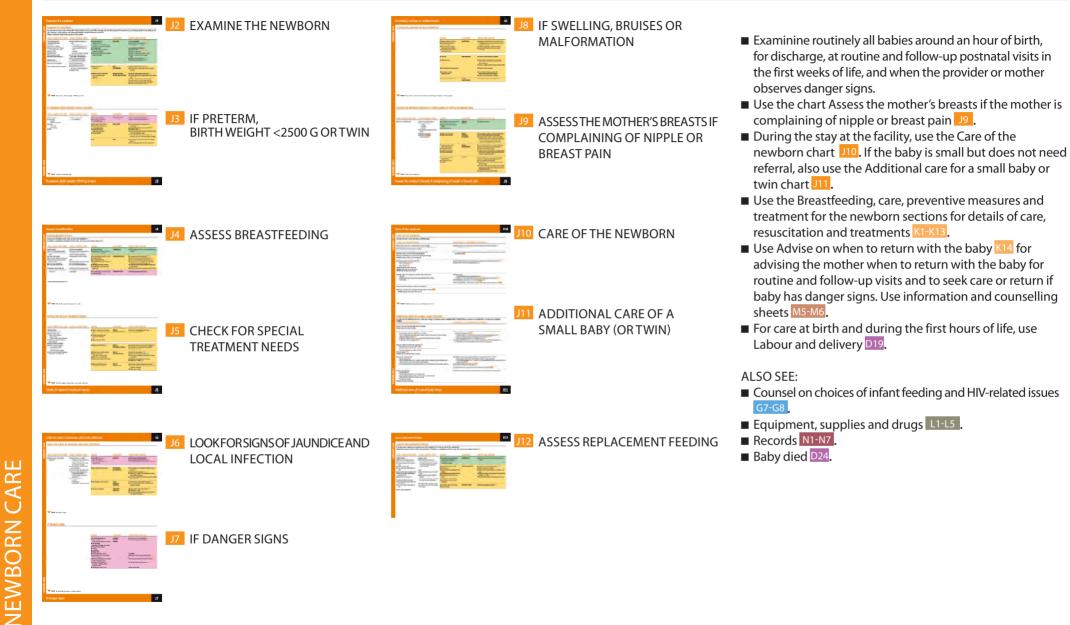
All in the community should be informed and involved in the process of improving the health of their members. Ask the different groups to provide feedback and suggestions on how to improve the services the health facility provides.

- Find out what people know about maternal and newborn mortality and morbidity in their locality. Share data you may have and reflect together on why these deaths and illnesses may occur. Discuss with them what families and communities can do to prevent these deaths and illnesses. Together prepare an action plan, defining responsibilities.
- Discuss the different health messages that you provide. Have the community members talk about their knowledge in relation to these messages. Together determine what families and communities can do to support maternal and newborn health.
- Discuss some practical ways in which families and others in the community can support women during pregnancy, post-abortion, delivery and postpartum periods:
  - → Recognition of and rapid response to emergency/danger signs during pregnancy, delivery and postpartum periods
- → Provision of food and care for children and other family members when the woman needs to be away from home during delivery, or when she needs to rest
- $\rightarrow$  Accompanying the woman after delivery
- $\rightarrow$  Support for payment of fees and supplies
- → Motivation of male partners to help with the workload, accompany the woman to the clinic, allow her to rest and ensure she eats properly. Motivate communication between males and their partners, including discussing postpartum family planning needs.
- Support the community in preparing an action plan to respond to emergencies. Discuss the following with them:
  - $\rightarrow$  Emergency/danger signs knowing when to seek care
  - → Importance of rapid response to emergencies to reduce mother and newborn death, disability and illness
  - → Transport options available, giving examples of how transport can be organized
  - $\rightarrow$  Reasons for delays in seeking care and possible difficulties, including heavy rains
  - $\rightarrow$  What services are available and where
  - $\rightarrow$  What options are available
  - $\rightarrow$  Costs and options for payment
  - ightarrow A plan of action for responding in emergencies, including roles and responsibilities.

# Involve the community in quality of services



# **NEWBORN CARE**



# Newborn care

# **EXAMINE THE NEWBORN**

Use this chart to assess the newborn after birth, classify and treat, possibly around an hour; for discharge (not before 12 hours); and during the first week of life at routine, follow-up, or sick newborn visit. Record the findings on the postpartum record NG. Always examine the baby in the presence of the mother.

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
<ul> <li>Check maternal and newborn record or ask the mother:</li> <li>How old is the baby?</li> <li>Preterm (less than 37 weeks or 1 month or more early)?</li> <li>Breech birth?</li> <li>Difficult birth or other complicate delivery?</li> <li>Resuscitated at birth or other complicate delivery?</li> <li>Has baby had convulsions?</li> <li>Has the baby cried immediately after birth?</li> </ul>	<ul> <li>Assess breathing (baby must be calm)</li> <li>→ listen for grunting</li> <li>→ count breaths: are they 30-60 per minute? Repeat the count if elevated</li> <li>→ look at the chest for in-drawing.</li> <li>Look at the chest for in-drawing.</li> <li>Look at the movements: are they normal and symmetrical?</li> <li>Look at the presenting part — is there swelling and bruises?</li> <li>Look at abdomen for pallor.</li> <li>Look for malformations.</li> <li>Look for jaundice.</li> <li>Do you have concerns?</li> <li>How is the baby feeding? Is the baby being breastfed or gets bottle feeding and why?</li> <li>Ke mother very ill or transferred?</li> <li>id the baby receive any immunization or not?</li> <li>Assess breathing (baby must be calm)</li> <li>→ listen for grunting</li> <li>→ count breaths: are they 30-60 per minute? Repeat the count if elevated</li> <li>→ look at the chest for in-drawing.</li> <li>Look at the movements: are they normal and symmetrical?</li> <li>Take body temperature.</li> <li>Look at the presenting part — is there swelling and bruises?</li> <li>Look for jaundice.</li> <li>Feel for warmth. If cold, or very warm, measure temperature.</li> <li>Weigh the baby.</li> <li>Measure the length and the head circumference.</li> <li>Look at the umbilicus if there are any abnormalities, discharge or anything put on</li> </ul>	<ul> <li>Normal weight baby (2500-g or more).</li> <li>Feeding well — suckling effectively 8 times in 24 hours, day and night.</li> <li>No danger signs.</li> <li>No special treatment needs or treatment completed.</li> <li>Small baby, feeding well and gaining weight adequately.</li> </ul>	WELL BABY	<ul> <li>If first examination:</li> <li>Ensure care for the newborn J10.</li> <li>Examine again for discharge.</li> <li>If pre-discharge examination:</li> <li>Immunize if due K13.</li> <li>Advise on baby care K2 K9-K10.</li> <li>Advise on routine visit at age 3-7 days K14.</li> <li>Advise on when to return if danger signs K14.</li> <li>Record in home-based record.</li> <li>If further visits, repeat advices.</li> </ul>
Ask the mother: ■ Do you have concerns? ■ How is the baby feeding? Is the baby being breastfed or gets		■ Body temperature 35-36.4°C.	MILD HYPOTHERMIA	<ul> <li>Re-warm the baby skin-to-skin K9.</li> <li>If temperature not rising after 2 hours, reassess the baby.</li> </ul>
bottle feeding and why? Is the mother very ill or transferred? Did the baby receive any immunization or not? Is the baby having stool and		<ul> <li>Mother not able to breastfeed due to receiving special treatment.</li> <li>Mother transferred.</li> </ul>	MOTHER NOT ABLE TOTAKE CARE FOR BABY	<ul> <li>Help the mother express breast milk K5.</li> <li>Consider alternative feeding methods until mother is well K5-K6.</li> <li>Provide care for the baby, ensure warmth K9.</li> <li>Ensure mother can see the baby regularly.</li> <li>Transfer the baby with the mother if possible.</li> <li>Ensure care for the baby at home.</li> </ul>

# IF PRETERM, BIRTH WEIGHT <2500-G OR TWIN

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
■ Baby just born. ■ Birth weight $\rightarrow$ <1500-g $\rightarrow$ 1500-g to <2500-g.	If this is repeated visit, assess weight gain	<ul> <li>Birth weight &lt;1500g.</li> <li>Very preterm &lt;32 weeks or &gt;2 months early).</li> </ul>	VERY SMALL BABY	<ul> <li>Refer baby urgently to hospital K14.</li> <li>Ensure extra warmth during referral.</li> </ul>
<ul> <li>Preterm</li> <li>→ &lt;32 weeks</li> <li>→ 33-36 weeks.</li> <li>Twin.</li> </ul>		<ul> <li>Birth weight 1500g-&lt;2500g.</li> <li>Preterm baby (32-36 weeks or 1-2 months early).</li> <li>Several days old and weight gain inadequate.</li> <li>Feeding difficulty.</li> </ul>	SMALL BABY	<ul> <li>Give special support to breastfeed the small baby K4.</li> <li>Ensure additional care for a small baby J11.</li> <li>Reassess daily J11.</li> <li>Do not discharge before feeding well, gaining weight and body temperature stable.</li> <li>If feeding difficulties persist for 3 days and otherwise well, refer for breastfeeding counselling.</li> </ul>
		■ Twin	TWIN	<ul> <li>Give special support to the mother to breastfeed twins </li> <li>Do not discharge until both twins can go home.</li> </ul>



NEXT: Assess breastfeeding

# If preterm, birth weight <2500 g or twin

J3

# Assess breastfeeding

# **ASSESS BREASTFEEDING**

Assess breastfeeding in every baby as part of the examination. If mother is complaining of nipple or breast pain, also assess the mother's breasts 19.

# ASK, CHECKRECORD LOOK, LISTEN, FEEL SIGNS

#### Ask the mother

- How is the breastfeeding going?
- Has your baby fed in the previous hour?
- Is there any difficulty?
- Is your baby satisfied with the feed?
- Have you fed your baby any other foods or drinks?
- How do your breasts feel?
- Do you have any concerns?

If baby more than one day old:

How many times has your baby fed in 24 hours?

Observe a breastfeed.
If the baby has not fed in the previous
hour, ask the mother to put the
baby on her breasts and observe
breastfeeding for about 5 minutes.

#### Look

- Is the baby able to attach correctly?
- Is the baby well-positioned?
- Is the baby suckling effectively?

If mother has fed in the last hour, ask her to tell you when her baby is willing to feed again.

Suckling effectively. **FEEDING WELL** Encourage the mother to continue breastfeeding Breastfeeding 8 times in 24 hours on on demand demand day and night Not yet breastfed (first hours of life). FEEDING ■ Support exclusive breastfeeding K2-K3. Not well attached. DIFFICULTY Help the mother to initiate breastfeeding K3. Not suckling effectively. Teach correct positioning and attachment K3. Advise to feed more frequently, day and night. Breastfeeding less than 8 times per 24 hours. Reassure her that she has enough milk. Receiving other foods or drinks. Advise the mother to stop feeding the baby other foods or drinks. Several days old and inadequate Reassess at the next feed or follow-up visit in 2 days. weight gain. ■ Not suckling (after 6 hours of age). Refer baby urgently to hospital K14. NOT ABLE TO Stopped feeding. FEED

CLASSIFY TREAT AND ADVISE

To assess replacement feeding see 112

# CHECK FOR SPECIAL TREATMENT NEEDS

ASK, CHECK RECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
Check record for special treatment needs ■ Has the mother had within 2 days of delivery: → fever >38°C? → infection treated with antibiotics? ■ Membranes ruptured >18 hours before delivery?		<ul> <li>Baby &lt;1 day old and membranes ruptured &gt;18 hours before delivery, or</li> <li>Mother being treated with antibiotics for infection, or</li> <li>Mother has fever &gt;38°C.</li> </ul>	RISK OF BACTERIAL INFECTION	<ul> <li>Give baby 2 IM antibiotics for 5 days K12.</li> <li>Assess baby daily 12-17.</li> </ul>
<ul> <li>Mother tested TPHA?</li> <li>Mother tested HIV-positive?</li> <li>→ is or has been on ARV</li> <li>→ has she received</li> </ul>		Mother tested TPHA.	RISK OF CONGENITAL SYPHILIS	<ul> <li>Give baby single dose of benzathine penicillin K12.</li> <li>Ensure mother and husband and if there are other wives are treated F6.</li> <li>Follow up in 2 weeks.</li> </ul>
<ul> <li>infant feeding counselling?</li> <li>Is the mother receiving TB treatment which began &lt;2 months ago?</li> </ul>		<ul> <li>Mother known to be HIV-positive.</li> <li>Mother has not been counselled on infant feeding.</li> <li>Mother chose breastfeeding.</li> <li>Mother chose replacement feeding.</li> </ul>	RISK OF HIV TRANSMISSION	<ul> <li>Give ARV to the newborn G9.</li> <li>Counsel on infant feeding options G7.</li> <li>Give special counselling to mother who is breast feeding G8.</li> <li>Teach the mother replacement feeding.</li> <li>Follow up in 2 weeks G8.</li> </ul>
		Mother started TB treatment <2 months before delivery.	RISK OF TUBERCULOSIS	<ul> <li>Give baby propylaxis according to the MoH guidelines K13.</li> <li>Give BCG vaccination to the baby only when baby's treatment completed and tuberculin test is negative.</li> <li>Follow up in 2 weeks.</li> </ul>

NEXT: Look for signs of jaundice and local infection

# Check for special treatment needs

J5

# LOOK FOR SIGNS OF JAUNDICE AND LOCAL INFECTION

ASK, CHECK RECORD What has been applied to the umbilicus?

#### Look at the skin and the eyes, are they yellow?

→ if baby is less than 24 hours old, look at skin on the face

LOOK, LISTEN, FEEL

- → if baby is 24 hours old or more, look at palms and soles.
- Look at the eyes. Are they swollen and draining pus?
- Look at the skin, especially around the neck, armpits, inguinal area:
  - $\rightarrow$  Are there skin pustules?
  - → Is there swelling, hardness or large bullae?
- Look at the umbilicus:
  - $\rightarrow$  Is it red?
  - $\rightarrow$  Draining pus?
  - → Does redness extend to the skin?
  - → Pustules around the umbilicus

SIGNS	CLASSIFY	TREAT AND ADVISE
<ul> <li>Yellow skin on face and only &lt;24 hours old.</li> <li>Yellow palms and soles and ≥24 hours old.</li> </ul>	JAUNDICE	<ul> <li>Refer baby urgently to hospital K14.</li> <li>Encourage breastfeeding on the way.</li> <li>If feeding difficulty, give expressed breast milk by cup K6.</li> </ul>
Eyes swollen and draining pus.	GONOCOCCAL EYE INFECTION	<ul> <li>Give single dose of appropriate antibiotic for eye infection K12.</li> <li>Teach mother to treat eyes K13.</li> <li>Follow up in 2 days. If no improvement or worse, refer urgently to hospital.</li> <li>Assess and treat mother and her husband and if there are other wives for possible gonorrhea E8.</li> </ul>
Red umbilicus or skin around it.	LOCAL UMBILICAL INFECTION	<ul> <li>Teach mother to treat umbilical infection K13.</li> <li>If no improvement in 2 days, or if worse, refer urgently to hospital.</li> </ul>
Less than 10 pustules	LOCAL SKIN INFECTION	<ul> <li>Teach mother to treat skin infection K13.</li> <li>Follow up in 2 days.</li> <li>If no improvement of pustules in 2 days or more, refer urgently to hospital.</li> </ul>

# **IF DANGER SIGNS**

SIGNS	CLASSIFY	TREAT AND ADVISE
<ul> <li>Any of the following signs:</li> <li>Fast breathing (more than 60 breaths per minute).</li> <li>Slow breathing (less than 30 breaths per minute).</li> <li>Severe chest in-drawing</li> <li>Grunting</li> <li>Convulsions.</li> <li>Floppy or stiff.</li> </ul>	POSSIBLE SERIOUS ILLNESS	<ul> <li>Give first dose of 2 IM antibiotics K12.</li> <li>Refer baby urgently to hospital K14.</li> </ul>
■ Fever (temperature >38°C).		In addition:
■ Temperature <35°C or not		Re-warm and keep warm during referral K9.
rising after rewarming.		Continue skin to skin care and breastfeeding.
Umbilicus draining pus or umbilical redness and swelling		Treat local umbilical infection before referral K13
extending to skin		
<ul> <li>More than 10 skin pustules or</li> </ul>		Treat skin infection before referral K13.
bullae, or swelling, redness,		
hardness of skin.		
Bleeding from stump or cut.		Stop the bleeding.
Pallor.		
Abdominal distension, and		
projectile vomiting		

NEXT: If swelling, bruises or malformation

# If danger signs

#### **SIGNS** CLASSIFY TREAT AND ADVISE Bruises, swelling on buttocks. **BIRTH INJURY** Explain to husband that it does not hurt the baby, ■ Swollen head — bump on it will disappear in a week or two and no special one or both sides. treatment is needed. Abnormal position of legs ■ DO NOT force legs into a different position. (after breech presentation). Gently handle the limb that is not moving, Asymmetrical arm movement, do not pull. arm does not move. Club foot MALFORMATION Refer for special treatment to the hospital if available. Cleft palate or lip Help mother to breastfeed. If not successful, teach her alternative feeding methods depending on the type and degree of the malformation K5-K6. Plan to follow up. Advise on surgical correction at age of several Odd looking, unusual months. appearance Refer to hospital for special evaluation. Open tissue on head, Cover with sterile tissues soaked with abdomen or back sterile saline solution before referral. Refer for special treatment if available. Manage according to national guidelines. SEVERE Other abnormal appearance. MALFORMATION

## IF SWELLING, BRUISES OR MALFORMATION

NEXT: Assess the mother's breasts if complaining of nipple or breast pain

# ASSESS THE MOTHER'S BREASTS IF COMPLAINING OF NIPPLE OR BREAST PAIN

ASK,CHECKRECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
How do your breasts feel?	<ul> <li>Look at the nipple for fissure</li> <li>Look at the breasts for:         <ul> <li>→ swelling</li> <li>→ shininess</li> <li>→ redness.</li> </ul> </li> <li>Feel gently for painful part of the breast.</li> </ul>	<ul> <li>No swelling, redness or tenderness.</li> <li>Normal body temperature.</li> <li>Nipple not sore and no fissure visible.</li> <li>Baby well attached.</li> </ul>	BREASTS HEALTHY	Reassure the mother.
	<ul> <li>Measure temperature.</li> <li>Observe a breastfeed if not yet done 14.</li> </ul>	<ul> <li>Nipple sore or fissured.</li> <li>Baby not well attached.</li> </ul>	NIPPLE SORENESS OR FISSURE	<ul> <li>Encourage the mother to continue breastfeeding.</li> <li>Teach correct positioning and attachment <sup>K3</sup>.</li> <li>Reassess after 2 feeds (or 1 day). If not better, teach the mother how to express breast milk from the affected breast and feed baby by cup, and continue breastfeeding on the healthy side.</li> </ul>
		<ul> <li>Both breasts are swollen, shiny and patchy red.</li> <li>Temperature &lt;38°C.</li> <li>Baby not well attached.</li> <li>Not yet breastfeeding.</li> </ul>	BREAST ENGORGEMENT	<ul> <li>Encourage the mother to continue breastfeeding.</li> <li>Teach correct positioning and attachment K3.</li> <li>Advise to feed more frequently.</li> <li>Reassess after 2 feeds (1 day). If not better, teach mother how to express enough breast milk before the feed to relieve discomfort K5.</li> <li>Give the mother medication for pain and fever.</li> </ul>
		<ul> <li>Part of breast is painful, swollen and red.</li> <li>Temperature &gt;38°C</li> <li>Feels ill.</li> </ul>	MASTITIS	<ul> <li>Encourage mother to continue breastfeeding.</li> <li>Teach correct positioning and attachment K3.</li> <li>Give cloxacillin for 10 days F5.</li> <li>Reassess in 2 days. If no improvement or worse, refer to hospital.</li> <li>If mother is HIV+ and is breastfeeding, let her breastfeed on the healthy breast. Express milk from the affected breast and discard until no fever K5.</li> <li>If severe pain, give paracetamol F4.</li> </ul>

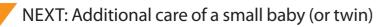
NEXT: Return to 💴 and complete the classification, then go to 💷

# Care of the newborn

**NEWBORN CARE** 

CARE OF THE NEWBORN	
Use this chart for care of all babies until discharge.	
CARE AND MONITORING	RESPOND TO ABNORMAL FINDINGS
<ul> <li>Ensure the room is warm (not less than 25°C and no draught).</li> <li>Keep the baby in the room with the mother, in her bed or within easy reach.</li> <li>Let the mother and baby sleep under a bednet.</li> </ul>	If the baby is in a cot, ensure baby is dressed or wrapped and covered by a blanket. Cover the head with a hat.
<ul> <li>Support exclusive breastfeeding on demand day and night.</li> <li>Ask the mother to alert you if breastfeeding difficulty.</li> <li>Assess breastfeeding in every baby before planning for discharge.</li> <li>DO NOT discharge if baby is not yet feeding well.</li> </ul>	If mother reports breastfeeding difficulty, assess breastfeeding and help the mother with positioning and attachment
<ul> <li>Teach the mother how to care for the baby.</li> <li>→ Keep the baby warm K9</li> <li>→ Give cord care K10</li> <li>→ Ensure hygiene K10</li> <li>DO NOT expose the baby in direct sun.</li> <li>DO NOT put the baby on any cold surface.</li> <li>DO NOT bath the baby before 24 hours.</li> </ul>	<ul> <li>If the mother is unable to take care of the baby, provide care or teach the husband or family members K9-K10</li> <li>Wash hands before and after handling the baby.</li> </ul>
<ul> <li>Ask the mother and husband to watch the baby and alert you if         <ul> <li>→ Feet cold</li> <li>→ Breathing difficulty: grunting, fast or slow breathing, chest in-drawing</li> <li>→ Any bleeding</li> <li>→ Convulsions</li> <li>→ Is not feeding.</li> </ul> </li> </ul>	<ul> <li>If feet are cold:         <ul> <li>→ Teach the mother to put the baby skin-to-skin K13.</li> <li>→ Reassess in 1 hour; if feet still cold, measure temperature and re-warm the baby K9.</li> </ul> </li> <li>If bleeding from cord, check if tie is loose and retie the cord.</li> <li>If other bleeding, assess the baby immediately J2-J7.</li> <li>If breathing difficulty or mother reports any other abnormality, examine the baby as on J2-J7.</li> </ul>
■ Give prescribed treatments according to the schedule K12.	
Examine every baby before planning to discharge mother and baby J2-J9. DO NOT discharge before baby is 12 hours old	

DO NOT discharge before baby is 12 hours old.



# ADDITIONAL CARE OF A SMALL BABY (OR TWIN)

Use this chart for additional care of a small baby: preterm, 1-2 months early or weighing 1500g-<2500g. Refer to hospital a very small baby: >2 months early, weighing <1500g

### CARE AND MONITORING

# **RESPONSE TO ABNORMAL FINDINGS**

- Plan to keep the small baby longer before discharging. Allow visits to the mother and baby. ■ Give special support for breastfeeding the small baby (or twins) K4: ■ If the small baby is not suckling effectively and does not have other danger signs,  $\rightarrow$  Encourage the mother to breastfeed every 2-3 hours. consider alternative feeding methods K5-K6  $\rightarrow$  Assess breastfeeding daily: attachment, suckling, duration and frequency of feeds,  $\rightarrow$  Teach the mother how to hand express breast milk directly into the baby's mouth K5 and baby satisfaction with the feed J4 K6  $\rightarrow$  Teach the mother to express breast milk and cup feed the baby K5-K6  $\rightarrow$  If alternative feeding method is used, assess the total daily amount of milk given.  $\rightarrow$  Determine appropriate amount for daily feeds by age K6.  $\rightarrow$  Weigh daily and assess weight gain K7 ■ If feeding difficulty persists for 3 days, or weight loss greater than 10% of birth weight and no other problems, refer for breastfeeding counselling and management. Ensure additional warmth for the small baby K9:  $\rightarrow$  Ensure the room is very warm (25°–28°C).  $\rightarrow$  Teach the mother how to keep the small baby warm in skin-to-skin contact  $\rightarrow$  Provide extra blankets for mother and baby. Ensure hygiene K10. DO NOT bath the small baby. Wash as needed. ■ Assess the small baby daily: ■ If difficult to keep body temperature within the normal range (36.5°C to 37.5°C):  $\rightarrow$  Keep the baby in skin-to-skin contact with the mother as much as possible  $\rightarrow$  Measure temperature → If body temperature below 36.5°C persists for 2 hours despite skin-to-skin contact  $\rightarrow$  Assess breathing (baby must be quiet, not crying): listen for grunting; count breaths per minute, repeat the count if >60 or <30; look for chest in-drawing with mother, assess the baby J2-J8  $\rightarrow$  Look for jaundice (first 10 days of life): first 24 hours on the abdomen, then on palms ■ If breathing difficulty, assess the baby J2-J8. ■ If jaundice, refer the baby to the hospital for assessment and for phototherapy. and soles. ■ If any maternal concern, assess the baby and respond to the mother J2-J8 Plan to discharge when: ■ If the mother and baby are not able to stay, ensure daily (home) visits or send to  $\rightarrow$  Breastfeeding well hospital.  $\rightarrow$  Gaining weight adequately on 3 consecutive days  $\rightarrow$  Body temperature between 36.5° and 37.5°C on 3 consecutive days  $\rightarrow$  Mother able and confident in caring for the baby  $\rightarrow$  No maternal concerns.
- Assess the baby for discharge.

**NEWBORN CARE** 

# Additional care of a small baby (twin)

J11

# ASSESS REPLACEMENT FEEDING

How do your breasts feel?

If mother chose replacement feeding assess the feeding in every baby as part of the examination. Advise the mother on how to relieve engorgement 📧. If mother is complaining of breast pain, also assess the mother's breasts 🧾.

ASK,CHECKRECORD	LOOK, LISTEN, FEEL	SIGNS	CLASSIFY	TREAT AND ADVISE
Ask the mother What are you feeding the baby? How are you feeding your baby?	Observe a feed ■ If the baby has not fed in the previous hour, ask the mother to feed the baby and observe	<ul> <li>Sucking and swallowing adequate amount of milk, spilling little.</li> <li>Feeding 8 times in 24 hours on demand day and night.</li> </ul>	FEEDING WELL	Encourage the mother to continue feeding by cup on demand K6.
<ul> <li>Has your baby fed in the previous hour?</li> <li>Is there any difficulty?</li> <li>How much milk is baby taking per feed?</li> <li>Is your baby satisfied with the feed?</li> <li>Have you fed your baby any other foods or drinks?</li> <li>Do you have any concerns?</li> <li>If baby more than one day old:</li> </ul>	<ul> <li>feeding for about 5 minutes. Ask her to prepare the feed.</li> <li>Look</li> <li>Is she holding the cup to the baby's lips?</li> <li>Is the baby alert, opens eyes and mouth?</li> <li>Is the baby sucking and swallowing the milk effectively, spilling little?</li> </ul>	<ul> <li>Not yet fed (first 6 hours of life).</li> <li>Not fed by cup.</li> <li>Not sucking and swallowing effectively, spilling</li> <li>Not feeding adequate amount per day.</li> <li>Feeding less than 8 times per 24 hours.</li> <li>Receiving other foods or drinks.</li> <li>Several days old and inadequate weight gain.</li> </ul>	FEEDING DIFFICULTY	<ul> <li>Teach the mother replacement feeding G8.</li> <li>Teach the mother cup feeding K6.</li> <li>Advise to feed more frequently, on demand, day and night.</li> <li>Advise the mother to stop feeding the baby other foods or drinks or by bottle.</li> <li>Reassess at the next feed or follow-up visit in 2 days.</li> </ul>
<ul> <li>How many times has your baby fed in 24 hours?</li> <li>How much milk is baby taking per day?</li> </ul>	If mother has fed in the last hour, ask her to tell you when her baby is willing to feed again.	<ul> <li>Not sucking (after 6 hours of age).</li> <li>Stopped feeding.</li> </ul>	NOT ABLE TO FEED	Refer baby urgently to hospital K14.

# BREASTFEEDING, CARE, PREVENTIVE MEASURES AND TREATMENT FOR THE NEWBORN



<sup>к</sup>2 – K2 COUNSEL ON BREASTFEEDING (1) Counsel on importance of exclusive breast feeding Help the mother to initiate breastfeeding

> **COUNSEL ON BREASTFEEDING (2)** Support exclusive breastfeeding Teach correct positioning and attachment for

breastfeeding





#### OTHER BREASTFEEDING SUPPORT Give special support to the mother who is not yet breastfeeding Advise the mother who is not breastfeeding at all on how to relieve engorgement If the baby does not have a mother

**ENSURE WARMTH FOR THE BABY** 

Keep the baby warm Keep a small baby warm Rewarm the baby skin-to-skin



#### ADVISE WHEN TO RETURN WITH THE BABY Routine visits Follow-up visits Advise the mother to seek care for the baby Refer baby urgently to hospital

**K**1

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#### ка К4 COUNSEL ON BREASTFEEDING (3) Give special support to breastfeed the small baby (preterm and/or low birth weight)

Give special support to breastfeed twins

ALTERNATIVE FEEDING METHODS (1) Express breast milk Hand express breast milk directly into the baby's mouth



# OTHER BABY CARF

Cord care Sleeping Hygiene

### NEWBORN RESUSCITATION

Keep the baby warm Open the airway If still not breathing, ventilate... If breathing or crying, stop ventilating If not breathing or gasping at all after 20 minutes of ventilation

- This section has details on breastfeeding, care of the baby, treatments, immunization, routine and follow-up visits and urgent referral to hospital.
- General principles are found in the section on good care A1-A6
- If mother HIV-positive, see also G7-G11



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#### ALTERNATIVE FEEDING METHODS (2) Cup feeding expressed breast milk Quantity to feed by cup Signs that baby is receiving adequate amount of milk

WEIGH AND ASSESS WEIGHT GAIN Weigh baby in the first month of life Assess weight gain Scale maintenance



### TREAT AND IMMUNIZE THE BABY(1)

Treat the baby Give 2 IM antibiotics (first week of life) Give IM benzathine penicillin to baby (single dose) if mother tested RPR positive Give IM antibiotic for possible gonococcal eye infection (single dose)

TREAT AND IMMUNIZETHE BABY (2) Treat local infection Give isoniazid (INH) prophylaxis to newborn Immunize the newborn

### **COUNSEL ON BREASTFEEDING**

### Counsel on importance of exclusive breastfeeding during pregnancy and after birth

INCLUDE PARTNER OR OTHER FAMILY MEMBERS IF POSSIBLE

Explain to the mother that:

- Breast milk contains exactly the nutrients a baby needs
- $\rightarrow$  is easily digested and efficiently used by the baby's body
- $\rightarrow$  protects a baby against infection.
- Babies should start breastfeeding within 1 hour of birth. They should not have any other food or drink before they start to breastfeed.
- Babies should be exclusively breastfed for the first 6 months of life.
- Breastfeeding
- → helps baby's development and mother/baby attachment
- $\rightarrow$  can help delay a new pregnancy (see D27 for breastfeeding and birth spacing).

For counselling if mother HIV-positive, see G7.

# Help the mother to initiate breastfeeding within 1 hour, after the delivery of the baby

- After birth, let the baby rest comfortably on the mother's chest in skin-to-skin contact.
- Tell the mother to help the baby to her breast when the baby seems to be ready, usually within the first hour. Signs of readiness to breastfeed are:
  - → baby looking around/moving
  - $\rightarrow$  mouth open
  - $\rightarrow$  searching.
- Check that position and attachment are correct at the first feed. Offer to help the mother at any time K3.
- Let the baby release the breast by her/himself; then offer the second breast.
- If the baby does not feed in 1 hour, examine the baby 12–19. If healthy, leave the baby with the mother to try later. Assess in 3 hours, or earlier if the baby is small 14.
- If the mother is ill and unable to breastfeed, help her to express breast milk and feed the baby by cup K6. On day 1 express in a spoon and feed by spoon.
- If mother cannot breastfeed at all, use one of the following options:
  - → If not available, then commercial infant formula.
- $\rightarrow$  If not available, then home-made formula from modified animal milk.

- Keep the mother and baby together in bed or within easy reach. DO NOT separate them.
- Encourage breastfeeding on demand, day and night, as long as the baby wants.
- → A baby needs to feed day and night, 8 or more times in 24 hours from birth. Only on the first day may a full-term baby sleep many hours after a good feed.
- $\rightarrow$  A small baby should be encouraged to feed, day and night, at least 8 times in 24 hours from birth.
- Help the mother whenever she wants, and especially if she is a first time or adolescent mother.
- Let baby release the breast, then offer the second breast.
- If mother must be absent, let her express breast milk and let somebody else feed the expressed breast milk to the baby by cup.

DO NOT force the baby to take the breast. DO NOT interrupt feed before baby wants. DO NOT give any other feeds or water. DO NOT use artificial teats or pacifiers.

- Advise the mother on medication and breastfeeding
- $\rightarrow$  Most drugs given to the mother in this guide are safe and the baby can be breastfed.
- $\rightarrow$  If mother is taking cotrimoxazole or fansidar, monitor baby for jaundice.
- Advice the mother to practice hygiene before and during breastfeeding.

# Teach correct positioning and attachment for breastfeeding

- Show the mother how to hold her baby. She should:
- $\rightarrow$  make sure the baby's head and body are in a straight line
- $\rightarrow$  make sure the baby is facing the breast, the baby's nose is opposite her nipple
- $\rightarrow$  hold the baby's body close to her body
- $\rightarrow$  support the baby's whole body, not just the neck and shoulders
- Show the mother how to help her baby to attach. She should:
- $\rightarrow$  touch her baby's lips with her nipple
- $\rightarrow$  wait until her baby's mouth is opened wide
- $\rightarrow$  move her baby quickly onto her breast, aiming the infant's lower lip well below the nipple.
- Look for signs of good attachment:
  - $\rightarrow\,$  more of areola visible above the baby's mouth
- $\rightarrow$  mouth wide open
- $\rightarrow$  lower lip turned outwards
- $\rightarrow$  baby's chin touching breast
- Look for signs of effective suckling (that is, slow, deep sucks, sometimes pausing).
- If the attachment or suckling is not good, try again. Then reassess.
- If breast engorgement, express a small amount of breast milk before starting breastfeeding to soften nipple area so that it is easier for the baby to attach.

If mother is HIV-positive, see G7 for special counselling to the mother who is HIV-positive and breastfeeding.

If mother chose replacement feedings, see G8

### COUNSEL ON BREASTFEEDING

### Give special support to breastfeed the small baby (preterm and/or low birth weight)

#### COUNSEL THE MOTHER:

- Reassure the mother that she can breastfeed her small baby and she has enough milk.
- Explain that her milk is the best food for such a small baby. Feeding for her/him is even more important than for a big baby.
- Explain how the milk's appearance changes: milk in the first days is thick and yellow, then it becomes thinner and whiter. Both are good for the baby.
- A small baby does not feed as well as a big baby in the first days:
- $\rightarrow$  may tire easily and suck weakly at first
- → may suckle for shorter periods before resting
- $\rightarrow$  may fall asleep during feeding
- → may have long pauses between suckling and may feed longer
- $\rightarrow$  does not always wake up for feeds.
- Explain that breastfeeding will become easier if the baby suckles and stimulates the breast her/ himself and when the baby becomes bigger.
- Encourage skin-to-skin contact since it makes breastfeeding easier.

#### HELP THE MOTHER:

- Initiate breastfeeding within 1 hour of birth.
- Feed the baby every 2-3 hours. Wake the baby for feeding, even if she/he does not wake up alone, 2 hours after the last feed.
- Always start the feed with breastfeeding before offering a cup. If necessary, improve the milk flow (let the mother express a little breast milk before attaching the baby to the breast).
- Keep the baby longer at the breast. Allow long pauses or long, slow feed. Do not interrupt feed if the baby is still trying.
- If the baby is not yet suckling well and long enough, do whatever works better in your setting:
- $\rightarrow$  Let the mother express breast milk into baby's mouth K5
- → Let the mother express breast milk and feed baby by cup K6. On the first day express breast milk into, and feed colostrum by spoon.
- Teach the mother to observe swallowing if giving expressed breast milk.
- Weigh the baby daily (if accurate and precise scales available), record and assess weight gain K7

### Give special support to breastfeed twins

COUNSEL THE MOTHER:

- Reassure the mother that she has enough breast milk for two babies.
- Encourage her that twins may take longer to establish breastfeeding since they are frequently born preterm and with low birth weight.

#### HELP THE MOTHER:

- Start feeding one baby at a time until breastfeeding is well established.
- Help the mother find the best method to feed the twins:
- → If one is weaker, encourage her to make sure that the weaker twin gets enough milk.
- → If necessary, she can express milk for her/him and feed her/him by cup after initial breastfeeding.
- $\rightarrow$  Daily alternate the side each baby is offered.

### **ALTERNATIVE FEEDING METHODS**

#### **Express breast milk**

- The mother needs clean containers to collect and store the milk. A wide necked jug, jar, bowl or cup can be used.
- Once expressed, the milk should be stored with a well-fitting lid or cover.
- Teach the mother to express breast milk:
- → To provide milk for the baby when she is away. To feed the baby if the baby is small and too weak to suckle
- $\rightarrow$  To relieve engorgement and to help baby to attach
- $\rightarrow$  To drain the breast when she has severe mastitis or abscesses.
- Teach the mother to express her milk by herself. DO NOT do it for her.
- Teach her how to:
- $\rightarrow$  Wash her hands thoroughly.
- $\rightarrow$  Sit or stand comfortably and hold a clean container underneath her breast.
- $\rightarrow$  Put her first finger and thumb on either side of the areola, behind the nipple.
- $\rightarrow$  Press slightly inwards towards the breast between her finger and thumb.
- $\rightarrow$  Express one side until the milk flow slows. Then express the other side.
- $\rightarrow$  Continue alternating sides for at least 20-30 minutes.
- If milk does not flow well:
- $\rightarrow$  Apply warm compresses.
- $\rightarrow$  Have someone massage her back and neck before expressing.
- $\rightarrow$  Teach the mother breast and nipple massage.
- → Feed the baby by cup immediately. If not, store expressed milk in a cool, clean and safe place.
- If necessary, repeat the procedure to express breast milk at least 8 times in 24 hours. Express as much as the baby would take or more, every 3 hours.
- When not breastfeeding at all, express just a little to relieve pain K5.
- If mother is very ill, help her to express or do it for her.

## Hand express breast milk directly into the baby's mouth

- Teach the mother to express breast milk.
- Hold the baby in skin-to-skin contact, the mouth close to the nipple.
- Express the breast until some drops of breast milk appear on the nipple.
- Wait until the baby is alert and opens mouth and eyes, or stimulate the baby lightly to awaken her/him.
- Let the baby smell and lick the nipple, and attempt to suck.
- Let some breast milk fall into the baby's mouth.
- Wait until the baby swallows before expressing more drops of breast milk.
- After some time, when the baby has had enough, she/he will close her/his mouth and take no more breast milk.
- Ask the mother to repeat this process every 1-2 hours if the baby is very small (or every 2-3 hours if the baby is not very small).
- Be flexible at each feed, but make sure the intake is adequate by checking daily weight gain.

### **ALTERNATIVE FEEDING METHODS**

### Cup feeding expressed breast milk

- Teach the mother to feed the baby with a cup. Do not feed the baby yourself. The mother should:
- Measure the quantity of milk in the cup
- Hold the baby sitting semi-upright on her lap
- Hold the cup of milk to the baby's lips:
- $\rightarrow$  rest cup lightly on lower lip
- $\rightarrow$  touch edge of cup to outer part of upper lip
- $\rightarrow$  tip cup so that milk just reaches the baby's lips
- $\rightarrow$  but do not pour the milk into the baby's mouth.
- Baby becomes alert, opens mouth and eyes, and starts to feed.
- The baby will suck the milk, spilling some.
- Small babies will start to take milk into their mouth using the tongue.
- Baby swallows the milk.
- Baby finishes feeding when mouth closes or when not interested in taking more.
- If the baby does not take the calculated amount:
- $\rightarrow$  Feed for a longer time or feed more often
- $\rightarrow$  Teach the mother to measure the baby's intake over 24 hours, not just at each feed.
- If mother does not express enough milk in the first few days, or if the mother cannot breastfeed at all, use one of the following feeding options:
- $\rightarrow$  donated heat-treated breast milk
- $\rightarrow$  home-made or commercial formula.
- Feed the baby by cup if the mother is not available to do so.
- Baby is cup feeding well if required amount of milk is swallowed, spilling little, and weight gain is maintained.

### Quantity to feed by cup

- Start with 80 ml/kg body weight per day for day 1. Increase total volume by 10-20 ml/kg per day, until baby takes 150 ml/kg/day. See table below.
- Divide total into 8 feeds. Give every 2-3 hours to a small size or ill baby.
- Check the baby's 24 hour intake. Size of individual feeds may vary.
- Continue until baby takes the required quantity.
- Wash the cup with water and soap after each feed.

#### APPROXIMATE QUANTITY TO FEED BY CUP (IN ML) EVERY 2-3 HOURS FROM BIRTH (BY WEIGHT)

Weight (kg)	Day 0	1	2	3	4	5	6	7	
1.5-1.9	15ml	17ml	19ml	21ml	23ml	25ml	27ml	27+ml	
2.0-2.4	20ml	22ml	25ml	27ml	30ml	32ml	35ml	35+ml	
2.5+	25ml	28ml	30ml	35ml	35ml	40+ml	45+ml	50+ml	

## Signs that baby is receiving adequate amount of milk

- Baby is satisfied with the feed.
- Weight loss is less than 10% in the first week of life.
- Baby gains at least 160-g in the following weeks or a minimum 300-g in the first month.
- Baby wets every day as frequently as baby is feeding.
- Baby's stool is changing from dark to light brown or yellow by day 3.

### WEIGH AND ASSESS WEIGHT GAIN

### Weigh baby in the first month of life

#### WEIGH THE BABY

- Monthly if birth weight normal and breastfeeding well. Every 2 weeks if replacement feeding or treatment with isoniazid.
- When the baby is brought for examination because not feeding well, or ill.

#### WEIGH THE SMALL BABY

- Every day until 3 consecutive times gaining weight (at least 15-g/day).
- Weekly until 4-6 weeks of age (reached term).

### Assess weight gain

Use this table for guidance when assessing weight gain in the first month of life

Age	Acceptable weight loss/gain in the first month of life
1 week	Loss up to 10%
2-4 weeks	Gain at least 160 g per week (at least 15 g/day)
1 month	Gain at least 300 g in the first month
If weighing daily with a pre	cise and accurate scale
First week	No weight loss or total less than 10%
Afterward	daily gain in small babies at least 20 g

### Scale maintenance

Daily/weekly weighing requires precise and accurate scale (10-g increment):

- $\rightarrow$  Calibrate it daily according to instructions.
- $\rightarrow$  Check it for accuracy according to instructions.

Simple spring scales are not precise enough for daily/weekly weighing.

### OTHER BREASTFEEDING SUPPORT

## Give special support to the mother who is not yet breastfeeding

(Mother or baby ill, or baby too small to suckle)

- Teach the mother to express breast milk K5. Help her if necessary.
- Use the milk to feed the baby by cup.
- If mother and baby are separated, help the mother to see the baby or inform her about the baby's condition at least twice daily.
- If the baby was referred to another institution, ensure the baby gets the mother's expressed breast milk if possible.
- Encourage the mother to breastfeed when she or the baby recovers.

### If the baby does not have a mother

- Give home-based or commercial formula milk by cup.
- Teach the carer how to prepare milk and feed the baby K6
- Follow up in 2 weeks; weigh and assess weight gain.

## Advise the mother who is not breastfeeding at all on how to relieve engorgement

(Baby died or stillborn, mother chose replacement feeding)

- Breasts may be uncomfortable for a while.
- Avoid stimulating the breasts.
- Support breasts with a well-fitting bra or cloth. Do not bind the breasts tightly as this may increase her discomfort.
- Apply a compress. Warmth is comfortable for some mothers, others prefer a cold compress to reduce swelling.
- Teach the mother to express enough milk to relieve discomfort. Expressing can be done a few times a day when the breasts are overfull. It does not need to be done if the mother is uncomfortable. It will be less than her baby would take and will not stimulate increased milk production.
- Relieve pain. An analgesic such as ibuprofen, or paracetamol may be used. Some women use plant products such as teas made from herbs, or plants such as raw cabbage leaves placed directly on the breast to reduce pain and swelling.
- Advise to seek care if breasts become painful, swollen, red, if she feels ill or temperature greater than 38°C.

Pharmacological treatments to reduce milk supply are not recommended. The above methods are considered more effective in the long term.

### ENSURE WARMTH FOR THE BABY

#### Keep the baby warm

#### AT BIRTH AND WITHIN THE FIRST HOUR(S)

- Warm delivery room: for the birth of the baby the room temperature should be 25-28°C, no draught.
- Dry baby: immediately after birth, place the baby on the mother's abdomen or on a warm, clean and dry surface. Dry the whole body and hair thoroughly, with a dry cloth.
- Skin-to-skin contact: Leave the baby on the mother's abdomen (before cord cut) or chest (after cord cut) after birth for at least 2 hours. Cover the baby with a soft dry cloth.
- If the mother cannot keep the baby skin-to-skin because of complications, wrap the baby in a clean, dry, warm cloth and place in a cot. Cover with a blanket. Use a radiant warmer if room not warm or baby small.

#### SUBSEQUENTLY (FIRST DAY)

- Explain to the mother that keeping baby warm is important for the baby to remain healthy.
- Dress the baby or wrap in soft dry clean cloth. Cover the head with a cap for the first few days, especially if baby is small.
- Ensure the baby is dressed or wrapped and covered with a blanket.
- Keep the baby within easy reach of the mother. Do not separate them (rooming-in).
- If the mother and baby must be separated, ensure baby is dressed or wrapped and covered with a blanket.
- Assess warmth every 4 hours by touching the baby's feet: if feet are cold use skin-to-skin contact, add extra blanket and reassess (see Rewarm the newborn).
- Keep the room for the mother and baby warm. If the room is not warm enough, always cover the baby with a blanket and/or use skin-to-skin contact.

#### AT HOME

- Explain to the mother that babies need one more layer of clothes than other children or adults.
- Keep the room or part of the room warm, especially in a cold climate.
- During the day, dress or wrap the baby.
- At night, let the baby sleep with the mother or within easy reach to facilitate breastfeeding.

Do not put the baby on any cold or wet surface.

Do not bath the baby at birth. Wait at least 24 hours before bathing. Do not swaddle – wrap too tightly. Swaddling makes them cold. Do not leave the baby in direct sun.

### Keep a small baby warm

- The room for the baby should be warm (not less than 25°C) with no draught.
- Explain to the mother the importance of warmth for a small baby.
- After birth, encourage the mother to keep the baby in skin-to-skin contact as long as possible.
- Advise to use extra clothes, socks and a cap, blankets, to keep the baby warm or when the baby is not with the mother.
- Wash or bath a baby in a very warm room, in warm water. After bathing, dry immediately and thoroughly. Keep the baby warm after the bath. Avoid bathing small babies.
- Check frequently if feet are warm. If cold, rewarm the baby (see below).
- Seek care if the baby's feet remain cold after rewarming.

### Rewarm the baby skin-to-skin

- Before rewarming, remove the baby's cold clothing.
- Place the newborn skin-to-skin on the mother's chest dressed in a pre-warmed shirt open at the front, a nappy (diaper), hat and socks.
- Cover the infant on the mother's chest with her clothes and an additional (prewarmed) blanket.
- Check the temperature every hour until normal.
- Keep the baby with the mother until the baby's body temperature is in normal range.
- If the baby is small, encourage the mother to keep the baby in skin-to-skin contact for as long as possible, day and night.
- Be sure the temperature of the room where the rewarming takes place is at least 25°C.
- If the baby's temperature is not 36.5°C or more after 2 hours of rewarming, reassess the baby 12–17.
- If referral needed, keep the baby in skin-to-skin position/contact with the mother or other person accompanying the baby.

### Ensure warmth for the baby

## Other baby care

### **OTHER BABY CARE**

Always wash hands before and after taking care of the baby. DO NOT share supplies with other babies.

### Cord care

- Wash hands before and after cord care.
- Put 4% chlorohexidine on the cord.
- Fold nappy (diaper) below stump.
- Keep cord stump loosely covered with clean clothes.
- If stump is soiled, wash it with clean water and soap. Dry it thoroughly with clean cloth.
- If umbilicus is red or draining pus or blood, examine the baby and manage accordingly 12–17
- Explain to the mother that she should seek care if the umbilicus is red or draining pus or blood and if the baby has fever.

DO NOT bandage the stump or abdomen. Avoid touching the stump unnecessarily.

### Sleeping

- Use the bednet day and night for a sleeping baby.
- Let the baby sleep on her/his back or on the side.
- Keep the baby away from smoke or people smoking.
- Keep the baby, especially a small baby, away from sick children or adults.

### Hygiene (washing, bathing)

#### AT BIRTH:

■ Only remove blood or meconium.

DO NOT remove vernix. DO NOT bathe the baby until at least 24 hours of age. Give Vit K im

#### LATER AND AT HOME:

- Wash the face, neck, underarms daily.
- Wash the buttocks when soiled. Dry thoroughly.
- Bath when necessary:
- $\rightarrow$  Ensure the room is warm, no draught
- $\rightarrow$  Use warm water for bathing
- $\rightarrow$  Thoroughly dry the baby, dress and cover after bath.

#### **OTHER BABY CARE:**

Use cloth on baby's bottom to collect stool. Dispose of the stool as for woman's pads. Wash hands.

DO NOT bathe the baby before 24 hours old or if the baby is cold. DO NOT apply anything in the baby's eyes except an antimicrobial at birth.

#### SMALL BABIES REQUIRE MORE CAREFUL ATTENTION:

The room must be warmer when changing, washing, bathing and examining a small baby.

### NEWBORN RESUSCITATION

Start resuscitation within 1 minute of birth if baby is not breathing or is gasping for breath. Observe universal precautions to prevent infection A4.

### Keep the baby warm

- Clamp and cut the cord. Give Vitamin K im injection.
- Transfer the baby to a dry, clean and warm surface.
- Inform the mother that the baby has difficulty initiating breathing and that you will help the baby to breathe.
- Keep the baby wrapped and under a radiant heater if possible.

### Open the airway

- Position the head so it is slightly extended.
- Suction first the mouth and then the nose.
- Introduce the suction tube into the newborn's mouth 5-cm from lips and suck while withdrawing.
- Introduce the suction tube 3-cm into each nostril and suck while withdrawing until no mucus.
- Repeat each suction if necessary but no more than twice and no more than 20 seconds in total.

### If still no breathing, VENTILATE:

- Place mask to cover chin, mouth, and nose.
- Form seal.
- Squeeze bag attached to the mask with 2 fingers or whole hand, according to bag size, 2 or 3 times.
- Observe rise of chest. If chest is not rising:
- $\rightarrow$  reposition head
- $\rightarrow$  check mask seal.
- Squeeze bag harder with whole hand.
- Once good seal and chest rising, ventilate at 40 squeezes per minute until newborn starts crying or breathing spontaneously.

### If breathing or crying, stop ventilating

- Look at the chest for in-drawing.
- Count breaths per minute.
- If breathing more than 30 breaths per minute and no severe chest in-drawing: → do not ventilate any more
- $\rightarrow$  put the baby in skin-to-skin contact on mother's chest and continue care as on D19
- $\rightarrow$  monitor every 15 minutes for breathing and warmth
- $\rightarrow$  tell the mother that the baby will probably be well.

#### DO NOT leave the baby alone

## If breathing less than 30 breaths per minute or severe chest in-drawing:

- continue ventilating
- arrange for immediate referral
- explain to the mother what happened, what you are doing and why
- ventilate during referral
- record the event on the referral form and labour record.

## If no breathing or gasping at all after 20 minutes of ventilation

- Stop ventilating. The baby is dead.
- Explain to the mother and give supportive care D24.
- Record the event.

## Newborn resuscitation

K11

### TREAT THE BABY

### Treat the baby

- Determine appropriate drugs and dosage for the baby's weight.
- Tell the mother the reasons for giving the drug to the baby.
- Give intramuscular antibiotics in thigh. Use a new syringe and needle for each antibiotic.
- Give vitamin K injection im

### Give 2 IM antibiotics (first week of life)

- Give first dose of both ampicillin and gentamicin IM in thigh before referral for possible serious illness, severe umbilical infection or severe skin infection.
- Give both ampicillin and gentamicin IM for 5 days in asymptomatic babies classified at risk of infection.
- Give intramuscular antibiotics in thigh. Use a new syringe and needle for each antibiotic.

	Ampicillin IM Dose: 50mg per kg every 12 hours Add 2.5ml sterile water	Gentamicin IM Dose: 5 mg per kg every 24 hours if term; 4 mg per kg every 24 hours if preterm
Weight	to 500 mg vial = 200 mg/ml	20 mg per 2 ml vial = 10 mg/ml
1.0 — 1.4 kg	0.35 ml	0.5 ml
1.5 — 1.9 kg	0.5 ml	0.7 ml
2.0 — 2.4 kg	0.6 ml	0.9 ml
2.5 — 2.9 kg	0.75 ml	1.35 ml
3.0 — 3.4 kg	0.85 ml	1.6 ml
3.5 — 3.9 kg	1 ml	1.85 ml
4.0 — 4.4 kg	1.1 ml	2.1 ml

### Give IM benzathine penicillin to baby (single dose) if mother tested TPHA

Weight	Benzathine penicillin IM Dose: 50 000 units/kg once Add 5 ml sterile water to vial containing 1.2 million units = 1.2 million units/(6ml total volume) = 200 000 units/ml	
1.0 - 1.4 kg	0.35 ml	
1.5 - 1.9 kg	0.5 ml	
2.0 - 2.4 kg	0.6 ml	
2.5 - 2.9 kg	0.75 ml	
3.0 - 3.4 kg	0.85 ml	
3.5 - 3.9 kg	1.0 ml	
4.0 - 4.4 kg	1.1 ml	

## Give IM antibiotic for possible gonococcal eye infection (single dose)

Weight	Ceftriaxone (1st choice) Dose: 50 mg per kg once 250 mg per 5 ml vial=mg/ml	Kanamycin (2nd choice) Dose: 25 mg per kg once, max 75 mg 75 mg per 2 ml vial = 37.5 mg/ml
1.0 - 1.4 kg	1 ml	0.7 ml
1.5 - 1.9 kg	1.5 ml	1 ml
2.0 - 2.4 kg	2 ml	1.3 ml
2.5 - 2.9 kg	2.5 ml	1.7 ml
3.0 - 3.4 kg	3 ml	2 ml
3.5 - 3.9 kg	3.5 ml	2 ml
4.0 - 4.4 kg	4 ml	2 ml

### Teach the mother to give treatment to the baby at home

- Explain carefully how to give the treatment. Label and package each drug separately.
- Check mother's understanding before she leaves the clinic.
- Demonstrate how to measure a dose.
- Watch the mother practice measuring a dose by herself.
- Watch the mother give the first dose to the baby.

### Treat local infection

#### TEACH MOTHER TO TREAT LOCAL INFECTION

- Explain and show how the treatment is given.
- Watch her as she carries out the first treatment.
- Ask her to let you know if the local infection gets worse and to return to the clinic if possible.
- Treat for 5 days.

#### TREAT SKIN PUSTULES OR UMBILICAL INFECTION

Do the following 3 times daily:

- Wash hands with clean water and soap.
- Gently wash off pus and crusts with boiled and cooled water and soap.
- Dry the area with clean cloth.
- Paint with gentian violet.
- Wash hands.

#### TREAT EYE INFECTION

Do the following 6-8 times daily:

- Wash hands with clean water and soap.
- Wet clean cloth with boiled and cooled water.
- Use the wet cloth to gently wash off pus from the baby's eyes.
- Apply 1% tetracycline eye ointment in each eye 3 times daily.
- Wash hands.

#### **REASSESS IN 2 DAYS:**

- Assess the skin, umbilicus or eyes.
- If pus or redness remains or is worse, refer to hospital.
- If pus and redness have improved, tell the mother to continue treating local infection at home.

### Give isoniazid (INH) prophylaxis to newborn

If the mother is diagnosed as having tuberculosis and started treatment less than 2 months before delivery:

- Give 5-mg/kg isoniazid (INH) orally once a day for 6 months (1 tablet = 200-mg).
- Delay BCG vaccination until INH treatment completed, or repeat BCG.
- Reassure the mother that it is safe to breastfeed the baby.
- Do Tuberculin test before giving the BCG. If negative give BCG three days after stopping the treatment. If tuberculin test is positive continue the treatment for TB.
- Follow up the baby every 2 weeks, or according to national guidelines, to assess weight gain.

### Immunize the newborn

- Give BCG, OPV-0, Hepatitis B (HB-1) vaccine in the first week of life, preferably before discharge.
- If un-immunized newborn first seen 1-4 weeks of age, give BCG only.
- Record on immunization card and child record.
- Advise when to return for next immunization.

Age	Vaccine
Birth < 1 week	BCG OPV-0 HB1
6 weeks	DPT OPV-1 HB-2

### Give ARV medicine to newborn

- Give the first dose of ARV medicines to newborn 8–12 hours after birth:
  - $\rightarrow$  Give Nevirapine 2 mg/kg once only.
- $\rightarrow$  Give Zidovudine 4 mg/kg every 12 hours.
- If the newborn spills or vomits within 30 minutes repeat the dose.

### Teach mother to give oral ARV medicines at home

- Explain and show how the medicine is given.
  - $\rightarrow$  Wash hands.
  - $\rightarrow$  Demonstrate how to measure the dose on the spoon.
  - $\rightarrow$  Begin feeding the baby by cup.
  - $\rightarrow$  Give medicine by spoon before the end of the feed.
  - $\rightarrow$  Complete the feed.
- Watch her as she carries out the next treatment.
- Explain to the mother that she should watch her baby after giving a dose of Zidovudine. If baby vomits or spills within 30 minutes, she should repeat the dose.
- Give Zidovudine every 12 hours for 7 days.

## Treat and immunize the baby (2)

## K13

### ADVISE WHEN TO RETURN WITH THE BABY

For maternal visits see schedule on D28.

### **Routine visits**

	Return
Postnatal visit	Within the first week, preferably
	within 2-3 days
Immunization visit	At age 6 weeks
(If BCG, OPV-0 and HB-1	
given in the first week of life)	

### Follow-up visits

If the problem was:	Return in
Feeding difficulty	2 days
Red umbilicus	2 days
Skin infection	2 days
Eye infection	2 days
Thrush	2 days
Mother has either:	
ightarrow breast engorgement or	2 days
$\rightarrow$ mastitis.	2 days
Low birth weight, and either	
$\rightarrow$ first week of life or	2 days
→ not adequately gaining weight	2 days
Low birth weight, and either	
$\rightarrow$ older than 1 week or	7 days
$\rightarrow$ gaining weight adequately	7 days
Orphan baby	14 days
INH prophylaxis	14 days
Treated for possible congenital syphilis	14 days
Mother HIV-positive	14 days

### Advise the mother to seek care for the baby

Use the counselling sheet to advise the mother when to seek care, or when to return, if the baby has any of these danger signs:

#### RETURN OR GO TO THE HOSPITAL IMMEDIATELY IF THE BABY HAS

- difficulty breathing.
- convulsions.
- fever or feels cold.
- bleeding.
- diarrhoea.
- very small, just born.
- not feeding at all.

#### GO TO HEALTH CENTRE AS QUICKLY AS POSSIBLE IF THE BABY HAS

- difficulty feeding.
- pus from eyes.
- skin pustules.
- yellow skin.
- a cord stump which is red or draining pus.
- feeds <5 times in 24 hours.

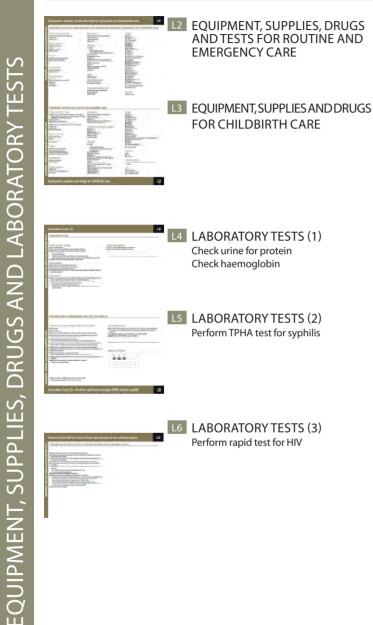
### Refer baby urgently to hospital

- After emergency treatment, explain the need for referral to the mother/father.
- Organize safe transportation.
- Always send the mother with the baby, if possible.
- Send referral note with the baby.
- Inform the referral centre if possible by radio or telephone.

#### **DURING TRANSPORTATION**

- Keep the baby warm by skin-to-skin contact with mother or someone else.
- Cover the baby with a blanket and cover her/his head with a cap.
- Protect the baby from direct sunshine.
- Encourage breastfeeding during the journey.
- If the baby does not breastfeed and journey is more than 3 hours, consider giving expressed breast milk by cup K6.

### EQUIPMENT, SUPPLIES, DRUGS AND LABORATORY TESTS



### Equipment, supplies, drugs and laboratory tests

### EQUIPMENT, SUPPLIES, DRUGS AND TESTS FOR ROUTINE AND EMERGENCY PREGNANCY AND POSTPARTUM CARE

#### Warm and clean room

- Examination table or bed with clean linen
- Light source
- Heat source

#### Hand washing

- Clean water supply
- Soap
- Nail brush or stick
- Clean towels

#### Waste

- Bucket for soiled pads and swabs
- Receptacle for soiled linens
- Container for sharps disposal

### Sterilization

- Instrument sterilizer
- Jar for forceps

### Miscellaneous

- Wall clock
- Torch with extra batteries and bulb
- Log book
- Records
- Refrigerator

### Tests

- TPHA testing kit
- Proteinuria dip sticks
- Container for catching urine
- HIV testing kits
- Haemoglobin testing kit

#### Equipment

- Blood pressure machine and stethoscope
- Body thermometer
- Fetal stethoscope
- Baby scale
- Ultra sound mask and ambu bag
- Microscope for testing
- Wheel chair
- Stand infusion
- Centrifuge to spin blood tubes for serum TPHA testing
- Accurate pipettes for quantitative/titer TPHA testing
- Microwell plates TPHA testing.

#### **Supplies**

- Gloves:
- →utility
- → sterile or highly disinfected
- $\rightarrow$  long sterile for manual removal of placenta
- Urinary catheter and bag
- Syringes and needles
- IV tubing
- Suture material for tear or episiotomy repair
- Antiseptic solution (iodophors or chlorhexidine)
- Spirit (70% alcohol)
- Swabs, cotton and gauze
- Bleach (chlorine base compound)
- Impregnated bednet
- Condoms, enema, clean delivery kits.

### Disposable delivery kit

- Plastic sheet to place under mother
- Cord ties (sterile)
- Sterile blade
- Blood sugar test,
- Blood group test,
- Complete blood test,
- TPHA

### Drugs

- Oxytocin
- Ergometrine
- Magnesium sulphate
- Calcium gluconate
- Diazepam
- Hydralazine
- Ampicillin
- Gentamicin
- Metronidazole
- Benzathine penicillin
- Cloxacillin
- Amoxycillin
- Ceftriaxone
- Trimethoprim + sulfamethoxazole

L2

- Clotrimazole vaginal pessary
- Erythromycin
- Ciprofloxacin
- Tetracycline or doxycycline
- Quinine tablet and injection
- Lignocaine
- Adrenaline
- Ringer lactate
- Normal saline 0.9%
- Glucose 50% solution
- Water for injection
- Paracetamol
- Gentian violet
- Iron/folic acid tablet
- Mebendazole
- Sulphadoxine-pyrimethamine
- Nevirapine (adult, infant)
- Zidovudine (AZT) (adult, infant)
- Lamivudine (3TC)

Vaccine

Tetanus toxoid

### EQUIPMENT, SUPPLIES AND DRUGS FOR CHILDBIRTH CARE

### Warm and clean room

- Delivery bed: a bed that supports the woman in a semi-sitting or lying in a lateral position, with removable stirrups (only for repairing the perineum or instrumental delivery)
- Clean bed linen
- Curtains if more than one bed
- Clean surface (for alternative delivery position)
- Work surface for resuscitation of newborn near delivery beds
- Light source
- Heat source
- Room thermometer

### Hand washing

- Clean water supply
- Soap
- Nail brush or stick
- Clean towels

### Waste

QUIPMENT, SUPPLIES, DRUGS AND LABORATORY TESTS

III

- Container for sharps disposal
- Receptacle for soiled linens
- Bucket for soiled pads and swabs
- Bowl and plastic bag for placenta

### Sterilization

- Instrument sterilizer
- Jar for forceps

### Miscellaneous

- Wall clock
- Torch with extra batteries and bulb
- Log book

### Equipment

- Blood pressure machine and stethoscope
- Body thermometer
- Fetal stethoscope
- Baby scale
- Self inflating bag and mask, ambu bag neonatal size
- Mucus extractor with suction tube
- Warmers

### Delivery instruments (sterile)

- Scissors
- Needle holder
- Artery forceps or clamp
- Dissecting forceps
- Sponge forceps
- Vaginal speculum

### **Supplies**

- Gloves:
- →utility
- → sterile or highly disinfected
- $\rightarrow$  long sterile for manual removal of placenta
- $\rightarrow$  Long plastic apron
- Urinary catheter
- Syringes and needles
- IV tubing
- Suture material for tear or episiotomy repair
- Antiseptic solution (iodophors or chlorhexidine)
- Spirit (70% alcohol)
- Swabs
- Bleach (chlorine-base compound)
- Clean (plastic) sheet to place under mother
- Sanitary pads
- Clean towels for drying and wrapping the baby
- Cord ties (sterile)
- Blanket for the baby
- Baby feeding cup
- Impregnated bednet

### Drugs

- Oxytocin
- Ergometrine
- Magnesium sulphate
- Calcium gluconate
- Diazepam
- Hydralazine
- Ampicillin
- Gentamicin
- Metronidazole
- Benzathine penicillin
- Lignocaine
- Adrenaline
- Ringer lactate
- Normal saline 0.9%
- Water for injection
- Tetracycline 1% eye ointment
- Vitamin A
- Izoniazid
- Nevirapine (adult, infant)
- Zidovudine (AZT) (adult, infant)
- Lamivudine (3TC)
- Vitamine K 0.5 or 1 mg injection

#### Vaccine

- BCG
- OPV
- Hepatitis B

### Birth spacing methods

L3

■ Pill

IUD

Injectables

### Test

- TPHA testing kit
- HIV testing kits
- Haemoglobin testing kit
- Complete blood kit

## Equipment, supplies and drugs for childbirth care

### Laboratory tests (1)

LABORATORY TESTS

### Check urine for protein

Label a clean container.

- Give woman the clean container and explain where she can urinate.
- Teach woman how to collect a clean-catch urine sample. Ask her to:
  - $\rightarrow$  Clean vulva with water
  - $\rightarrow$  Spread labia with fingers
  - $\rightarrow$  Urinate freely (urine should not dribble over vulva; this will ruin sample)
- → Catch the middle part of the stream of urine in the cup. Remove container before urine stops.
- Analyse urine for protein using either dipstick or boiling method.

#### **DIPSTICK METHOD**

- Dip coated end of paper dipstick in urine sample.
- Shake off excess by tapping against side of container.
- Wait specified time (see dipstick instructions).
- Compare with colour chart on label. Colours range from yellow (negative) through yellow-green and green-blue for positive.

### Check haemoglobin

- Draw blood with syringe and needle or a sterile lancet.
- Insert below instructions for method used locally.



### Perform TPHA test for syphilis

- Seek consent.
- Explain procedure.
- Use a sterile needle and syringe.
- Draw up 2 ml blood from a vein.
- TPHA TEST is an indirect hemagglutination test for the detection and titration of specific anti-T. pallidum antibodies.
- The test is highly specialized and should be conducted by a trained lab technician.
- The test is designed for use with serum only, plasma samples should not be used.

#### TEST REAGENTS

■ All the reagents used for TPHA testing must be allowed to reach room temperature before use. Do not freeze any of the reagents.

There are two methods

- A. QUALITATIVE METHOD
  - $\rightarrow$  This method is to show if the test is positive or negative
- B. QUANTITATIVE TEST
- → This test is used to show the amount of severity of the infection to specify the dose of the treatment.

 $^{\ast}$  Make sure that the kit should be stored at 2-8° C in an upright position at all times.

\* Always ensure the kit is within the expiry dates.

### Interpreting results

- Strong positive reactions may show some folding at the edge of the cell mat. When the test well is positive, the control well should be observed.
- The control cells should settle to a compact button. They should not be used as a comparison for non-reactive serum patterns since the control cells will give a more compact pattern than the test cells.
- Agglutination in the control well indicates the presence of non-specific agglutinins in the sample, the test should be reported as INVALID.
- A doubtful reaction with test cells should be reported as INDETERMINATE. This result may indicate a low level of antibody in early primary syphilis or yaws. This sample should be first retested in the qualitative test then a further sample should be tested at a later date to determine whether or not there is a rising titer. It is also advisable to perform a reagin test and/or another confirmation test (FTA-ABS) to complete the profile of the test serum.

## Laboratory tests (2) Perform TPHA test for syphilis

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### PERFORM HIV COUNSELING AND TESTING (TYPE OF TEST USE DEPENDS ON THE NATIONAL POLICY)

- Explain the procedure and seek consent according to the national policy.
- Use test kits recommended by the national and/or international bodies and follow the instructions of the HIV rapid test selected.
- Prepare your worksheet, label the test, and indicate the test batch number and expiry date. Check that expiry time has not lapsed.
- Wear gloves when drawing blood and follow standard safety precautions for waste disposal.
- Draw blood for all tests at the same time (tests for Hb, syphilis and HIV can often be coupled at the same time).
- $\rightarrow$  Use a sterile needle and syringe when drawing blood from a vein.
- $\rightarrow$  Use a lancet when doing a finger prick.
- Perform the test following manufacturer's instructions.
- Interpret the results as per the instructions of the HIV rapid testing algorithm.
  - → If the first test result is non-reactive, no further testing is done. Record the result as Negative for HIV.
  - → If the first test result is reactive, perform a second HIV rapid test using a different test kit.
  - → If the second test is also reactive, perform a third HIV rapid testing using a different kit. If the third test is reactive record the result as positive.
  - → If the first and second test results are reactive and the third test result is non-reactive, repeat test/assay in 14 days.
  - $\rightarrow$  Respect confidentiality A2
- Record all results in the logbook.
- If positive refer for counselling and treatment. If negative counsel on prevention.

### **INFORMATION AND COUNSELLING SHEETS**



M2 CARE DURING PREGNANCY
 Visit the health worker during pregnancy
 Care for yourself during pregnancy
 Routine visits to the health centre
 Know the signs of labour
 When to seek care on danger signs

PREPARING A BIRTH AND EMERGENCY PLAN

Preparing a birth plan Planning for delivery at home Preparing an emergency plan Planning for delivery at the hospital or health centre

CARE FOR THE MOTHER

AFTER BIRTH Care of the mother Birth spacing Routine visits to the health centre When to seek care for danger signs

CARE AFTER AN ABORTION

Self-care Birth spacing Know these DANGER signs Additional support

#### M6 CARE FOR THE BABY AFTER BIRTH

AFTER BIRTH Care of the newborn Routine visits to the health centre When to seek care for danger signs



#### BREASTFEEDING

Breastfeeding has many advantages for the baby and the mother Suggestions for successful breastfeeding Health worker support Breastfeeding and birth spacing

MR M8

#### CLEAN HOME DELIVERY (1) Delivery at home with an attendant Instructions to mother and family for a clean and safer delivery at home

#### CLEAN HOME DELIVERY (2)

Avoid harmful practices Encourage helpful traditional practices Danger signs during delivery Routine visits to the health centre

- These individual sheets have key information for the mother, her husband and family on care during pregnancy, preparing a birth and emergency plan, clean home delivery, care for the mother and baby after delivery, breastfeeding and care after an abortion.
- Individual sheets are used so that the woman can be given the relevant sheet at the appropriate stage of pregnancy and childbirth.

### Information and counselling sheets

M1

## Care during pregnancy

### **CARE DURING PREGNANCY**

### Visit the health worker during pregnancy

- Go to the health centre if you think you are pregnant. It is important to begin care as early in your pregnancy as possible.
- Visit the health centre at least 4 times during your pregnancy, even if you do not have any problems. The health worker will tell you when to return.
- If at any time you have any concerns about your or your baby's health, go to the health centre.
- During your visits to the health centre, the health worker will:
  - $\rightarrow$  Check your health and the progress of the pregnancy
  - $\rightarrow$  Help you make a birth plan
  - → Answer questions or concerns you may have
  - → Provide treatment for malaria and anaemia
  - → Give you a tetanus toxoid immunization
  - $\rightarrow$  Advise and counsel on:
  - → breastfeeding
  - → birthspacing after delivery
  - $\rightarrow$  nutrition
  - $\rightarrow$  HIV counselling and testing
  - → laboratory tests
  - $\rightarrow$  other matters related to your and your baby's health.
- Bring your home-based maternal record to every visit.

### Care for yourself during pregnancy

- Eat more and healthier foods, including more fruits and vegetables, beans, meat, fish, eggs, cheese, milk.
- Take iron tablets every day as explained by the health worker.
- Rest when you can. Avoid lifting heavy objects.
- Sleep under a bednet treated with insecticide.
- Do not take medication unless prescribed at the health centre.
- Do not smoke shisha or chew qaat.

### Routine visits to the health centre

1st visit Before 4 months

2nd visit 6-7 months 3rd visit 8 months

4th visit 9 months

### Know the signs of labour

If you have any of these signs, go to the health centre as soon as you can.

- Painful contractions every 20 minutes or less.
- Bag of water breaks.
- Bloody sticky discharge.

#### When to seek care on danger signs

Go to the hospital or health centre immediately, day or night, DONOT wait, if any of the following signs:

- vaginal bleeding
- convulsions/fits
- severe headaches with blurred vision
- fever and too weak to get out of bed
- severe abdominal pain
- fast or difficult breathing.

Go to the health centre as soon as possible if any of the following signs:

- fever
- abdominal pain
- water breaks and not in labour after 6 hours
- feel ill
- swollen fingers, face and legs.

PREGNANCY IS A SPECIAL TIME. CARE FOR YOURSELF AND YOUR BABY.

### Preparing a birth plan

The health worker will provide you with information to help you prepare a birth plan. Based on your health condition, the health worker can make suggestions as to where it would be best to deliver. Whether in a hospital, health centre or at home, it is important to deliver with a skilled attendant.

AT EVERY VISIT TO THE HEALTH CENTRE, REVIEW AND DISCUSS YOUR BIRTH PLAN. The plan can change if complications develop.

### Planning for delivery at home

- Who do you choose to be the skilled attendant for delivery?
- Who will support you during labour and delivery?
- Who will be close by for at least 24 hours after delivery?
- Who will help you to care for your home and other children?
- Do you have contact address of the skilled attendant?
- Organize the following:
  - $\rightarrow$  A clean and warm room or corner of a room.
  - $\rightarrow$  Home-based maternal record.
  - → A clean delivery kit which includes soap, a stick to clean under the nails, a new razor blade to cut the baby's cord, 3 pieces of string (about 20 cm. each) to tie the cord.
  - → Clean cloths of different sizes: for the bed, for drying and wrapping the baby, for cleaning the baby's eyes, and for you to use as sanitary pads.
  - $\rightarrow$  Warm covers for you and the baby.
  - $\rightarrow$  Warm spot for the birth with a clean surface or clean cloth.
- $\rightarrow$  Bowls: two for washing and one for the placenta.
- $\rightarrow$  Plastic for wrapping the placenta.
- $\rightarrow$  Buckets of clean water and some way to heat this water.
- $\rightarrow$  For handwashing, water, soap and a towel or cloth for drying hands of the birth attendant.
- $\rightarrow$  Fresh drinking water, fluids and food for the mother.

### Preparing an emergency plan

- To plan for an emergency, consider:
  - $\rightarrow$  Where should you go?
  - $\rightarrow$  How will you get there?
  - $\rightarrow$  Will you have to pay for transport to get there? How much will it cost?
  - $\rightarrow$  What costs will you have to pay at the health centre? How will you pay for this?
  - $\rightarrow$  Can you start saving for these possible costs now?
  - $\rightarrow$  Who will go with you to the health centre?
  - $\rightarrow$  Who will help to care for your home and other children while you are away?

### Planning for delivery at the hospital or health centre

- How will you get there? Will you have to pay for transport to get there?
- How much will it cost to deliver at the facility? How will you pay for this?
- Can you start saving for these costs now?
- Who will go with you and support you during labour and delivery?
- Who will help you while you are away and care for your home and other children?
- Bring the following:
  - $\rightarrow$  Home-based maternal record.
  - → Clean cloths of different sizes: for the bed, for drying and wrapping the baby, and for you to use as sanitary pads.
  - $\rightarrow$  Clean clothes for you and the baby.
  - $\rightarrow$  Food and water for you and the support person.

## Preparing a birth and emergency plan

### CARE FOR THE MOTHER AFTER BIRTH

#### Care of the mother

- Eat more and healthier foods, including more meat, fish, oils, coconut, nuts, cereals, beans, vegetables, fruits, cheese and milk.
- Take iron tablets as explained by the health worker.
- Rest when you can.
- Drink plenty of clean, safe water.
- Sleep under a bednet treated with insecticide.
- Do not take medication unless prescribed at the health centre.
- Do not smoke shisha or chew khat.
- Wash all over daily, particularly the perineum.
- Change pad every 4 to 6 hours as soon as this is soaked. Wash pad or dispose of it safely.

### **Birth spacing**

- You can become pregnant within several weeks after delivery if you have sexual relations and are not breastfeeding exclusively.
- Talk to the health worker about choosing a birth spacing method which best meets your and your husband's needs.

### Routine visits to the health centre

#### First week after birth:

6 weeks after birth:

### When to seek care for danger signs

Go to hospital or health centre immediately, day or night, DO NOT wait, if any of the following signs:

- Vaginal bleeding has increased.
- Fits.
- Fast or difficult breathing.
- Fever and too weak to get out of bed.
- Severe headaches with blurred vision.

Go to health centre as soon as possible if any of the following signs:

- Swollen, red or tender breasts or nipples.
- Problems urinating, or leaking.
- Increased pain or infection in the perineum.
- Infection in the area of the wound.
- Smelly vaginal discharge.

### **CARE AFTER AN ABORTION**

### Self-care

- Rest for a few days, especially if you feel tired.
- Change pads whenever it becomes soaked. Wash used pad or dispose of it safely. Wash perineum.
- Do not have sexual intercourse until bleeding stops.
- You and your husband should use a condom correctly in every act of sexual intercourse if at risk of STI or HIV.
- Return to the health worker as indicated.

### **Birth spacing**

- Remember you can become pregnant as soon as you have sexual relations. Use a birth spacing method to prevent an unwanted pregnancy.
- Talk to the health worker about choosing a birth spacing method which best meets your and your husband's needs.

### Know these danger signs

If you have any of these signs, go to the health centre immediately, day or night. DO NOT wait:

- Increased bleeding or continued bleeding for 2 days.
- Fever, feeling ill.
- Dizziness or fainting.
- Abdominal pain.
- Backache.
- Nausea, vomiting.
- Foul-smelling vaginal discharge.

### Additional support

■ The health worker can help you identify persons or groups who can provide you with additional support if you should need it.

## Care after an abortion

## Care for the baby after birth

## CARE FOR THE BABY AFTER BIRTH

### Care of the newborn

#### KEEP YOUR NEWBORN CLEAN

- Wash your baby's face and neck daily. Bathe her/him when necessary. After bathing, thoroughly dry your baby and then dress and keep her/him warm.
- Wash baby's bottom when soiled and dry it thoroughly.
- Wash your hands with soap and water before and after handling your baby, especially after touching her/his bottom.

#### CARE FOR THE NEWBORN'S UMBILICAL CORD

- Keep cord stump loosely covered with a clean cloth. Fold diaper and clothes below stump.
- Put 4% chlohexidine on the stump.
- If stump area is soiled, wash with clean water and soap. Then dry completely with clean cloth.
- Wash your hands with soap and water before and after care.

#### KEEP YOUR NEWBORN WARM

- In cold climates, keep at least an area of the room warm.
- Newborns need more clothing than other children or adults.
- If cold, put a hat on the baby's head. During cold nights, cover the baby with an extra blanket.

#### **OTHER ADVICE**

- Let the baby sleep on her/his back or side.
- Keep the baby away from smoke.

### Routine visits to the health centre

#### First week after birth:



At 6 weeks :

At these visits your baby will be vaccinated. Have your baby immunized.

### When to seek care for danger signs

Go to hospital or health centre immediately, day or night, DO NOT wait, if your baby has any of the following signs:

- Difficulty breathing
- Fits
- Fever
- Feels cold
- Bleeding
- Stops feeding
- Diarrhoea
- Pustules around the cord with smelly discharge, pus or blood
- Deep yellow eyes or skin.

Go to the health centre as soon as possible if your baby has any of the following signs:

- Difficulty feeding.
- Feeds less than every 5 hours.
- Pus coming from the eyes.
- Irritated cord with pus or blood.
- Yellow eyes or skin.

### BREASTFEEDING

### Breastfeeding has many advantages

#### FOR THE BABY

- During the first 6 months of life, the baby needs nothing more than breast milk not water, not other milk, not cereals, not teas, not juices.
- Breast milk contains exactly the water and nutrients that a baby's body needs. It is easily digested and efficiently used by the baby's body. It helps protect against infections and allergies and helps the baby's growth and development.

#### FOR THE MOTHER

- Ensure health education on breast feeding for mother
- Postpartum bleeding can be reduced due to uterine contractions caused by the baby's sucking.
- Breastfeeding can help delay a new pregnancy.

FOR THE FIRST 6 MONTHS OF LIFE, GIVE ONLY BREAST MILK TO YOUR BABY, DAY AND NIGHT AS OFTEN AND AS LONG AS SHE/HE WANTS.

### Suggestions for successful breastfeeding

- Immediately after birth, keep your baby in the bed with you, or within easy reach.
- Start breastfeeding within 1 hour of birth.
- The baby's suck stimulates your milk production. The more the baby feeds, the more milk you will produce.
- At each feeding, let the baby feed and release your breast, and then offer your second breast. At the next feeding, alternate and begin with the second breast.
- Give your baby the first milk (colostrum). It is nutritious and has antibodies to help keep your baby healthy.
- At night, let your baby sleep with you, within easy reach.
- While breastfeeding, you should drink plenty of clean, safe water. You should eat more and healthier foods and rest when you can.

## The health worker can support you in starting and maintaining breastfeeding

- The health worker can help you to correctly position the baby and ensure she/he attaches to the breast. This will reduce breast problems for the mother.
- The health worker can show you how to express milk from your breast with your hands. If you should need to leave the baby with another caretaker for short periods, you can leave your milk and it can be given to the baby in a cup.
- The health worker can put you in contact with a breastfeeding support group.

If you have any difficulties with breastfeeding, see the health worker immediately.

### Breastfeeding and birth spacing

- During the first 6 months after birth, if you breastfeed exclusively, day and night, and your menstruation has not returned, you may be protected against another pregnancy.
- If you do not meet these requirements, or if you wish to use another birth spacing method while breastfeeding, discuss the different options available with the health worker. Exclusive breastfeeding it is not 100% effective protective for prevention of pregnancy, especially after the first months of delivery.

## Breastfeeding

## Clean home delivery (1)

### **CLEAN HOME DELIVERY**

Regardless of the site of delivery, it is strongly recommended that all women deliver with a skilled attendant. For a woman who prefers to deliver at home the following recommendations are provided for a clean home delivery to be reviewed during antenatal care visits.

### Delivery at home with an attendant

- Ensure the attendant and other family members know the emergency plan and are aware of danger signs for yourself and your baby.
- Arrange for a support person to assist the attendant and to stay with you during labour and after delivery.
- → Have these supplies organized for a clean delivery: new razor blade, 3 pieces of string about 20-cm each to tie the cord, and clean cloths to cover the birth place.
- $\rightarrow$  Prepare the home and the supplies indicated for a safe birth:
  - $\rightarrow$  Clean, warm birth place with fresh air and a source of light
  - $\rightarrow$  Clean warm blanket to cover you
- $\rightarrow$  Clean cloths:
  - $\rightarrow$  for drying and wrapping the baby
  - $\rightarrow$  for cleaning the baby's eyes
  - $\rightarrow$  to use as sanitary pads after birth
  - $\rightarrow$  to dry your body after washing
  - $\rightarrow$  for birth attendant to dry her hands.
- $\rightarrow$  Clean clothes for you to wear after delivery
- ightarrow Fresh drinking water, fluids and food for you
- ightarrow Buckets of clean water and soap for washing, for you and the skilled attendant
- $\rightarrow$  Means to heat water
- $\rightarrow$  Three bowls, two for washing and one for the placenta
- $\rightarrow$  Plastic for wrapping the placenta
- $\rightarrow$  Bucket for you to urinate in
- $\rightarrow$  Give the baby Vitamin K 0.5 or 1mg im.

# Instructions to mother and family for a clean and safer delivery at home

- Make sure there is a clean delivery surface for the birth of the baby.
- Ask the attendant to wash her hands before touching you or the baby. The nails of the attendant should be short and clean.
- When the baby is born, place her/him on your abdomen/chest where it is warm and clean. Dry the baby thoroughly and wipe the face with a clean cloth. Then cover with a clean dry cloth.
- Cut the cord when it stops pulsating, using the disposable delivery kit, according to instructions.
- Wait for the placenta to deliver on its own.
- Make sure you and your baby are warm. Have the baby near you, dressed or wrapped and with head covered with a cap.
- Start breastfeeding when the baby shows signs of readiness, within the first hour of birth.
- Dispose of placenta

(describe correct, safe culturally accepted way to dispose of placenta)

DO NOT be alone for the 24 hours after delivery. DO NOT bath the baby on the first day.

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### Avoid harmful practices

#### FOR EXAMPLE:

DO NOT use local medications to hasten labour. DO NOT wait for waters to stop before going to health facility. DO NOT insert any substances into the vagina during labour or after delivery. DO NOT push on the abdomen during labour or delivery. DO NOT pull on the cord to deliver the placenta. DO NOT put ashes, cow dung or other substance on umbilical cord/stump. DO NOT give the baby honey (FAX) or sugar with water, gee etc..

### Encourage helpful traditional practices:

### Danger signs during delivery

If you or your baby has any of these signs, go to the hospital or health centre immediately, day or night, DO NOT wait.

#### MOTHER

- If waters break and not in labour.
- Labour pains (contractions) continue for more than 12 hours.
- Heavy bleeding (soaks more than 2-3 pads in 15 minutes).
- Placenta not expelled 1 hour after birth of baby.

#### BABY

- Very small.
- Difficulty in breathing.
- Fits.
- Fever.
- Feels cold.
- Bleeding.
- Not able to feed.

### Routine visits to the health centre

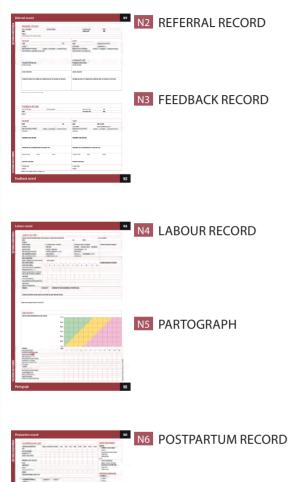
- Go to the health centre or arrange a home visit by a skilled attendant as soon as possible after delivery, preferably within the first days, for the examination of you and your baby and to receive preventive measures.
- Go for a routine postpartum visit according to the guidelines.

## Clean home delivery (2)



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### **RECORDS AND FORMS**



N7 INTERNATIONAL FORMOF MEDICAL CERTIFICATE OF CAUSE OF DEATH

- Records are suggested not so much for the format as for the content. The content of the records is adjusted to the content of the Guide.
- Modify national or local records to include all the relevant sections needed to record important information for the provider, the woman and her family, for the purposes of monitoring and surveillance and official reporting.
- Fill out other required records such as immunization cards for the mother and baby.

### **Records and forms**

## **Referral record**

**RECORDS AND FORMS** 

- |

	D		
REFERRAL RECOR	SIGNATURE OF REFERRING PERSON	REE	ERRAL HOSPITAL (DESTINATION)
WHO IS REFERRING	RECORD NUMBER		ERRED DATE TIME
NAME		ARRIVAL DATE	
FACILITY			
ACCOMPANIED BY THE HEALTH	WORKER		
		BABY	
WOMAN			
NAME	AGE	NAME	DATE AND HOUR OF BIRTH
ADDRESS		BIRTH WEIGHT	GESTATIONAL AGE
MAIN REASONS FOR REFERRAL			Emergency Non-emergency To accompany the mother
MAJOR FINDINGS (CLINICA AND	) BP, TEMP., LAB.)	MAJOR FINDINGS (CLINICA AND	) TEMP.)
		LAST (BREAST)FEED (TIME)	
TREATMENTS GIVEN AND TIME		TREATMENTS GIVEN AND TIME	
BEFORE REFERRAL		BEFORE REFERRAL	
DURING TRANSPORT		DURING TRANSPORT	
INFORMATION GIVEN TO THE WON	MAN AND COMPANION ABOUTTHE REASONS FOR REFERRAL	INFORMATION GIVEN TO THE WOM	IAN AND COMPANION ABOUT THE REASONS FOR REFERRA
L		]	

Sample form to be adapted. Revised on 13 June 2003.

FEEDBACK RECORD				
WHO IS REFERRING	RECORD NUMBER	ADM	AISSION DATE	TIME
NAME		DISCHARGE D	DATE T	IME
FACILITY (NAME AND ADDRESS)				
NAME AND SIGNATURE OF HEALTH WORKER R	EFERRING			
WOMAN		BABY		
NAME	AGE	NAME	DATE OF BIF	RTH
ADDRESS		BIRTH WEIGHT	AGE AT DISC	CHARGE (DAYS)
MAIN REASONS FOR REFERRAL	ncy $\Box$ Non-emergency $\Box$ To accompany the baby	MAIN REASONS FOR REFERRAL	□ Emergency □ Non-eme	rgency $\Box$ To accompany the mother
DIAGNOSES		DIAGNOSES		
TREATMENTS GIVEN AND TIME		TREATMENTS GIVEN AND TIME		
TREATMENTS AND RECOMMENDATIONS ON	FURTHER CARE	TREATMENTS AND RECOMMEND	DATIONS ON FURTHER CA	ARE
FOLLOW-UP VISIT WHEN	WHERE	FOLLOW-UP VISIT	WHEN	WHERE
PREVENTIVE MEASURES		PREVENTIVE MEASURES		
IF DEATH: DATE		IF DEATH: DATE		
CAUSES		CAUSES		

Sample form to be adapted. Revised on 25 August 2003.

## Labour record

CORDS AND FORMS

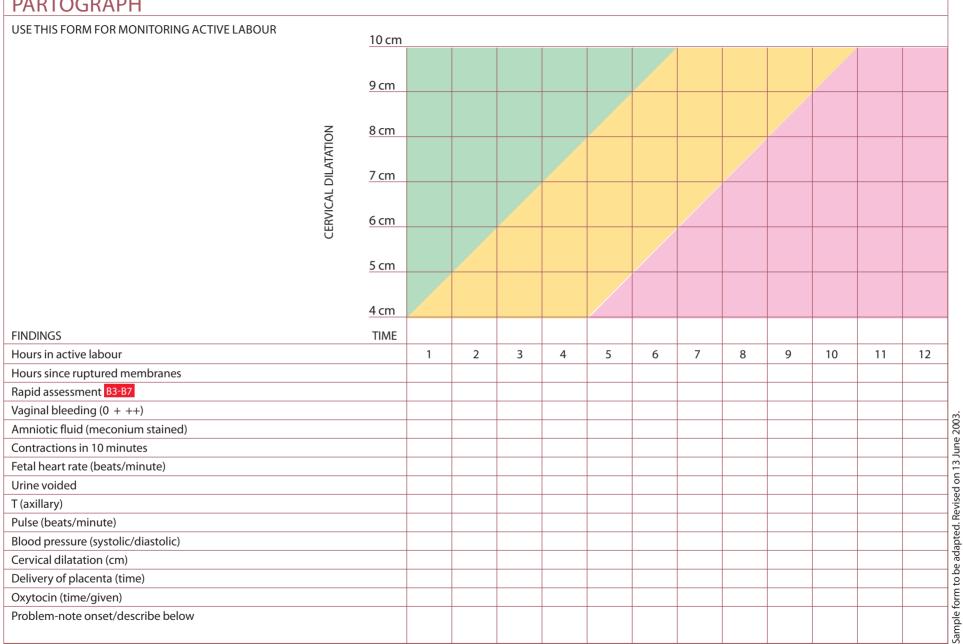
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#### LABOUR RECORD USE THIS RECORD FOR MONITORING DURING LABOUR, DELIVERY AND POSTPARTUM RECORD NUMBER NAME AGE PARITY ADDRESS **DURING LABOUR** AT OR AFTER BIRTH - MOTHER AT OR AFTER BIRTH - NEWBORN PLANNED NEWBORN TREATMENT ADMISSION DATE **BIRTH TIME** LIVEBIRTH STILLBIRTH: FRESH MACERATED ADMISSION TIME **OXYTOCIN - TIME GIVEN** RESUSCITATION NO YES TIME ACTIVE LABOUR STARTED PLACENTA COMPLETE NO YES **BIRTH WEIGHT** TIME MEMBRANES RUPTURED TIME DELIVERED GEST. AGE WEEKS OR PRETERM TIME SECOND STAGE STARTS ESTIMATED BLOOD LOSS SECOND BABY ENTRY EXAMINATION MORE THAN ONE FETUS - SPECIFY FETAL LIE: LONGITUDINAL 🗌 TRANSVERSE FETAL PRESENTATION: HEAD BREECH OTHER - SPECIFY STAGE OF LABOUR NOT IN ACTIVE LABOUR ACTIVE LABOUR NOT IN ACTIVE LABOUR PLANNED MATERNAL TREATMENT HOURS SINCE ARRIVAL 2 3 4 5 6 7 8 9 10 11 12 1 HOURS SINCE RUPTURED MEMBRANES VAGINAL BLEEDING (0 + ++) STRONG CONTRACTIONS IN 10 MINUTES FETAL HEART RATE (BEATS PER MINUTE) **TEMPERATURE (AXILLARY)** PULSE (BEATS/MINUTE) **BLOOD PRESSURE (SYSTOLIC/DIASTOLIC) URINE VOIDED** CERVICAL DILATATION (CM) PROBLEM TIME ONSET TREATMENTS OTHER THAN NORMAL SUPPORTIVE CARE IF MOTHER REFERRED DURING LABOUR OR DELIVERY, RECORD TIME AND EXPLAIN

Sample form to be adapted. Revised on 13 June 2003.

### PARTOGRAPH



Partograph

## Postpartum record

POSTPARTUN	A REC	ORD												ADVISE AND COUNSEL
MONITORING AFTER BI			5-15 MI	N FOR 15	STHOUR	2 HR	3 HR	4 HR	8 HR	12 HR	16 HR	20 HR	24 HR	MOTHER
TIME RAPID ASSESSMENT														<ul> <li>Postpartum care and hygiene</li> <li>Nutrition</li> </ul>
BLEEDING (0 + ++)														<ul> <li>Birth spacing and family planning</li> <li>Danger signs</li> </ul>
UTERUS HARD/ROUND?	,													Follow-up visits
MATERNAL: BLOOD PRE	SSURE													BABY  Exclusive breastfeeding
PULSE														<ul> <li>Hygiene, cord care and warmth</li> </ul>
URINE VOIDED														Special advice if low birth weight
VULVA														<ul> <li>Danger signs</li> <li>Follow-up visits</li> </ul>
NEWBORN: BREATHING														
NEWBORN ABNORMAL	SIGNS (LIS	5T)							ļ	<u> </u>			<u> </u>	PREVENTIVE MEASURES
														FOR MOTHER
TIME FEEDING OBSERVE	D	□ FEED	ING WE	ELL 🗆 DI	FFICULT	(								□ Iron/folate
COMMENTS														<ul> <li>Vitamin A</li> <li>Mebendazole</li> </ul>
														<ul> <li>Sulphadoxine-pyrimethamine</li> </ul>
PLANNED TREATMENT	TIME	TREAT	MENT G	IVEN										<ul> <li>Tetanus toxoid immunization</li> </ul>
MOTHER														□ RPR test result and treatment
														ARV
														FOR BABY
NEWBORN														<ul> <li>Risk of bacterial infection and treatment</li> </ul>
														BCG, OPV-0, Hep-0
IF REFERRED (MOTHER C	OR NEWBO	ORN), REC	ORD TI	ME AND	EXPLAIN	:								RPR result and treatment
														TB test result and prophylaxis
IF DEATH (MOTHER OR N	NEWBORN	I), DATE, T	TIME AN	ID CAUSI	E:									□ ARV

Sample form to be adapted. Revised on 25 August 2003.

## INTERNATIONAL FORM OF MEDICAL CERTIFICATE OF CAUSE OF DEATH

	CAUSE OF DEAT	Н	APPROXIMATE INTERVAL BETWEEN ONSET AND DEATH
l Disease or condition directly	. ,	nsequence of)	
leading to death*			
Antecedent causes	Due to (or as cor	nsequence of)	
Morbid conditions, if any, giving	(C)		
rise to the above cause, stating	Due to (or as cor	nsequence of)	
,			
the death, but not related to the dise	ease		
-	ying, e.g. heart failure	, respiratory failure.	
or condition causing it. * This does not mean the mode of dy It means the disease, injury or comp CONSIDER COLLECTING THE FOLLO	ying, e.g. heart failure plication that caused o	, respiratory failure. death.	
* This does not mean the mode of d It means the disease, injury or comp	ying, e.g. heart failure plication that caused o	, respiratory failure. death.	
* This does not mean the mode of dy It means the disease, injury or comp CONSIDER COLLECTING THE FOLLO	ying, e.g. heart failure plication that caused o	, respiratory failure. death.	
* This does not mean the mode of dy It means the disease, injury or comp CONSIDER COLLECTING THE FOLLO	ying, e.g. heart failure plication that caused o	, respiratory failure. death. N □ Not pregnant	gnant within 42 days of death
* This does not mean the mode of dy It means the disease, injury or comp CONSIDER COLLECTING THE FOLLO	ying, e.g. heart failure plication that caused o	, respiratory failure. death. N □ Not pregnant	
* This does not mean the mode of dy It means the disease, injury or comp CONSIDER COLLECTING THE FOLLO	ying, e.g. heart failure plication that caused o	, respiratory failure. death. N Not pregnant Not pregnant, but pred Pregnant at the time o	
* This does not mean the mode of dy It means the disease, injury or comp CONSIDER COLLECTING THE FOLLO III If the deceased is a female, was she	ying, e.g. heart failure plication that caused o	, respiratory failure. death. N Not pregnant Not pregnant, but pred Pregnant at the time o	fdeath
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### Glossary and acronyms

#### ABORTION

Termination of pregnancy from whatever cause before the fetus is capable of extrauterine life.

#### ADOLESCENT

Young person 10–19 years old.

#### ADVISE

**DSSARY AND ACRONYMS** 

To give information and suggest to someone a course of action.

#### ANTENATAL CARE

Care for the woman and fetus during pregnancy.

#### ASSESS

To consider the relevant information and make a judgement. As used in this guide, to examine a woman or baby and identify signs of illness.

#### BABY

A very young boy or girl in the first week(s) of life.

#### BIRTH

Expulsion or extraction of the baby (regardless of whether the cord has been cut).

#### BIRTH AND EMERGENCY PLAN

A plan for safe childbirth developed in antenatal care visit which considers the woman's condition, preferences and available resources. A plan to seek carefor danger signs during pregnancy, childbirth and postpartum period, for the woman and newborn.

#### BIRTH SPACING

Birth Spacing refers to the time interval from one child's birth date until the next child's birth date.

#### **BIRTH WEIGHT**

The first of the fetus or newborn obtained after birth.

For live births, birth weight should preferably be measured within the first hour of life before significant postnatal weight loss has occurred, recorded to the degree of accuracy to which it is measured.

#### CHART

As used in this guide, a sheet presenting information in the form of a table.

#### CHILDBIRTH

Giving birth to a baby or babies and placenta.

#### CLASSIFY

To select a category of illness and severity based on a woman's or baby's signs and symptoms.

#### CLINIC As used in this guide, any firstlevel outpatient health facility such as a dispensary, rural health post, health centre or outpatient

department of a hospital.

#### COMMUNITY

As used in this guide, a group of people sometimes living in a defined geographical area, who share common culture, values and norms. Economic and social differences need to be taken into account when determining needs and establishing links within a given community.

#### **BIRTH COMPANION**

Partner, other family member or friend who accompanies the woman during labour and delivery.

#### CHILDBEARING AGE (WOMAN)

15-49 years. As used in this guide, also a girl 10-14 years, or a woman more than 49 years, when pregnant, after abortion, after delivery.

#### COMPLAINT

As described in this guide, the concerns or symptoms of illness or complication need to be assessed and classified in order to select treatment.

#### CONCERN

A worry or an anxiety that the woman may have about herself or the baby(ies).

#### COMPLICATION

Acondition occurring during pregnancy or aggravating it. This classification includes conditions such as obstructed labour or bleeding.

#### CONFIDENCE

A feeling of being able to succeed.

#### CONTRAINDICATION

A condition occurring during another disease or aggravating it. This classification includes conditions such as obstructed labour or bleeding.

#### COUNSELLING

As used in this guide, interaction with a woman to support her in solving actual or anticipated problems, reviewing options, and making decisions. It places emphasis on provider support for helping the woman make decisions.

#### DANGER SIGNS

Terminology used to explain to the woman the signs of life-threatening and other serious conditions which require immediate intervention.

#### **EMERGENCY SIGNS**

Signs of life-threatening conditions which require immediate intervention.

#### ESSENTIAL

Basic, indispensable, necessary.

#### FACILITY

A place where organized care is provided: a health post, health centre, hospital maternity or emergency unit, or ward.

#### FAMILY

Includes relationships based on blood, marriage, sexual partnership, and adoption, and a broad range of groups whose bonds are based on feelings of trust mutual support, and a shared destiny.

#### FEMALE GENITAL MUTILATION/ CUTTING (FGM/C)

Female genital mutilation/ cutting includes procedures that intentionally alter or cause injury to the female genital organs for non-medical reasons. It does not include genital surgery performed for medically prescribed reasons.

#### FOLLOW-UP VISIT

A return visit requested by a health worker to see if further treatment or referral is needed.

#### **GESTATIONAL AGE**

Duration of pregnancy from the last menstrual period. In this guide, duration of pregnancy (gestational age) is expressed in 3 different ways:

Trimester	Months	Weeks
First weeks	less than 4 months	less than 16
Second	4-6 months	16-28 weeks
Third	7-9+ months	29-40+ weeks

#### GRUNTING

Soft short sounds that a baby makes when breathing out. Grunting occurs when a baby is having difficulty breathing.

#### HOME DELIVERY

Delivery at home (with a skilled attendant).

#### HOSPITAL

As used in this guide, any health facility with inpatient beds, supplies and expertise to treat a woman or newborn with complications.

#### INTEGRATED MANAGEMENT

A process of caring for the woman in pregnancy, during and after childbirth, and for her newborn, that includes considering all necessary elements: care to ensure they remain healthy, and prevention, detection and management of complications in the context of her environment and according to her wishes.

#### LABOUR

**GLOSSARY AND ACRONYMS** 

As used in this guide, a period from the onset of regular contractions to complete delivery of the placenta.

#### LOW BIRTH WEIGHT BABY

Weighing less than 2500-g at birth.

#### MATERNITY CLINIC

Health centre with beds or a hospital where women and their newborns receive care during childbirth and delivery, and emergency first aid.

#### MISCARRIAGE

Premature expulsion of a non-viable fetus from the uterus.

#### MONITORING

Frequently repeated measurements of vital signs or observations of danger signs.

#### NEWBORN

Recently born infant. In this guide used interchangeable with baby.

#### PARTNER

As used in this guide, the male companion of the pregnant woman (husband).

#### POSTNATAL CARE

Care for the baby after birth. For the purposes of this guide, up to two weeks.

#### POSTPARTUM CARE

Care for the woman provided in the postpartum period, e.g. from complete delivery of the placenta to 42 days after delivery.

#### PRE-REFERRAL

Before referral to a hospital.

#### PREGNANCY

Period from when the woman misses her menstrual period or the uterus can be felt, to the onset of labour/elective caesarian section or abortion.

#### PREMATURE

Before 37 completed weeks of pregnancy.

#### PRETERM BABY

Born early, before 37 completed weeks of pregnancy. If number of weeks not known, 1 month early.

#### PRIMARY HEALTH CARE\*

Essential health care accessible at a cost the country and community can afford, with methods that are practical, scientifically sound and socially acceptable. (Among the essential activities are maternal and child health care, including family planning; immunization; appropriate treatment of common diseases and injuries; and the provision of essential drugs).

#### PRIMARY HEALTH CARE LEVEL

Health post, health centre or maternity clinic; a hospital providing care for normal pregnancy and childbirth.

#### PRIORITY SIGNS

Signs of serious conditions which require interventions as soon as possible, before they become lifethreatening.

#### QUICK CHECK

A quick check assessment of the health status of the woman or her baby at the first contact with the health provider or services in order to assess if emergency care is required. RAPID ASSESSMENT AND

#### MANAGEMENT

Systematic assessment of vital functions of the woman and the most severe presenting signs and symptoms; immediate initial management of the lifethreatening conditions; and urgent and safe referral to the next level of care.

#### REASSESSMENT

As used in this guide, to examine the woman or baby again for signs of a specific illness or condition to see if she or the newborn are improving.

#### RECOMMENDATION

Advice. Instruction that should be followed.

#### REFERRAL, URGENT

As used in this guide, sending a woman or baby, or both, for further assessment and care to a higher level of care; including arranging for transport and care during transport, preparing written information (referral form), and communicating with the referral institution.

#### **REFERRAL HOSPITAL**

A hospital with a full range of obstetric services including surgery and blood transfusion and care for newborns with problems.

#### REINFECTION

Infection with same or a different strain of HIV virus.

#### **REPLACEMENT FEEDING**

The process of feeding a baby who is not receiving breast milk with a diet that provides all the nutrients she/ he needs until able to feed entirely on family foods.

#### SECONDARY HEALTH CARE

More specialized care offered at the most peripheral level, for example radiographic diagnostic, general surgery, care of women with complications of pregnancy and childbirth, and diagnosis and treatment of uncommon and severe diseases. (This kind of care is provided by trained staff at such institutions as district or provincial hospitals).

#### SHOCK

A dangerous condition with severe weakness, lethargy, or unconsciousness, cold extremeties, and fast, weak pulse. It is caused by severe bleeding, severe infection, or obstructed labour.

### Glossary

### SIGN

**OSSARY AND ACRONYMS** 

As used in this guide, physical evidence of a health problem which the health worker observes by looking, listening, feeling or measuring. Examples of signs: bleeding, convulsions, hypertension, anaemia, fast breathing.

#### SKILLED ATTENDANT

Refers exclusively to people with midwifery skills (for example, midwives, doctors and nurses) who have been trained to proficiency in the skills necessary to manage normal deliveries and diagnose or refer obstetric complications.

For the purposes of this guide, a person with midwiferv skills who:

- has acquired the requisite qualifications to be registered and/or legally licensed to practice training and licensing requirements are countryspecific:
- May practice in hospitals, clinics, health units, in the home, or in any other service setting.
- Is able to do the following:
  - $\rightarrow$  give necessary care and advice to women during pregnancy and postpartum and for their newborn infants:
  - $\rightarrow$  conduct deliveries on her/his own and care for the mother and newborn; this includes provision of preventive care, and detection and

#### appropriate referral of

As used in this guide, a health abnormal conditions.  $\rightarrow$  provide emergency care for problem reported by a woman, the woman and newborn; such as pain or headache. perform selected obstetrical procedures such as manual

**SYMPTOM** 

#### TERM, FULL-TERM

Word used to describe a baby born after 37 completed weeks of pregnancy.

#### TRIMESTER OF PREGNANCY

#### **VERY SMALL BABY**

Baby with birth weight less than 1500-g or gestational age less than 32 weeks.

#### **SMALL BABY**

care.

A newly born infant born preterm and/ or with low birth weight.

removal of placenta and

newborn resuscitation; prescribe and give drugs

(IM/IV) and infusions to the

including for post-abortion

 $\rightarrow$  provide health information

and counselling for the

woman, her family and

mother and baby as needed,

#### **STABLE**

community.

Staying the same rather than getting worse.

#### **STILLBIRTH**

Birth of a baby that shows no signs of life at birth (no gasping, breathing or heart beat).

#### SURVEILLANCE, PERMANENT

Continuous presence and observation of a woman in labour.

WHO definitions have been used where possible but, for the purposes of this guide, have been modified where necessary to be more appropriate to clinical care (reasons for modification are given). For conditions where there are no official WHO definitions, operational terms are proposed, again only for the purposes of this guide.

See Gestational age.

### ACRONYMS

- AIDS Acquired immunodeficiency syndrome, caused by infection with human immunodeficiency virus (HIV). AIDS is the final and most severe phase of HIV infection.
   ANC Care for the woman and fetus during pregnancy.
   ARV Antiretroviral drug, a drug to treat HIV infection, or to prevent mother-
- to-child transmission of HIV. BCG An immunization to prevent
- tuberculosis, given at birth. BP Blood pressure.
- BPM Beats per minute.
- FGM/C Female Genital Mutilation/ Cutting
- FHR Fetal heart rate.
- Hb Haemoglobin.

**GLOSSARY AND ACRONYMS** 

- HB-1 Vaccine given at birth to prevent hepatitis B.
- HMBR Home-based maternal record: pregnancy, delivery and interpregnancy record for the woman and some information about the newborn.
- HIV Human immunodeficiency virus. HIV is the virus that causes AIDS. INH Isoniazid, a drug to treat
- tuberculosis. IV Intravenous (injection or infusion).
- IM Intramuscular injection.
- IU International unit.
- IUD Intrauterine device.

- LAM Lactation amenorrhea. LBW Low birth weight: birth weight less than 2500 g.
- LMP Last menstrual period: a date from which the date of delivery is estimated.
- MTCTMother-to-childtransmission of HIV.
- NG Naso-gastric tube, a feeding tube put into the stomach through the nose.
- ORS Oral rehydration solution.
- OPV-0 Oral polio vaccine. To prevent poliomyelitis, OPV-0 is given at birth. QC A quick check assessment of the health status of the woman or her baby at the first contact with the health provider or services in order to assess if emergency care is required.
- RAM Systematic assessment of vital functions of the woman and the most severe presenting signs and symptoms; immediate initial management of the lifethreatening conditions; and urgent and safe referral to the next level of care.
- STI Sexually transmitted infection.

- TBA A person who assists the mother during childbirth. In general, a TBA would initially acquire skills by delivering babies herself or through apprenticeship to other TBAs.
- TPHA Treponema Pallidum Haemagglutination Assay for testing Syphilis. It can be performed in the clinic.
- TT Tetanus Toxoid an immunization against tetanus
- hat birth. > More than
  - $\geq$  Equal or more than
  - < Less than
    - $\leq$  Equal or less than

## Acronyms





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