### **Helping Babies Survive**

# **Essential Care for Every Baby**

**Provider Guide** 





#### **Introduction**

#### Dear provider of essential newborn care

The Provider Guide for the Essential Care for Every Baby program is intended to be a vital document for providers of essential newborn care. Some will use it as preparation for and during the initial Essential Care for Every Baby training course. Others will not use it until after the completion of the course. Then, it will guide activities that will help providers maintain and improve knowledge and skills through review and practice. The Provider Guide also suggests ways to improve the environment in which babies receive care in your facility.

#### Uses of the Provider Guide

#### To prepare for the Essential Care for Every Baby course

The Guide can assist you in preparing for the Essential Care for Every Baby course. First review the Background Knowledge and then complete the Review Key Knowledge in each section.

The remainder of the material in the Guide is for use after the course.

#### To maintain and increase knowledge and skills

The Guide is divided into a series of activities. Most of these review actions required for essential care. There are four exercises that combine several actions. To maintain and increase knowledge and skills, complete the following steps:

- Identify a provider in your facility who will become your partner in these activities. Ideally, this partner should have completed the Essential Care for Every Baby course.
- 2. Together with this partner, complete each activity in the Guide in three steps:
  - a) Confirm your understanding of the key knowledge by reviewing the Background Knowledge section;
  - b) Test your knowledge by completing the Review Key Knowledge section:
  - c) Practice skills by performing the actions in the Practice Key Skills section.
- Complete each activity at the interval recommended in the table (page 60-61), and record your completion of each activity in the table.

*Note*: These exercises can be completed by a single provider without a partner if necessary, but paired practice is encouraged.

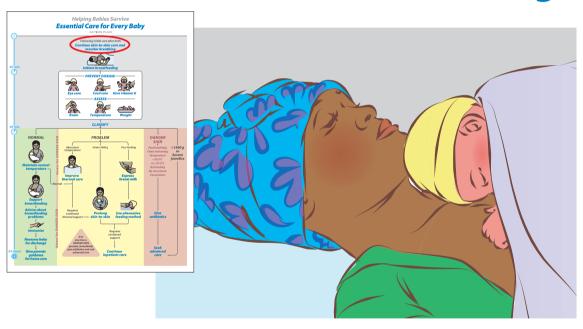
#### To improve care in your facility

The Guide also outlines ways to improve care in your facility. Suggestions are included with each activity:

- Identify differences between the recommended actions and the actions performed in your facility. Discuss how you could change your practice to perform each action as recommended.
- Consider improvements that might need small changes in the environment where births occur and where babies receive care. Also consider how you could obtain key pieces of equipment or supplies that are not currently available. Work with leaders in your facility to make changes in the environment and obtain equipment or supplies.
- Identify major deficiencies in your facility that limit the quality of newborn care. Some examples are insufficient space or lack of electric power. Consider trying to develop strategies for eliminating these deficiencies with local health authorities.

#### After immediate care at birth

# Continue skin-to-skin care and monitor breathing



To keep babies warm and identify problems early

A baby begins to lose heat immediately after birth. Prevent heat loss and low body temperature with the following steps:

- 1) Dry the baby thoroughly at birth and remove wet towels or clothing.
- 2) Place the baby naked on mother's skin near her breasts.
- 3) Cover the mother and baby with a clean, dry drape or cloth. Cover the baby's head.

Skin-to-skin care should begin at birth and continue for at least one hour. Avoid interruptions and keep them as brief as possible. Uncover only the body areas needed for care

Check the baby's temperature every 15 minutes during skin-to-skin care after birth. Feel the baby's foot or forehead. If the skin feels cool, measure the temperature (see page 16-17).

Rapid breathing after birth often occurs while normal lung fluid is being absorbed. Rapid breathing usually resolves by one to two hours after birth. However, rapid breathing that continues may be caused by a more serious problem that requires advanced care. Monitor babies every 15 minutes for rapid breathing (>60/min) and chest in-drawing until the time of the first complete exam. This can be done by observation alone, without handling, if the baby appears well.

#### 2. Review key knowledge

Select the correct answer:

- ☐ After delivery of the placenta
- $\hfill \square$  Immediately after drying the baby following birth
- $\hfill \square$  After being shown to the relatives

# During the first hour after birth, how often should babies be observed for breathing problems?

- ☐ Once during the hour
- ☐ Every 30 minutes
- ☐ Every 15 minutes

### During the first hour when should skin-to-skin care be interrupted?

- ☐ Briefly for essential care only
- ☐ When showing the baby to the relatives
- $\Box$  To give the first bath

#### To improve care in your facility:

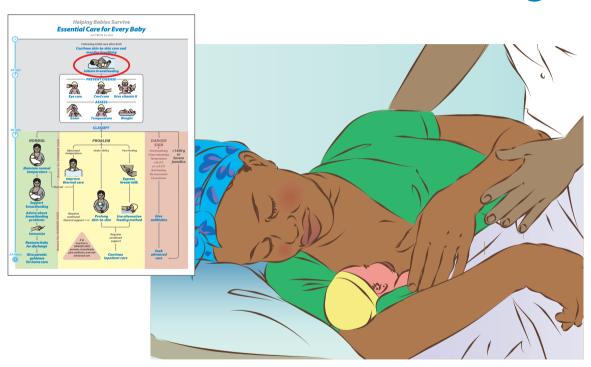
How can you make sure that every baby receives skin-to-skin care immediately after birth? How can you make sure that every baby is monitored for breathing problems?

Discuss the answers to these questions with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Is there a private area where mothers can stay with their babies for the first hour after birth?
- Are mothers and babies frequently separated after birth?
- Are there providers who monitor breathing of all babies during the first 1-2 hours after birth?

#### Within one hour after birth

# Initiate breastfeeding



To increase the success of breastfeeding

Breast milk and colostrum provide nutrition that is easy to digest and contain antibodies that protect against infection. Babies should receive only breast milk for the first 6 months. Babies who receive other food or liquids before 6 months of age are more likely to develop diarrhea. Advise women about breastfeeding during antenatal visits and discuss it again before birth occurs.

Starting breastfeeding soon after birth helps mothers provide enough milk later. It also helps the uterus contract and reduces maternal bleeding.

Some babies may not breastfeed well soon after birth, but it is important to encourage breastfeeding during this time. To encourage early breastfeeding, keep mother and baby together unless a problem separates them. Babies are often alert immediately after birth and will move toward the mother's breast but may not suck.

Signs of readiness to feed include:

- 1) eyes open
- 2) the baby's head slightly back
- 3) tongue down and forward
- 4) mouth open
- 5) licking movements

Teach mothers how to recognize these signs.

#### 2. Review key knowledge

#### Fill in the missing words:

Breast milk and colostrum provide nutrition that is easily digestible, and contain that protect against infection. Babies should receive only breast milk for the first months. Babies who receive food or liquids other than breast milk are more likely to develop . Starting breastfeeding soon after birth helps mothers produce more milk later on, helps the uterus and reduces maternal Signs that the baby is ready to feed include: the baby's is slightly back: the is down and forward; the mouth is open wide; the baby makes movements.

#### 3. Practice key skills

#### **Role One**

Play the role of a mother who has just delivered. Collect a manikin or doll with a head covering and a blanket for the baby.

#### **Role Two**

Play the role of the provider.

Demonstrate and assist the mother with:

- Positioning herself comfortably
- · Positioning the baby skin-to-skin near the breasts
- · Covering the baby's body and head
- Monitoring breathing and temperature
- · Recognizing signs of readiness to breastfeed

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

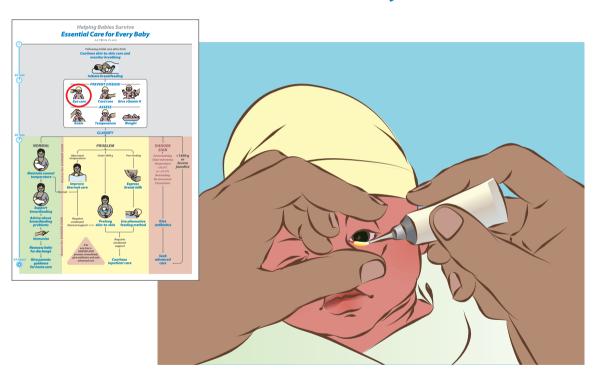
How can you make it easier for mothers to begin breastfeeding soon after birth?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Do mothers receive counseling about breastfeeding before delivery?
- · Are mothers and babies separated after delivery?
- Do all birth attendants understand the importance of early breastfeeding?

#### Within 90 minutes after birth

# Provide eye care



To help prevent serious eye infections

Infections can pass from the mother to the newborn during birth. Infections of the eye can result in blindness.

Applying medicine to the inside of the lower lid of both eyes soon after birth can prevent these infections. Know what eye treatment is recommended by your health authority.

Describe the eye treatment recommended by your health authority on the lines below:

Eye treatment can be delayed until the baby has breastfed, but provide eye care within the first 90 minutes after birth.

Only medicine to prevent eye infection should be placed in the eye.

#### 2. Review key knowledge

Select the correct answer:

#### When should initial eye treatment be given?

- $\square$  At the end of the first day
- $\hfill\square$  Within 90 minutes after birth
- $\hfill\square$  After the first bath

## In what part of the eye should medicine to prevent eye infections be given?

- ☐ Inside the upper eyelid☐ Inside the lower eyelid☐
- ☐ In the corner of the eye only

### In addition to medicine to prevent infection, what else should be put in a baby's eyes?

- $\hfill\Box$  Special herbal tea
- $\square$  Colostrum
- $\ \square \ \ Nothing$

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Use a manikin or doll with eyes that will not be damaged by ointment or drops.

#### **Role Two**

Play the role of the provider.

Demonstrate and describe to the mother:

- · Applying medication to the eyes
  - Wash hands with soap and water
  - Pull down the lower lid of the eye
  - Place a portion of the ointment inside the lower lid
  - Repeat for the other eye
- · Why antibiotics are used in the eyes

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

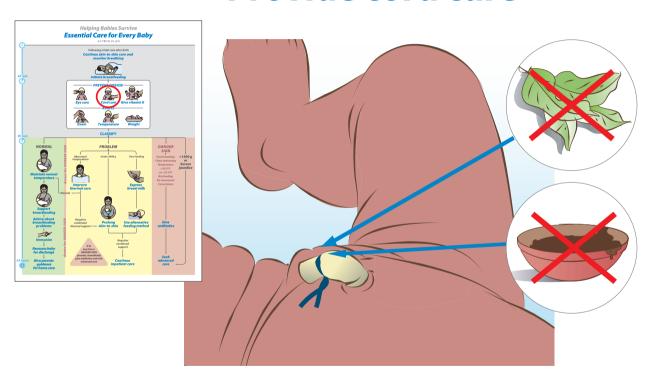
How could you ensure that every baby born in your facility receives eye care?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Is medicine for eye care available in your facility for every baby?
- How soon after birth is eye care provided?
- Who provides eye care?

#### Within 90 minutes after birth

# **Provide cord care**



To help prevent infections

Proper hygiene helps prevent infections in babies. Hygiene includes frequent hand washing, bathing the baby periodically, and proper care of the cord.

Cleansing after birth: Soon after birth, remove blood or meconium (not vernix) by wiping. Do not bathe the baby until at least 6 hours after birth, and then only if the baby's temperature is normal and the baby has no serious problems. Small babies should be bathed later because they often become cold during bathing. Babies of mothers with HIV should be bathed as early as possible after birth.

Cord care: Proper care of the cord may prevent infection. Keep the cord exposed and dry. DO NOT apply anything to the cord, including herbs, animal dung or other substances, unless a treatment is recommended by your health authority. Do not bandage or cover the cord. If soiled, wash the cord with clean water. If there is blood coming from the cord, place a new tie tightly around the cord.

**Special circumstances:** If your health authority recommends that medicine be applied to the cord, describe this treatment in the space in the next column:

#### 2. Review key knowledge

Select the correct answer:

#### When should a baby first be bathed?

- $\hfill\square$  As soon as the baby breathes normally
- □ At least 6 hours following birth□ As soon as the baby has a normal temperature

# Following birth in a health facility what should be applied to the umbilical cord?

- ☐ Nothing, unless a medicine is recommended by the health authority
- $\hfill\square$  A clean bandage soaked in alcohol
- ☐ Dried herbs or other powders

### During the first hour after birth, how should meconium on the baby's skin be removed?

- $\hfill \square$  Scrubbed away in a bath of warm water
- $\hfill \square$  Wiped away with a clean cloth
- ☐ Scrubbed with a cloth containing alcohol

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Use a manikin or doll with an umbilical cord.

#### **Role Two**

Play the role of the provider.

Advise the mother about cord care:

- · Keeping the cord dry
- · Cleaning the cord
- Stopping bleeding

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice. Practice cord care as recommended by the local health authorities.

#### To improve care in your facility:

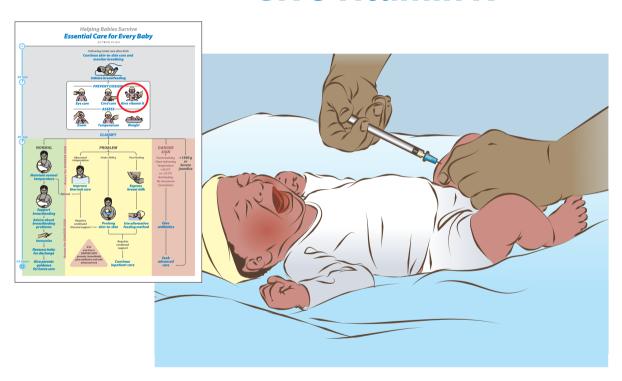
How could you ensure that every baby receives appropriate cord care?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Do mothers understand proper cord care at home?
- Will advice to put other substances on the cord be made by someone after the baby goes home?

### Within 90 minutes after birth (may be deferred until later during the first day)

# **Give vitamin K**



To prevent bleeding that can cause death

Vitamin K protects babies from serious bleeding that may result in death or brain damage. Every newborn should be given vitamin K. Because this treatment is painful, it should not be given during the first hour after birth, a time when the mother and baby should not be disturbed. Give vitamin K around 90 minutes of age after the first complete exam.

The dose of vitamin K is 1 mg (0.5 mg for babies <1500 grams), and it is given intramuscularly (IM) in the front, outside of the mid-thigh. Check the volume of this dose carefully as more than one concentration may be available.

Providers must wash their hands, but are not routinely required to wear gloves, during injections. Wipe the baby's skin with alcohol and use sterile technique. Do not re-use needles. Place used needles in a solid container with a lid to avoid injury and infection.

#### 2. Review key knowledge

Select the correct answer:

#### Why should all babies be treated with vitamin K?

- $\ \square$  To stimulate breathing
- ☐ To prevent serious bleeding☐ To prevent infection☐
- io prevent infection

#### Which babies should receive vitamin K?

- ☐ All babies
- $\hfill\square$  Only babies who are bleeding
- $\ \square$  Only small babies

#### 3. Practice key skills

#### **Role One**

Play the role of the mother.

Collect a manikin or doll, syringe, water or used vitamin K vial, and alcohol for cleansing the skin.

#### **Role Two**

Play the role of provider.

Demonstrate how to inject vitamin K.

- Explain to the mother the need for vitamin K and how it will be given
- Encourage mother to breastfeed her baby for comfort during the injection
- Wash hands with soap and water (use gloves if available)
- Draw up correct dose
- Identify the correct injection site on the doll or manikin
- · Clean the site of injection
- Demonstrate the technique for safe disposal of syringes and needles

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

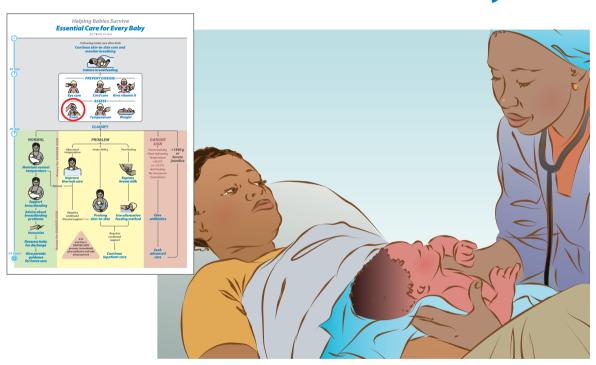
How can you make sure that all babies born in your facility are treated with vitamin K?

Discuss the answer to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Is vitamin K available for every baby?
- Who can give vitamin K?
- Is there more than one concentration of vitamin K?

#### Within 90 minutes after birth

# **Examine the baby**



To tell if a baby is well or has a problem

A complete exam should be performed within 90 minutes of birth or whenever a baby appears unwell. During the exam, evaluate a baby by looking, listening and feeling. Focus on the following features:

**Breathing:** A baby should breathe easily between 40-60 times a minute. Count a baby's breathing rate for one minute.

**Movement and tone:** When active, well babies have spontaneous movements of arms and legs that are equal on both sides. Limbs are flexed at rest. The tone should be neither floppy nor rigid.

**Skin color:** The normal skin color of a newborn is pink, but hands and feet may still look pale or blue soon after delivery. Pink color may be difficult to detect in dark-skinned babies. The inside of the mouth should be pink in all babies. Babies with jaundice may have yellow skin. Recognizing jaundice is important because severe jaundice may require advanced care.

**Cord appearance:** On the initial exam, there should be no drainage or bleeding from the cord.

**Other features of a general exam:** Inspect the baby's entire body for abnormalities.

Document the results of this exam even if all findings are normal. Perform the exam in front of the parents and communicate the findings to them.

#### 2. Review key knowledge

Select the correct answer:

Which of the following describes movements of the arms and legs in a healthy baby?

t

- ☐ Equal on one side compared to the other when awake
- $\hfill\square$  Repeated jerky movements

#### How fast should a baby breathe?

- $\square$  At least 65 times per minute
- $\hfill\square$  At any rate as long as there is no chest in-drawing
- $\square$  40-60 times per minute

### Within one hour after birth, what should drain from the umbilical cord?

- ☐ Small amounts of clear fluid
- ☐ Droplets of blood
- ☐ No drainage

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Collect a manikin or doll, a blanket, a pen and paper or recording form for physical exam.

#### **Role Two**

Play the role of the provider.

Demonstrate, describe to the mother, and document the physical examination:

- Breathing
- Movement and position of arms and legs
- · Skin color
- · Cord appearance
- · Other features of a general exam

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

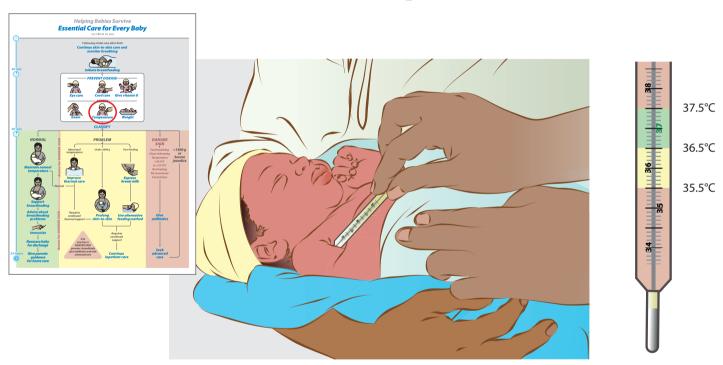
How can you make it easier to examine all babies in your facility by 90 minutes of age and record the results of the examination?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Who examines babies in your facility?
- Is there adequate light where you examine babies?
- Are there forms on which to record the results of examinations?

#### Within 90 minutes after birth

# Measure temperature



To identify babies who require special care

Keeping body temperature normal helps a baby stay healthy. Low temperature can cause death.

It is better to prevent low temperature than to warm a baby who is cold. Monitor temperature in the first hours after birth. Low temperature is common among premature and low-weight babies. Prevent or correct low temperature with changes in care (see Improve thermal care, page 39).

The normal temperature range is 36.5-37.5 °C. A temperature 35.5 °C-36.4 °C requires improved thermal care. A temperature below 35.5 °C is a Danger Sign. A temperature above 37.5 °C not due to over-warming (for example being placed in direct sunlight) is a Danger Sign.

Feeling the skin of the face, abdomen, or foot can estimate the temperature, but measuring the temperature is more exact. Measuring temperature in the armpit (axilla) is safer than measuring a rectal temperature. Measure temperature in all babies within 90 minutes after birth.

A thermometer used with babies must measure temperatures below 35.5  $^{\circ}$ C.

#### 2. Review key knowledge

#### Fill in the missing words:

Keeping a baby's	s temperature	normal can
sometimes prev	ent	Low body
temperature is c	ommon in the	first few hours after
, esp	ecially among	]
and	weight babies	s. It is better to
lc	ow temperatu	re than to try to
a	baby who is v	ery cold. A baby's
temperature car	n be estimated	l by feeling the skin of
the face, abdom	en or	, but measuring
the temperature	with a	is more exact.
An temperature	should be me	asured in the armpit
vithin minutes after birth.		

#### 3. Practice key skills

#### **Role One**

Choose thermometer readings for the provider in Role Two.

Collect a manikin or doll and a thermometer.

#### **Role Two**

Play the role of the provider.

Measure the temperature:

- · Clean the thermometer
- Position the baby on the side or back
- Put the tip of the thermometer high in the armpit
- Hold the arm against the side for the recommended time

Classify the temperature (given by the provider in Role One) as normal, having a problem, or showing a Danger Sign.

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

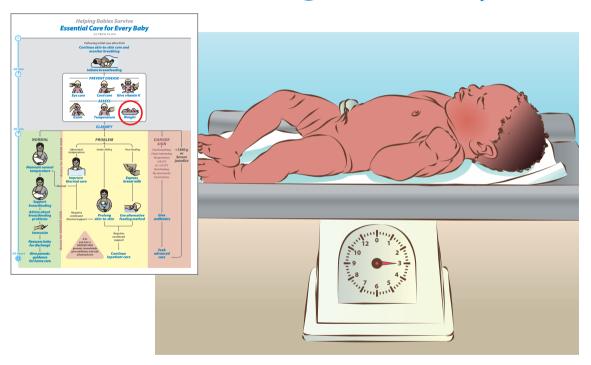
How could you ensure that all babies at your facility have a temperature measured within 90 minutes after birth?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Are baby thermometers available in your facility?
- Are cleaning solutions available?
- How are thermometers replaced when they no longer work?
- Are all staff who care for babies soon after birth capable of measuring a temperature?

#### Within 90 minutes after birth

# Weigh the baby



To help identify babies at higher risk

Birth weight identifies babies who may need special care and may be necessary for calculating drug doses. Use scales designed for weighing babies. All babies should be weighed within 90 minutes of birth. The baby should not be weighed during the initial period of skin-to-skin care (for at least the first hour after birth).

Use scales designed for weighing babies. Take the scale to the mother and baby. Zero the scale before each use. Clean the scales with diluted bleach solution or other safe cleaning product before each use to prevent infection.

Always document birth weight on the form used in your facility for this purpose, for example the baby's medical record or the immunization record.

Babies with birth weights under 2500 grams may require special care to prevent low body temperature. Babies with birth weight under 2000 grams should receive prolonged skin-to-skin care (see Prolong skin-to-skin care, page 41). These babies may need alternative feeding methods and more frequent assessment to identify problems and Danger Signs. Babies with birth weights under 1500 grams should be referred for advanced care when possible.

#### 2. Review key knowledge

Select the correct answer:

## Which of the following is the most important reason for weighing all babies soon after birth?

- ☐ Birth weight may identify babies who need special care.
- ☐ Mother and family members often want to know the birth weight.
- ☐ Birth weight will determine how long a baby will feed at each feeding.

#### How soon after birth should babies be weighed?

- ☐ Sometime during the first day
- ☐ Anytime before mother and baby leave the birth facility
- ☐ Within 90 minutes after birth

#### When should a scale be zeroed?

- ☐ Once per month
- ☐ Whenever it is convenient for the health care worker
- ☐ Before each use

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Collect a manikin or doll, scales, cleaning solution, and a blanket or cloth.

#### **Role Two**

Play the role of the provider.

Demonstrate how to weigh the baby:

- Clean the scale
- Put a clean cloth on the scale
- Balance the scale to zero
- Wash hands
- · Ask the mother to undress the baby
- Quickly place the baby on the scale
- Return the baby to mother for skin-to-skin care or dressing
- · Record the birth weight

Change roles and repeat the exercise.

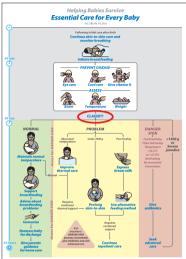
Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

How could you make it easier to weigh all babies at your facility?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Are scales suitable for babies available?
- Can scales be moved to mother and baby?
- Are cleaning products available?
- Who will repair the scales if they break?



By 90 minutes after birth

# Classify the baby







*To determine further care* 

At about 90 minutes following birth, babies should be classified as **normal and well, having a problem** or **needing advanced care**. Classification is based on the baby's weight, temperature and exam.

- Well babies breathe at a normal rate (40-60 per minute) without effort, have a temperature of 36.5-37.5 °C, and weigh >2000 grams.
- Babies who have a problem may have a temperature of 35.5-36.5 °C, birth weight of 1500-2000 grams, or may feed poorly.
- Babies needing advanced care may have a Danger Sign, severe jaundice or a birth weight <1500 grams.</li>

Some babies do not attach to the breast during the first 90 minutes after birth and therefore do not feed. If these babies are normal in all other ways, feeding should be attempted again. Babies who do not feed after several attempts should be classified as having a Danger Sign.

All babies should be classified by 4 hours of age.

#### 2. Review key knowledge

A 3000 gram baby is unable to suck or swallow during the first 6 hours after birth.

How would you classify this baby?

- $\Box$  The baby is normal.
- ☐ The baby has a Danger Sign, and you should seek advanced care.
- $\hfill\Box$  The baby has a feeding problem.

At 90 minutes of age, 2200 gram baby has a normal exam, is breathing 50 times per minute and attached to the breast and sucked for 10 minutes.

How would you classify this baby?

- $\Box$  The baby is normal.
- ☐ The baby has a Danger Sign, and you should seek advanced care.
- $\square$  The baby has a feeding problem.

At 90 minutes of age, a 1700 gram baby has a normal exam, fed only briefly at 30 minutes following delivery and has a temperature of 35.7 °C.

How would you classify this baby?

- $\hfill\Box$  The baby is abnormal (low) temperature.
- ☐ The baby has a Danger Sign, and you should seek advanced care.
- $\square$  The baby has a feeding problem.

#### 3. Practice key skills

#### Role One

Based on cases of babies born in your facility who were normal, had problems, and needed advanced care, provide findings of physical exam, weight, and temperature of these babies to the provider in Role Two.

#### **Role Two**

Classify babies as normal, having a problem, or needing advanced care.

Change roles and repeat the exercise.

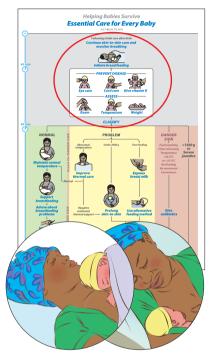
Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility section:

How can you ensure that babies are classified by 90 minutes after birth?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Is there an area in your facility where babies can stay with their mothers for at least 4 hours after delivery and be observed closely?
- Is there a provider available at all times who can assess and classify babies?



Continue skin-to-skin care and monitor breathing.
Initiate breastfeeding

# Exercise: Essential care during the first 90 minutes



Provide treatments to prevent disease

**Assess and Classify** 

#### **Background**

The purpose of this exercise is to practice at one time all of the essential actions and assessments performed during the first 90 minutes after birth.

The three actions that prevent disease (eye care cord care and giving vitamin K) and the three that classify the baby (examine, weigh and measure temperature) should be delayed until at least one hour after birth.

The six actions listed above can be performed in any order. However, it is recommended that the temperature be taken before the exam and vitamin K be given after the exam. Perform these actions while continuing skin-to-skin care as much as possible.

#### **Practice key skills**

Practice begins with a case scenario. The following is a suggested case; however, you may choose a different case.

#### Case scenario

A baby was born vaginally at 39 weeks gestation. The baby cried at birth. The placenta has been delivered and mother is well.

Role play essential care during the first 90 minutes and describe the care to the mother.

#### Role One

Play the role of the mother.

Collect a manikin or doll, thermometer, cleaning product, scale, ointment or drops for eyes, syringe and vial of vitamin K or water.

#### **Role Two**

Play the role of the provider. Demonstrate and describe to the mother the steps in the following Checklist.

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### Checklist ☐ Wash hands Explain why it is important to wash hands before touching the baby. ☐ Monitor breathing Describe fast, breathing and chest indrawina. ☐ Continue skin-to-skin care Explain that skin-to-skin care helps the baby stay warm and begin breastfeeding. ☐ Initiate breastfeedina Describe the signs that a baby is ready to breastfeed and how to position a baby. Provide treatment to prevent disease and assess the baby (steps can be done in any order between 60-90 minutes after birth) $\square$ Examine the baby Breathing, skin color, movements, activity, cord appearance, other physical features Describe the findings to the mother. ☐ *Measure temperature* Tell mother if temperature is normal, low, or high. $\square$ Weigh the baby Tell mother the baby's weight. ✓ Documents results of exam, weight and temperature. ☐ Provide eye care Explain that eye care prevents infections. ☐ Provide cord care Explain that cord care prevents infections.

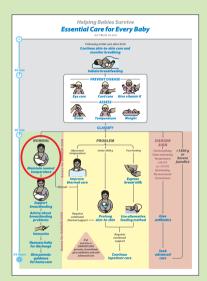
Explain that vitamin K prevents serious bleeding.

Classify the baby as being Normal, having a Problem, or showing a Danger Sign

✓ Give vitamin K

#### After skin-to-skin care with a well, normal weight baby

# Maintain normal temperature





To prevent a baby becoming either too cold or too hot

A baby begins to lose heat even before the body temperature falls. Preventing heat loss should begin with skin-to-skin care at birth. Skin-to-skin care should continue for at least one hour whenever possible. If illness in the mother prevents skin-to-skin care with her, another adult can provide skin-to-skin care

Other ways to prevent heat loss are to keep the room warm, and eliminate drafts and contact with wet or cold surfaces. Do not bathe a baby before 6 hours after birth, or longer if the baby has a low birth weight.

After skin-to-skin care, wrap the baby in a clean, dry blanket or cloth. Wrap securely, but not so tightly that breathing is difficult. Babies may also be dressed in dry clothes, or a diaper and shirt. The head should be covered. The amount of clothing should be appropriate for the temperature around the baby. This usually means 1-2 more layers of clothes than are required for adults to be comfortable.

Babies may become too hot if placed in direct sunlight, or if placed too close to heaters or stoves.

#### 2. Review key knowledge

Select the correct answers:

#### How soon does a baby begin to lose heat?

- ☐ When the baby starts breastfeeding
- ☐ Immediately after birth, even before the body temperature begins to fall
- ☐ After 90 minutes

### How long should skin-to-skin care last for all babies?

- ☐ At least 1 hour
- $\hfill \square$  As long as it is convenient for the mother
- ☐ At least 24 hours

### How should a baby be kept warm after skin-to-skin care?

- ☐ Bathing in warm water
- ☐ Wrapping in a clean, dry blanket or cloth☐ Exposing the baby to direct sunlight

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Collect a manikin or doll and a blanket or dry cloth.

#### **Role Two**

Play the role of the provider.

Demonstrate and describe to the mother:

- · Preventing heat loss
- Selecting appropriate clothing and head covering
- · Wrapping the baby

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

Are there simple changes at your facility that can help babies maintain normal temperatures?

How could you ensure that the environment at your facility best supports the thermal needs of babies?

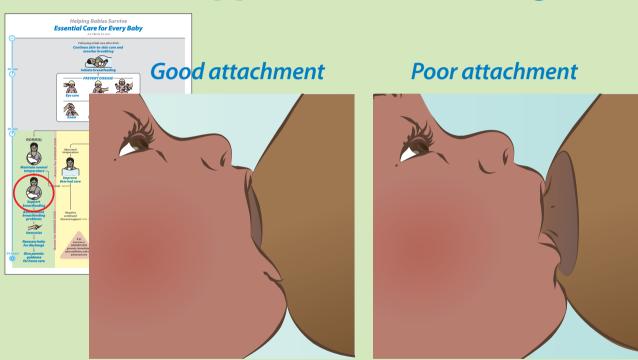
Discuss the answers to this question with other providers and leaders in your  $\,$ 

facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Do babies receive care in areas free of drafts?
- Can the temperature of these areas be adjusted?
- Are clean, dry wraps available for all infants?

#### During the first day after birth

# Support breastfeeding



To improve the success of breastfeeding

Breastfeeding often is not easy, especially for the first-time mother. Advice and support from a health care provider will increase a mother's chance of successful and exclusive breastfeeding.

Keep the mother and baby together unless it is necessary to separate them. Encourage breastfeeding whenever the baby shows signs of readiness to feed (see page 7). Place the baby in a position to breastfeed when these signs appear.

**Good positioning** means the baby can attach well, and the mother is comfortable. The mother should place the baby with the head and body in a straight line, the face opposite the nipple, chin touching the breast, and the neck not flexed. The whole body should be supported.

#### Good attachment occurs when

- 1) the mouth is open wide
- 2) the lower lip is turned downward
- 3) the chin is touching the breast
- 4) most of the dark portion of the nipple is in the baby's mouth.

**Poor attachment** occurs when the baby pulls at the nipple and only the nipple is in the mouth.

### Advise mothers to alternate the side on which the baby feeds first.

Options for positioning for feeding:







Healthy babies should feed about every 3 hours, or 8 to 12 times a day. Mothers will know that the baby is getting enough milk during each feeding when:

1) the breast softens with feeding, 2) swallowing sounds are heard during feeding, and 3) the baby sleeps well between feedings.

#### 2. Review key knowledge

## A baby who is ready to breastfeed does which of the following?

- ☐ Cries for a long period of time
- $\hfill\Box$  Opens the mouth wide
- $\square$  Eyes closed and hands open

#### How often should healthy babies feed?

- $\square$  Every hour
- ☐ About every 3 hours, or 8-12 times per day
- ☐ Every 6 hours

### Which of the following is a sign of good attachment?

- $\hfill\square$  Only the tip of the breast in the mouth
- Baby bites down and pulls on the nipple
- $\hfill\square$  Baby's mouth wide open on the breast

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Use a manikin or doll with a head covering and a blanket.

#### **Role Two**

Play the role of the provider.

Demonstrate and describe to the mother:

- Positioning at the breast
- Recognizing good and poor attachment
- Recognizing signs that a baby is adequately fed

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

How can you help all mothers breastfeed successfully?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- $\bullet \ \ \text{Is there a person knowledgeable about breastfeeding to advise all mothers?}$
- Who would support a breastfeeding mother who leaves the birth facility soon after delivery?

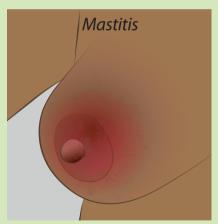
### Before discharge

# Advise about breastfeeding problems



Helping Babies Survive
Essential Care for Every Baby





To improve the success of breastfeeding

**Inverted nipples** can interfere with good attachment. Encourage mothers with inverted nipples to stimulate the nipples before feeding and to shape the breast before attachment.

Other problems with the breasts during the first week or two following delivery may prevent successful breastfeeding. Because the problems most commonly occur after discharge from the birth facility, providers should advise mothers about prevention, recognition and treatment.

**Breast engorgement** causes the breasts to be very full, tight, and shiny. Mothers with engorgement should feed more often, and/or express milk prior to attachment.

**Sore or cracked nipples** may result from poor attachment or a skin infection. Encourage better attachment and continued breastfeeding or expression of milk. Advise mothers to wash their breasts once a day and avoid soaps, medicated lotions, and ointments. Treat cracked nipples by applying the last drops of breast milk to the skin of the nipple.

**Mastitis** may occur when blocked ducts limit drainage of milk or may result from infection.

Infection typically occurs in one breast only, and is present when there is a well-defined, red, sore and swollen or hardened area. Mastitis is treated by increasing flow of milk by frequent breastfeeding or expressing milk. If a mother has a temperature of > 38°C, feels ill or does not improve in two days, she should seek medical care promptly. Further treatment may include antibiotics.

#### Improve milk supply by

- · Increasing maternal fluid intake
- · Increasing frequency of feedings

#### Improve flow of milk by

- · Applying warm compresses to the breasts
- Massaging the back and neck
- · Massaging the breasts and nipples

#### 2. Review key knowledge

Select the correct answer: What should mothers do if they have breast engagement?

- $\hfill\Box$  Feed more often or express milk
- $\square$  Stop breastfeeding for one day
- ☐ Apply herbs to the breasts

Sore or cracked nipples may result from which of the following?

 $\square$  Eating food that has hot spices

#### ☐ Wearing tight clothing

☐ Poor attachment during feedings

### Which of the following signs are common when a mother has mastitis?

- $\square$  Very full breasts with tight, shiny skin
- ☐ Non-tender breasts from which pus drains from both nipples
- ☐ Hard, tender and red area in one breast that is warm to the touch

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Use the pictures (at left) to show breast problems.

#### **Role Two**

Play the role of the provider.

Advise the mother about:

- Inverted nipples
- Breast engorgement
- · Sore or cracked nipples
- Mastitis
- · Low milk supply

Change roles and repeat the exercise.

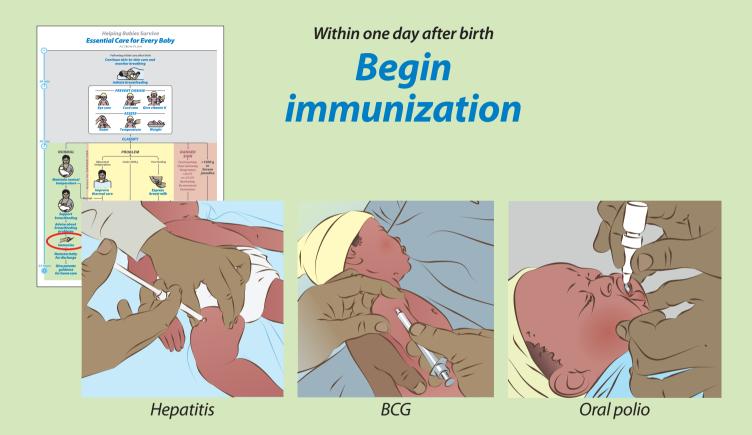
Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility

How could you ensure that all mothers with breastfeeding problems receive advice about recognizing and managing these problems?

Discuss the answers to this question with providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Who is available to advise mothers with breastfeeding problems in the birth facility?
- Who advises mothers after discharge from the birth facility?



To help prevent serious childhood illnesses

Immunizations given during the first week may include BCG, hepatitis B and oral polio.

As immunizations differ from one region to anoth				
follow recommendations of your health system. Write the immunizations that are recommended by				
	-			
	_			
	_			

If mother is HIV positive, BCG is often deferred until the baby is known to be HIV negative.

Remind mothers that additional doses of hepatitis B and polio vaccines will be required later. Immunizations against other diseases will also be needed later. Follow recommendations of your health authority.

#### 2. Review key knowledge

#### Fill in the missing words:

Immunizations given du	uring the first week may	
include,	and	
Remind mothers that additional doses of		
and	vaccines will be	
required later. Immuniza	ations against other diseases	
will also be needed later	r	

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Collect manikin or doll, alcohol and swabs, syringes of correct size, recording form and pen

#### **Role Two**

Play the role of the provider.

Explain to the mother what immunizations are needed and how they will be given.

Demonstrate giving each immunization:

- Measure the correct dose in the syringe (use air or water)
- Identify the correct site to give the medication or indicate oral administration
- · Clean the site of injection
- Record immunizations on the appropriate form
- Demonstrate the technique for safe disposal of syringes and needles

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

How could you ensure that all infants begin immunization?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Are vaccines and supplies for administration available for all babies?
- Who gives immunizations?
- What is the method for needle disposal?
- · How are records of immunizations kept?

#### When considering discharge



To make sure discharge is appropriate

When possible, discharge from the birth facility should not occur until 24 hours after birth. Delay discharge for babies who have had problems such as low birth weight, low temperature or breathing problems. Prior to discharge, assess both mother and baby for potential problems and readiness for home care.

**Evidence of successful breatfeeding** should be present prior to discharge. The baby should feed every 2-4 hours and at least 8 times per day. The baby should suckle effectively with slow, deep sucks, and the baby should settle between feedings. If the baby is not breastfeeding well, observe a feeding. Watch for signs of poor attachment.

A second complete exam of the baby should be performed prior to discharge from the birth facility. Include a thorough inspection of the umbilicus because of the risk of infection of the umbilicus, a serious and potentially lifethreatening problem. Signs of infection include redness and swelling at the base of the umbilicus and drainage of pus from the cord. If present, clean the cord with soap and water. Antibiotics should be given, and the baby should receive advanced care if a Danger Sign is also present.

#### 2. Review key knowledge

#### Fill in the missing words:

When possible, discharge from the birth facility should not occur until \_\_\_\_ hours after birth.

Delayed discharge should be considered for babies who have had problems such as low \_\_\_\_\_, low \_\_\_\_, or \_\_\_\_ problems. Evidence of successful \_\_\_\_\_ should be present prior to discharge. Prior to discharge, a second complete \_\_\_\_\_ of the baby should be performed. During the second examination, a thorough inspection of the \_\_\_\_\_ should be performed. Signs of infection of the umbilicus include \_\_\_\_\_ and \_\_\_\_ at the base and drainage of from the cord.

#### 3. Practice key skills

#### **Role One**

Play the role of the mother. Collect a manikin or doll with a head covering, blanket, recording form and pen.

#### **Role Two**

Play the role of the provider.

Demonstrate and describe to the mother:

- Completing an assessment of breastfeeding and a physical exam before discharge
- Identifying the baby who cannot be discharged early

Discuss concerns with the mother.

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

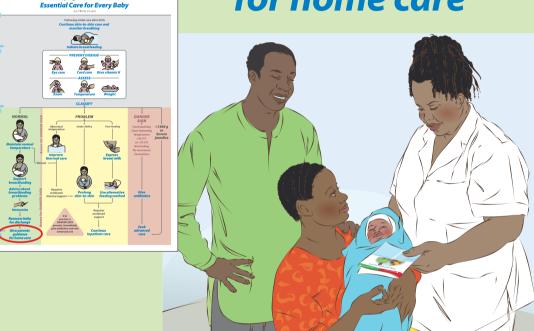
How could you ensure that every baby is examined and breastfeeding is assessed prior to discharge?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Who is responsible for re-examining babies prior to discharge?
- Where is information from this exam recorded?
- Who advises mothers if early problems with breastfeeding are identified?
- Can mothers and babies stay in the birth facility if there are problems?

#### When discharge is appropriate

Give parents guidance for home care



To help parents continue essential care and recognize problems

Helping Babies Survive

Prepare parents for home care by helping them understand key messages:

- Breastfeed exclusively for 6 months, and recognize signs of successful breastfeeding.
  - Feeds every 2-4 hours or 8-12 times per day
  - Sleeps well between feedings
  - From about 3 days after birth, urinates 6-8 times per day
- · Recognize and manage common breast problems.
  - Engorgement
  - Cracked nipples
  - Mastitis
- After activities that soil the hands, wash hands before touching the baby.
- **Put nothing on the cord** (other than medicine that is prescribed).
- · Complete scheduled immunizations.
- Recognize Danger Signs. Understand the need to seek medical care urgently for these signs.
   Understand where this care would be obtained.

These messages can be reinforced by the use of the Parent Guide, or similar document. Before discharge, parents should demonstrate their knowledge of these key messages.

Advise parents about other practices that are recommended in your setting, such as use of bed nets. Determine where and when follow up care will be provided.

#### 2. Review key knowledge

Select the correct answer:

Which of the following is a sign that a baby is breastfeeding adequately?

- ☐ Crying within one hour after each feeding
- ☐ Vigorous sucking that causes nipple pain with each feeding
- $\square$  Feeding 8 to 12 times per day

## What should parents understand about **Danger Signs?**

- ☐ Danger Signs never occur during the first week of life.
- ☐ When a Danger Sign is recognized, parents should seek medical care urgently.
- ☐ A Danger Sign is usually not serious and the family can manage the problem at home.

#### Parents should be advised to wash their hands:

- ☐ Whenever it is convenient
- ☐ Every 2-4 hours
- ☐ Before touching the baby if the parent has used the toilet

#### 3. Practice key skills

#### Role One

Play the role of the mother. Use a copy of the Parent Guide.

#### **Role Two**

Play the role of the provider.

Counsel a family about essential care at home:

- Discuss key messages for home care
- Assess understanding of Danger Signs
- Identify place and time for follow-up care

Change roles and repeat the exercise.

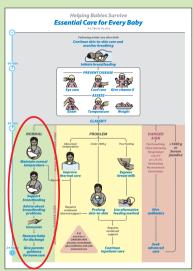
Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

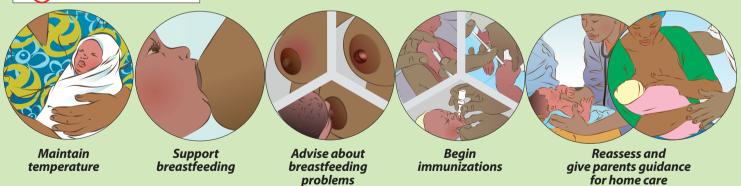
How could you ensure that all parents are given guidance for home care?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

- Who is responsible for preparing parents for the care of their baby at home?
- Is there a guide or other resource to remind parents about home care?
- Where do parents seek care for their baby if they observe a Danger Sign?



# Exercise: Essential care for a well baby



#### **Background**

The purpose of this exercise is to help the provider practice at one time all of the essential care for a well baby of normal birth weight for the period after the first 90 minutes.

#### **Practice key skills**

Practice begins with a case scenario. The following is a suggested case; however, you may choose a different case.

#### Case scenario

A baby born at 39 weeks gestation weighs 2900 grams. He has a temperature of 36.7°C and a normal physical exam. He has been given eye care, cord care and vitamin K.

Role play essential care after the first 90 minutes until preparation for home care.

#### Role One

Play the role of the mother. Collect a manikin or doll, head covering and blanket, syringes, recording form and pen, and Parent Guide.

#### **Role Two**

Play the role of the provider. Demonstrate and describe to the mother the steps in the following Checklist.

Change roles and repeat the exercise.

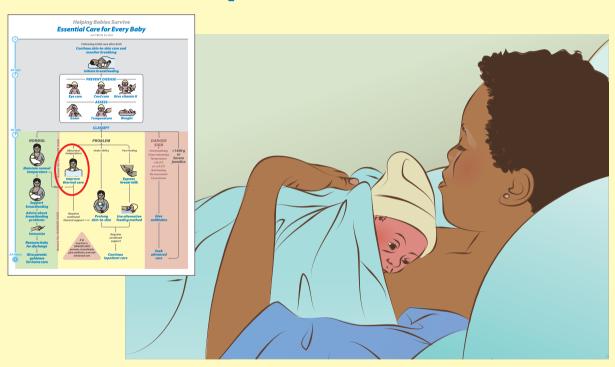
Discuss similarities and differences between the role play and your clinical practice.

#### Checklist

☐ Wash hands	
Reinforce why it is important to wash hands	S
before touching the baby.	
☐ Maintain normal temperature	
Explain ways to prevent heat loss and how t	to
wrap a baby.	
☐ Support breastfeeding	
Describe for mother good positioning and	
attachment at the breast.	
☐ Advise about breastfeeding problems	
Advise mother about breast engorgement,	
sore or cracked nipples, mastitis,	
and low milk supply.	
☐ Begin immunizations	
Explain each medication and complete the	
immunization record.	
☐ Reassess the baby (exam, particularly cord	
appearance and jaundice) and breastfeeding	
Discuss any concerns with the family.	
☐ Give parents guidance for home care	
Review key messages in the Parent Guide ar	าด
the plan for follow-up care.	

#### If the baby has an abnormal temperature

# Improve thermal care



To achieve a normal temperature

If the temperature is <36.5  $^{\circ}$ C, skin-to-skin care should be continued, or resumed if stopped. Make sure that the baby is dry and is in dry clothing with a hat in place. Cover mother and baby with a blanket. Make sure that the room is warm (at least 25 degrees C) and without drafts. Check the baby's temperature every hour until normal. Continue feeding during re-warming.

Using these steps, almost all babies with a low temperature will have a normal temperature within four hours. A low temperature that does not rise after one hour of attempts at warming is a Danger Sign. For these babies, seek advanced care urgently. Maintain skin-to-skin contact during this time.

A temperature that is > 37.5 °C may also be dangerous. Wrapping a baby in too many clothes, leaving a baby in direct sunlight, or placing a baby too close to a fire or heater can cause a high temperature. A high temperature may also be a sign of infection. Improper use of incubators and radiant warmers may cause a high temperature.

A temperature < 36.5 °C (that does not improve with warming) or > 37.5 °C (that is not caused by exposure to too much heat and does not become normal when the heat source is removed) is a Danger Sign.

#### 2. Review key knowledge

#### Fill in the missing words:

If a baby's temperature is k	oelow normal, make
sure that the room is with	out,
that the baby's clothes are	, and
that the baby is properly_	and has a
	r resuming skin-to-skin
care for a low temperature	e, recheck the temperatur
every	
A low temperature that do	oes not rise is a
A temperature	that is too high may be
caused by too many	, leaving the
baby in direct	, or placing the baby
too close to a	or

#### 3. Practice key skills

#### Role One

Collect a manikin or doll, head covering and blanket, wet and dry clothing. Provide a low or high temperature to the provider in Role Two.

#### **Role Two**

Play the role of the provider.

Take actions to return the temperature to normal:

- Warming a baby whose temperature is less than 36.5°C
- Cooling a baby whose temperature is above 37.5°C

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

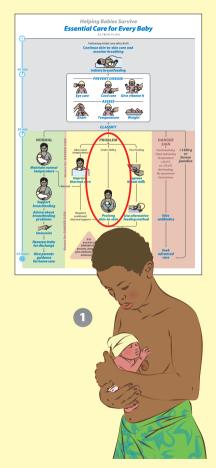
#### To improve care in your facility:

How could you ensure that you are able to correct an abnormal temperature at your facility?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

#### Suggested questions to identify potential problems:

- In the areas where mothers and babies receive care can the temperature be controlled?
- Can the temperature of babies be monitored every hour if necessary?
- If incubators or radiant warmers are used in your facility, is there special training for their use?



When a baby cannot maintain normal temperature when wrapped or weighs less than 2000 grams

# **Prolong skin-to-skin care**





To keep the baby warm

Babies with birth weights <2000 grams and babies who have low temperatures while in dry clothing and wrapped properly may need prolonged skinto-skin care to maintain normal body temperature. Prolonged skin-to-skin care also allows frequent breastfeeding and may increase bonding between the mother and baby.

Prolonged skin-to-skin care should be provided as much as possible throughout the day and night. During prolonged skin-to-skin care, the mother can stand, walk and move about freely. Other family members can also provide prolonged skin-to-skin care.

Small or premature babies may have other needs in addition to prolonged skin-to-skin care, including the need for special feeding techniques. Together this care is often called Kangaroo Mother Care (KMC). KMC should be provided in an organized program where care is supervised by a provider. Providers who assist mothers with KMC require special training.

#### 2. Review key knowledge

#### Fill in the missing words:

Babies with birth weight <	grams often					
require prolonged skin-to-sk	in care to maintain					
normal Prolon	ged skin-to-skin					
care should continue throug	hout the day					
and It may allow frequent						
and increase	bonding between					
and	In addition to the					
mother, other	_ members can also					
provide skin-to-skin care.						

#### 3. Practice key skills

#### Role One

Play the role of the mother. Collect a manikin or doll with a head covering, diaper, and support binder. Wear a shirt that opens in the front.

#### **Role Two**

Play the role of the provider.

Demonstrate and describe to mother the steps to position and secure a baby for prolonged skin-to-skin care:

- Position the baby upright on the mother's chest between the breasts
- Place the baby in a frog position with flexed arms
- Turn the head to one side
- · Cover the genitalia with a diaper
- Secure the baby snugly with a support binder and close mother's shirt

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

How could you ensure that all small babies or other babies who have difficulty maintaining their temperature receive prolonged skin-to-skin care?

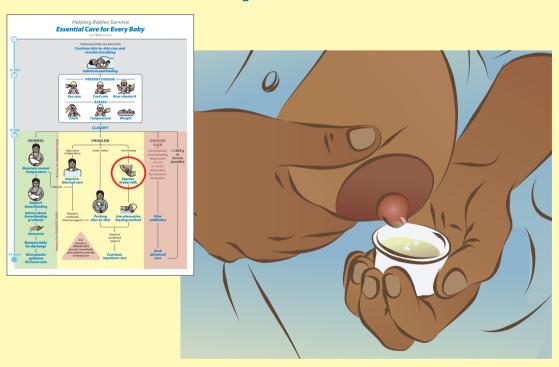
Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

#### Suggested questions to identify potential problems:

- Is there an area where mothers providing skin-to-skin care can stay?
- Are wraps for skin-to-skin care available for all mothers?
- Who is available to assist mothers with skin-to-skin care?

#### When a baby cannot feed directly from the breast, or the breasts are engorged

## **Express breast milk**



To provide breast milk for an alternate feeding method or to relieve engorgement

Mothers may express milk from their breasts to feed babies who are unable to feed from the breast. Also, some mothers may express milk to relieve engorgement.

Milk should be expressed at approximately the same frequency as breastfeeding. Breast milk may be produced in small amounts initially, but production typically increases after 2-3 days.

Before expressing milk, mothers should clean their hands with soap and water, and clean their breasts with water but not soap. Collect breast milk in a clean container with a lid if it is to be stored. Keep in a cool place for up to 6 hours, or up to 24 hours if refrigerated. Use freshly expressed milk whenever possible.

#### 2. Review key knowledge

#### Fill in the missing words:

Mothers express milk from their	breasts for two
reasons: 1) to feed babies who a	re,
and 2) to relieve	. Milk should be
expressed at approximately the	
frequency as breastfeeding. Bre	ast milk may
be produced in small amounts s	oon after
, but production	typically increases
after days. Prior to exp	ressing milk,
mothers should clean their	with
soap and water and clean their l	oreasts with
, but not	Collect
breast milk in a clean container	with a if
it is to be stored. Keep in a cool	place for up to
hours or up to _	
hours if refrigerated. Use freshly	expressed milk
whenever possible.	

#### 3. Practice key skills

#### Role One

Play the role of the mother or use a breast model if available. Collect a container for breast milk, clean water, and soap.

#### **Role Two**

Play the role of the provider. Demonstrate and describe to the mother the steps to express breast milk:

- Wash hands with soap and water
- · Wash breasts with water only
- · Sit comfortably
- Hold a clean container under nipple
- Place thumb above and first finger below and about 4 cm behind the nipple; support the breast with the other fingers
- Press the breast gently towards the chest wall
- Compress the breast between the thumb and finger
- Release and rotate the position of the thumb and finger to compress all around the breast
- Discuss how to store milk

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

How could you ensure that mothers are taught how to express milk when necessary?

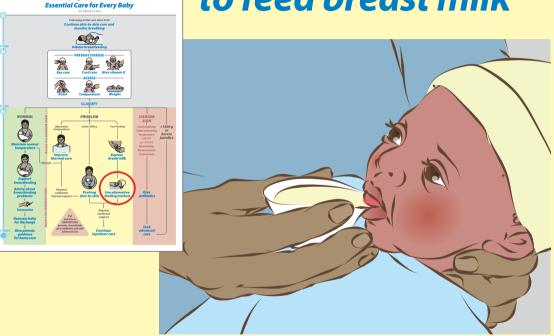
Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

#### Suggested questions to identify potential problems:

- Is there a private place where breast milk expression can be taught and practiced?
- Are containers for collection of milk available?
- Can milk be stored safely?

When the baby cannot feed directly from the breast

Use an alternative method to feed breast milk



To provide breast milk until breastfeeding can be established

Helping Babies Survive

Some small babies, sick babies, or those with an abnormality such as cleft lip and palate, may have difficulty feeding. They may be able to swallow but cannot suck effectively, or they may suck effectively for a brief period but tire after taking a small amount of milk. These babies may benefit from being fed expressed milk using an alternate method. Milk can be fed with a cup, spoon or paladai.

The baby is ready to feed when awake, looking around, with mouth open and licking. Allow the baby to lick the milk from the cup or other device rather than pouring milk into the mouth.

Start with 2-5 mL/kg per feeding and gradually increase the amount. The total intake on the day of birth should be 40-60 mL/kg. The intake should increase at least 20-30 mL/kg/day until 150 mL/kg/day is reached. Consider referral for advanced care if a baby is unable to swallow or cannot take these amounts.

#### 2. Review key knowledge

Select the correct answer:

#### Which of the following babies may benefit from being fed expressed breast milk?

- $\ \square$  A baby who vomits every feeding
- ☐ A baby who can swallow but cannot suck effectively
- $\hfill\square$  A baby who cannot swallow

#### When cup feeding a baby, you should do which of the following?

- $\square$  Allow the baby to lick the milk from the cup.
- $\hfill\square$  Pour a spoonful of milk into the baby's mouth.
- $\hfill\Box$  Drip a continuous stream of milk into the mouth.

#### Advanced care is necessary when which of the following occurs?

- $\hfill \square$  A baby must be cup fed every two hours.
- $\hfill\Box$  Each feeding lasts up to 30 minutes.
- $\hfill\Box$  A baby never takes more than 10 mL/feeding.

#### 3. Practice key skills

#### **Role One**

Play the role of the mother.

Collect a manikin or doll, a cup, spoon or paladai, container for milk and measuring device.

#### Role Two

Play the role of the provider.

Demonstrate and describe to the mother the steps in cup or spoon feeding:

- Determine and measure the correct amount of milk for a feeding
- · Position the baby semi-upright
- Allow the baby to take the milk from the cup or spoon
- Burp the baby after feeding

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

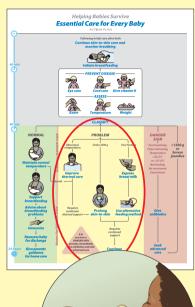
#### To improve care in your facility:

How could you ensure that an alternate feeding method is available for infants who cannot feed at the breast?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

#### Suggested questions to identify potential problems:

- Are cups or spoons appropriate for this purpose available in your facility?
- Which personnel are trained to cup or spoon feed infants? Do they teach mothers to do this?



Improve thermal care

# Exercise: Essential care for a baby with an abnormal temperature or feeding problem



Prolong skin-to-skin care



Express breast milk



Use an alternative method to feed breast milk

#### **Background**

The purpose of this exercise is to assist the learner in practicing at one time all of the essential care that is required for a baby who has an abnormal temperature or feeding problem.

#### **Practice key skills**

Practice begins with a case scenario. The following is a suggested case; however, you may choose a different case.

#### Case scenario

A baby born at 35 weeks gestation weighs 1900 grams. The baby has a temperature of 35.6°C. The baby can swallow but cannot attach to the breast.

Role play essential care for a baby with a temperature or feeding problem.

#### Role One

Play the role of the mother. Collect a manikin or doll, diaper and head cover, support binder, soap and water, collection and measuring containers for breast milk, and a cup, spoon or paladai. Use a breast model if available.

#### Role Two

Play the role of the provider. Demonstrate and describe to the mother the steps in the following Checklist.

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### Checklist

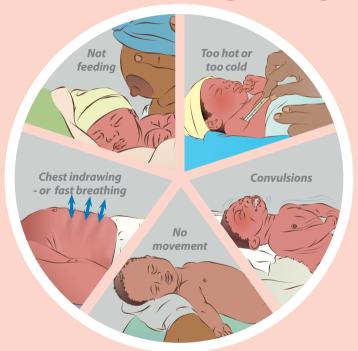
CI	necklist
	Wash hands Reinforce why it is important to wash hands before touching the baby and handling milk.
	Improve thermal care
	Describe ways to warm the environment and keep a baby dry.
	Prolong skin-to-skin care
	Explain to the mother how to maintain
	skin-to-skin care during regular activities. Express breast milk
	Explain to mother how to express and store breast milk.
	Feed breast milk by an alternative method
	Describe to mother how to give milk with
	a cup or spoon.
	Reassess temperature and feeding and
	communicate with the family

*Inform the family of the baby's condition* 

and what care will be needed.

Within the first 90 minutes, periodically during the first day, and at any time if you suspect a problem

## **Assess for Danger Signs**



To detect problems early and reduce the risk of death

Danger Signs are caused by infection or other serious conditions and indicate that a baby may die. All babies should be assessed for Danger Signs in the first 90 minutes after birth and frequently during the hospitalization. A baby with a Danger Sign needs urgent antibiotic treatment and advanced care.

The following are the **Danger Signs:** 

Fast breathing and chest in-drawing can be caused by pneumonia or sepsis. Chest in-drawing means the spaces between, above or below the ribs indent with each breath. Fast breathing is a breathing rate more than 60 breaths per minute. Babies with breathing problems may also have a blue color of the skin and inside the mouth.

Temperature that is too low (<35.5°C) or high (>37.5°C) is a sign of infection. A temperature that is 35.5-36.4°C and does not rise with re-warming is also a Danger Sign.

Not feeding may be a sign of infection, prematurity, or other serious problems.

No movement, or very little movement, even when stimulated, may be a sign of infection or other serious problems.

Convulsions are repeated back-and-forth movements of the arms and legs that cannot be stopped by holding the arm or leg. Jitteriness of the arms and legs may look like convulsions but is a less serious problem. Unlike convulsions, jitteriness can be caused by a stimulus such as a loud noise or sudden movement. Jitteriness can be stopped by holding the arms and legs.

A baby with a Danger Sign needs urgent antibiotic treatment and advanced care.

#### 2. Review key knowledge

Signs. A baby who is not

#### Fill in the missing words:

Danger Signs are caused by	or
other serious conditions. A Danger Sign	indicates
that the baby is at risk of	Babies
must be assessed for Danger Signs with	in the first
minutes after birth. If a [	Danger Sigr
is detected, the baby must be given	
urgently. The baby must also be referred	d for
care.	
A breathing rate faster than breaths	per minute
is a Danger Sign. Body temperatures tha	at are too
low (< °C) or too high (> °C) are	e Danger

quantities has a Danger Sign. If a	a baby does not
move even when	, this is a Danger
Sign. Rhythmic movements of t	he arms and legs
that cannot be stopped by hold	ling are called
, and are a Dang	jer Sign.

#### 3. Practice key skills

#### Role One

Play the role of the mother. Use a manikin or doll to demonstrate fast breathing or describe another Danger Sign.

#### **Role Two**

Play the role of the provider. Count the breathing rate of the manikin if possible. Name the Danger Sign that is shown or described

Change roles and repeat the exercise.

and tell how to identify each sign.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

How could you ensure that babies at your facility who have Danger Signs are recognized promptly?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

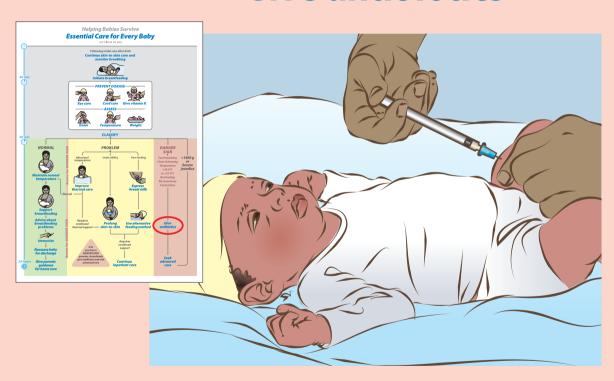
#### Suggested questions to identify potential problems:

or vomits large

- Who is responsible for evaluating babies immediately after birth and 90 minutes or more after birth?
- Are there timing devices to help count breathing rate?

#### If a baby has a Danger Sign

### **Give antibiotics**



To reduce the risk of death

Infection in a baby can cause death. A baby with a Danger Sign is at high risk for having an infection and needs urgent antibiotic treatment and advanced care. Ampicillin and gentamicin are often used to treat infection in babies. However, different antibiotics may be used in your facility.

In the space below, write the names of the antibiotics typically used to treat babies in your facility:

Give the first doses of antibiotics as soon as possible after the identification of a Danger Sign because early treatment may prevent death. The doses will depend on the weight of the baby and the antibiotics used. If possible, a blood culture should be obtained before antibiotics are given. Typically, antibiotic treatment is given for at least 5 days.

#### 2. Review key knowledge

Select the correct answer:

#### When should a baby be given antibiotics?

- ☐ If born too early
- ☐ When a Danger Sign is present
- ☐ If the baby appears to be in pain

#### When should the first dose of an antibiotic be given?

- ☐ After arrangements have been made for transfer for advanced care
- ☐ As soon as possible after a Danger Sign has been identified
- $\ \square$  After all family members have been contacted

#### What determines the dosage of a specific type of antibiotics?

- ☐ Time after birth
- $\hfill\square$  Body weight
- ☐ Size of the available syringe

#### 3. Practice key skills

#### **Role One**

Choose a birth weight for the calculation of antibiotic dosage.

Collect syringes, recording sheet and pen.

#### **Role Two**

Play the role of the provider.

Explain why a baby needs antibiotics.

Demonstrate the steps in giving antibiotics:

- Calculate dosages for the birth weight given
- Draw up the correct volume of each medication
- Document giving the medications in the baby's record

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

Note: If ampicillin and gentamicin are used in your facility, the chart on this page can be duplicated and posted for future reference.

IF OTHER ANTIBIOTICS ARE USED, YOU SHOULD CREATE A CHART FOR THOSE ANTIBIOTICS AND POST THIS CHART IN YOUR FACILITY.

### To improve care in your facility: How could you ensure that antibiotics Some suggestions to identify potential problems:

- How could you ensure that antibiotics are given promptly to all babies with a Danger Sign?
- Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.
- problems:Are antibiotics always available?
- Are antibiotics always available?If not, how can they be made available?
- Who can give antibiotics in your facility? Is one of these individuals always available?
- Does your facility have small syringes and needles that are appropriate for babies?

		4 mg per kg every 24 hours if preterm
Weight	Add 2.5 ml sterile water 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	1.86 ml
4.0 - 4.4 kg	1.1 ml	2.1 ml

#### If the face is yellow on the first day, or the palms and soles at any time

# Recognize severe jaundice



To begin treatment and arrange advanced care

Jaundice is a yellow color of the skin caused by high blood levels of bilirubin. Bilirubin comes from breakdown of red blood cells. High levels of bilirubin can cause brain damage or death.

All babies have some jaundice. Babies who are premature, have infections or certain blood disorders, or who feed poorly are more likely to develop severe jaundice.

Jaundice first appears on the head. As bilirubin levels rise, jaundice moves down the body. When bilirubin levels are very high, the palms and soles are yellow. Jaundice is severe if it appears on the face during the first day of life or is seen on the palms and soles at any time.

Jaundice can be difficult to detect in dark-skinned babies. Pressing the the skin with a finger and then releasing the pressure may help detect jaundice in those babies.

Severe jaundice can cause death or permanent injury and requires urgent advanced care. In all babies with jaundice, encourage breastfeeding every 2-3 hours. When breastfeeding is not possible, feed by cup or spoon.

#### 2. Review key knowledge

Select the correct answer:

In addition to premature babies and babies with infections, which are most likely to develop severe jaundice?

- ☐ Babies who feed poorly
- ☐ Baby girls
- $\square$  Babies of older mothers

Where does jaundice first appear?

- ☐ Back
- ☐ Abdomen
- ☐ Head

Jaundice is severe when it appears on the face during the first day after birth and what other body area at any time?

- $\square$  Back and abdomen
- $\square$  Legs and arms
- $\square$  Palms and soles

#### 3. Practice key skills

#### Role One

Play the role of the mother. Use a manikin or doll.

#### **Role Two**

Play the role of the provider.

Demonstrate and describe to the mother how to check for jaundice:

- Recognizing severe jaundice on the first day
- Recognizing severe jaundice after the first day

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### To improve care in your facility:

How could you ensure that all babies at your facility are evaluated for severe jaundice?

Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

#### Suggested questions to identify potential problems:

- Who would examine a baby for changes in skin color during the first day?
   After the first day?
- Can bilirubin levels be measured in your facility?
- Can treatment for jaundice be provided in your facility?

If a baby has a Danger Sign, is <1500 g, has severe jaundice, or needs extra support for another problem

Seek advanced care



To provide adequate monitoring and treatment

A baby who has a Danger Sign, is <1500 g or has severe jaundice needs advanced care to improve the baby's condition. In some cases, advanced care can save the baby's life.

Advanced care may include special monitoring. Special monitoring of the baby's vital signs and activities, such as body temperature and feeding, will determine when life-saving interventions should be used.

Advanced care may include special treatments. For example, a baby treated with antibiotics will need to complete a full course of antibiotics (usually at least 5 days). If a baby has poor feeding, intravenous fluids may be needed. If a baby has a breathing problem, oxygen may be needed. If a baby has convulsions, special medication may be needed.

A baby with a **birth weight <1500 g** needs advanced care that may include intravenous fluids or tube feedings, and special techniques or devices to maintain normal temperature.

A baby with **severe jaundice** needs special treatment with phototherapy or an exchange transfusion.

Before referring a baby for advanced care directly contact the facility that will receive the baby. Send a referral note (see example on page 64) with the baby. During the transport, the baby should be kept warm with skin-to-skin care and encouraged to breastfeed.

#### 2. Review key knowledge

#### Fill in the missing words:

A baby who is <	1500 grams, has s	severe jaundice or
a	_ needs advance	d care. Advanced
care may includ	e special	and
treatment. Spec	ial monitoring ma	akes it possible to
decide when	sa	ving intervention
should be provi	ded. Special treat	ments might
include giving s	pecial medicines.	If the baby is
feeding poorly, i	ntravenous	may
be necessary. If a	a baby has a brea	thing problem.
	may be needed.	

#### 3. Practice key skills

#### Role One

Identify a reason to seek advanced care (Danger Sign, weight less than 1500 grams, severe jaundice). Ask the provider in Role Two to start referral.

#### **Role Two**

Play the role of the provider.

Demonstrate the steps to seek advanced care:

- Explain to the family why referral is needed
- Describe the plan for safe transfer, including communication with the receiving facility
- Prepare a referral note
- Describe ways to keep the baby warm and fed during transport

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

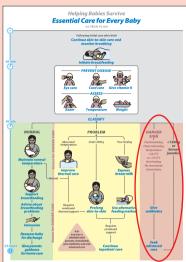
#### To improve care in your facility:

How could you ensure that advanced care is available for all babies at your facility who require this care?

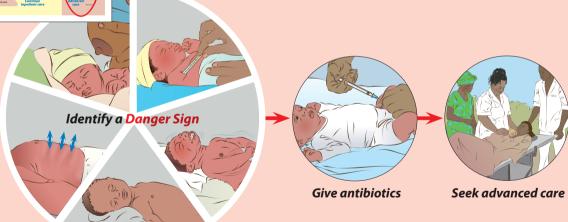
Discuss the answers to this question with other providers and leaders in your facility. The following questions may help you understand what prevents you from performing this action as recommended.

#### Suggested questions to identify potential problems:

- Does your facility provide advanced care for all problems? For some problems?
- Who makes the decision to refer a baby for advanced care?
- Who would be contacted and where would the baby be sent?
- What vehicles are available for transporting mothers and babies?



# Exercise: Essential care for a baby with a Danger Sign



#### **Background**

The purpose of this exercise is to practice at one time all of the essential care that is required for a baby with a Danger Sign. The provider will also describe this care to the mother and other family members.

#### **Practice key skills**

Practice begins with a case scenario. The following is a suggested case; however, you may choose a different case.

#### Case scenario

A baby born at 40 weeks gestation weighs 3100 grams. The baby has fast breathing and does not respond, even when stimulated.

Role play essential care for a baby with a Danger Sign.

#### Role One

Play the role of the mother. Collect a manikin or doll and forms used for the referral note

#### Role Two

Play the role of the provider. Demonstrate and describe to the mother the steps in the following Checklist.

Change roles and repeat the exercise.

Discuss similarities and differences between the role play and your clinical practice.

#### Checklist

- ☐ Wash hands
  Reinforce why it is important to wash hands
  before touching the baby.
- ☐ Assess for Danger Signs:
- ✓ Chest indrawing or fast breathing

  Describe chest indrawing, fast breathing, and
  blue color of the skin.
- ✓ Temperature too low or too high

  Define temperature that is too low (<35.5°C) or
  too high (>37.5°C).
- ✓ Not feeding

  Ask about time between feeds, quality of feeding, vomiting.
- ✓ No movement

  Describe floppiness or lethargy when stimulated.
- ✓ Convulsions

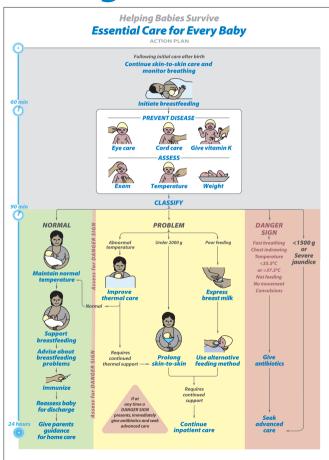
  Describe rhythmic movements of the limbs.

#### Prompt: The baby has a breathing rate of 70 and is limp during the exam.

- ☐ Give antibioics
  Explain why and how antibiotics are given.
- ☐ Seek advanced care
  Explain to the family why advanced care is
  needed and the steps in the process.
- ☐ Communicate with the family

  Make sure that the family's questions are
  answered.

## Mastering the Action Plan



#### The columns in the table describe six case scenarios

The first case (column 1) describes the care of a baby of normal birth weight who is well. All others describe babies who are either classified as having low temperature or a feeding problem at the end of the 90 minutes following birth, or have a Danger Sign, or have a birth weight < 1500 grams or severe jaundice. These and later observations about the babies are indicated in **black** letters in the table. Appropriate actions that should follow these observations are indicated in blue letters.

Use the Action Plan to describe or demonstrate to your partner the care that should be provided for these babies. You can also practice applying your knowledge and skill by creating other cases using observations about babies in your practice. Trace the pathway through the Action Plan for each case.

1	2	3	4	5	6
Continue skin-to-skin care and monitor breathing	Continue skin-to-skin care and monitor breathing	Continue skin-to-skin care and monitor breathing	Continue skin-to-skin care and monitor breathing	Continue skin-to-skin care and monitor breathing	Continue skin-to-skin care and monitor breathing
Initiate breastfeeding					
Prevent disease: eye and cord care, Give Vitamin K					
Assess: exam, temperature, weight					
CLASSIFY:	CLASSIFY:	CLASSIFY:	CLASSIFY:	CLASSIFY:	CLASSIFY:
Normal	Low temperature	Low temperature	Poor feeding	Danger Sign	< 1500 grams or severe jaundice
Maintain normal temperature	Improve thermal care	Improve thermal care	Express breast milk	Give antibiotics	,
Support breastfeeding	Normal temperature Support breastfeeding		Use alternative feeding method		
Advise about breast- feeding problems	Advise about breast- feeding problems	Requires continued support	Requires continued support		
	Maintain normal temperature	Prolong skin-to-skin care			
Immunize	Immunize	Immunize	Immunize	Immunize	Immunize
Reasses baby for discharge	Reasses baby for discharge	Continue inpatient care Continue inpatient care		Seek advanced care	Seek advanced care
Exam normal and breastfeeding adequate	Exam normal and breastfeeding adequate		at ime a		
Give guidance for home care	Give parents guidance for home care	presents, ii give antibio	ER SIGN mmediately tics and seek ted care		

#### Refresher Training: Documentation of Completion

#### Essential care during the first 90 minutes

	Date	Initials								
Continue skin-to-skin care and monitor breathing and Initiate breastfeeding										
Eye care										
Cord care										
Measure temperature										
Examine										
Weigh										
Give vitamin K										
Classify										
Exercise: Essential care during the first 90 minutes										

#### Essential care of a normal weight, well baby

	Date	Initials								
Maintain normal temperature										
Support breastfeeding and advise about breastfeeding problems										
Start immunizations										
Reassess the baby and feeding and give parents guidance for home care										
Exercise: Care of a well baby										

#### **Refresher Training: Documentation of Completion**

#### Essential care of a baby with an abnormal temperature or feeding problem

	Date	Initials								
Improve thermal care and Prolong skin-to-skin care										
Express breast milk										
Use an alternative method to feed breast milk										
Exercise: Care of a baby with an abnormal temperature or feeding problem										

#### Essential care of a baby with birth weight <1500 grams, severe jaundice or a Danger Sign

	Date	Initials								
Assess for Danger Signs and give antibiotics										
Recognize severe jaundice										
Seek advanced care										
Exercise: Care of a baby with a Danger Sign										

#### Instructions for refresher training and documentation

There is no prescribed interval at which refresher training should be completed for *individual actions*. The interval should be determined by several factors, including the experience of the provider, the frequency of the problem (e.g. abnormal temperature or poor feeding), and deficiencies in current practice. However, it is recommended that refresher training using the four *exercises* be completed at least every three months.

Providers should document completion of training by writing the date of training and their initials in the appropriate box.

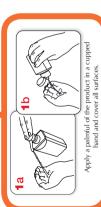
#### Normal and Abnormal Temperature Ranges, and Recommended Care

Danger sign	(Improve thermal care, treat and refer)	<u> </u>	
Normal range	( Maintain normal temperature )	8	37.5°C
Cautionary range	( Improve thermal care )	98	36.5°C
Danger sign	(Improve thermal care, treat and refer)	34	35.5°C

More resources:

# handrub? **t** How

**WITH ALCOHOL-BASED FORMULATION** 



# How to handwash?





apply enough soap to cover all hand surfaces.



Wet hands with water

September 1

ო





right palm over left dorsum with interlaced fingers and vice versa

Rub hands palm to palm

9

Design: mondofragilis network

rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa

rotational rubbing of left thumb clasped in right palm and vice versa

backs of fingers to opposing palms with fingers interlocked

0

use towel to turn off faucet





rinse hands with water

40-60 sec







and your hands are safe.



WHO axinowledges the Höpifaux Universitaires de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.

World Health Organization

# Sample Newborn Referral Form

Patient Information	
Patient's name	
Health system ID number	
Address	
Referral Information Date	
Referring facility	
ProviderPhone number	
Receiving facility	
ProviderPhone number	
Clinical Information	
Date of birth Time Sex Birth weight	Gestational age
Complications during pregnancy and labor:	
Type of delivery: vaginal-spontaneous, vaginal-instrumented, C-section	
Clinical diagnoses and problems:	
Reason for transfer: Rapid breathing   Chest in-drawing   Abnormal temperature	ıre □ Not feeding □
No movement ☐ Convulsions ☐ Birth weight < 1500 grams ☐ Severe jaundice ☐	Other
Treatments given:	
Support during transfer:	
Note written by Phone	
Date	

#### **Acknowledgements**

# Helping Babies Survive Essential Care for Every Baby Provider Guide

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William Keenan, MD, FAAP Elk Grove Village, IL, USA Following its introduction in 2010, the Helping Babies Breathe (HBB) program was adopted in many areas as a preferred program for teaching newborn care at the time of birth. However, many of those who used HBB struggled with how to integrate this program into existing programs teaching other aspects of essential newborn care. The Essential Care for Every Baby program was developed to facilitate this integration and complemented the ongoing efforts in many countries, including Uganda, Kenya, and Bangladesh. Its development was an international effort. The original content outline was reviewed by a distinguished group of professionals representing resource-limited countries around the world. The first version of the flip chart and other teaching materials were reviewed by a panel of experts assembled by the World Health Organization. Following revision based on their advice, the material was field tested in Kenya, India and Uganda. Reviewers and participants in the field testing included physicians, nurse midwives, nurses and educators. The current version of the program represents the input of a diverse, experienced, expert group of individuals representing medical schools, ministries of health and professional organizations. The editors of the Essential Care for Every Baby program are very appreciative of their valuable input. They have added tremendously to the quality of the program.

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# **Essential Care for Every Baby Helping Babies Survive**

**ACTION PLAN** 

