Helping Babies Survive

Essential Care for Every Baby

Facilitator Flip Chart





Helping Babies Survive

Essential Care for Every Baby

Explain and demonstrate

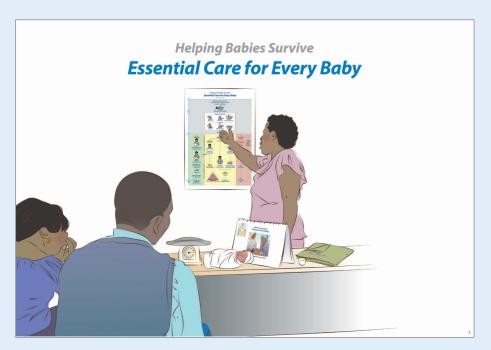
Begin with a story. Have each learner place one hand on the manikin. Then say to the learners:

Imagine that a baby is separated from his mother soon after birth. He is placed on a cot. An hour later he feels cold to touch and cannot be awakened to feed. There is no one who knows how to help. The baby dies.

Pause, and then say:

Now imagine you dry the baby immediately after birth and place him skin-to-skin with the mother. You help the mother begin breastfeeding. Over the next day, you monitor for signs of illness, provide essential care for the baby and teach the family how they can continue this care at home. The baby survives and thrives.

(Pause for a moment.)



Keeping babies warm, feeding breast milk early and exclusively, helping families practice good hygiene and recognize Danger Signs can be lifesaving. Providers of newborn care must be prepared to deliver this essential care to every baby and teach families to provide this care at home.

Invite discussion

- 1. Have any of you had experience with a baby who dies soon after birth?
- 2. Who provides care for mothers and babies immediately after birth? Until discharge from the birth facility?
- 3. How are these individuals prepared for this responsibility?

Learners in this course should have completed training in care provided at the time of birth. This should include how to help babies who do not breathe.

Show the Action Plan and learner materials.

Describe the time scale and the color coding. Identify actions that are performed at particular times and those that are required only if particular needs are observed.

Facilitate practice

Ask learners to organize themselves in groups of six and identify pairs of participants for cooperative learning.

Background

Care of babies after birth by health workers and mothers, often called **Essential Newborn Care** (ENC), promotes health and can increase newborn survival. Many babies die during the first day and first week, some because they do not receive this care. The *Essential Care for Every Baby* program aims at giving providers the knowledge and skill to provide most elements of ENC and assist mothers and families in providing this care.

This program is based on recommendations in the 2006 WHO *Pregnancy, Childbirth, Postpartum and Newborn Care* guidelines, the 2010 WHO *Essential Newborn Care Course* and other guidelines developed by the World Health Organization. The recommendations of local health authorities or ministries may vary slightly from the recommendations in this program. You should be familiar with these differences, and these variations should be highlighted for the learner.

Essential Care for Every Baby begins after immediate care at birth. It assumes that initial care of the newborn, including drying, cutting the cord and resuscitation is taught using another program; the Helping Babies Breathe program is recommended. Some elements of the Helping Babies Breathe curriculum are not repeated in this program, e.g. hand washing.

Some steps of ENC should be provided at specific times, e.g. by 90 minutes after birth. Others should follow observations, e.g. low body temperature. These times and observations are shown in the Action Plan.

Educational advice

Begin with a story to encourage learners to believe that ENC can really save lives.

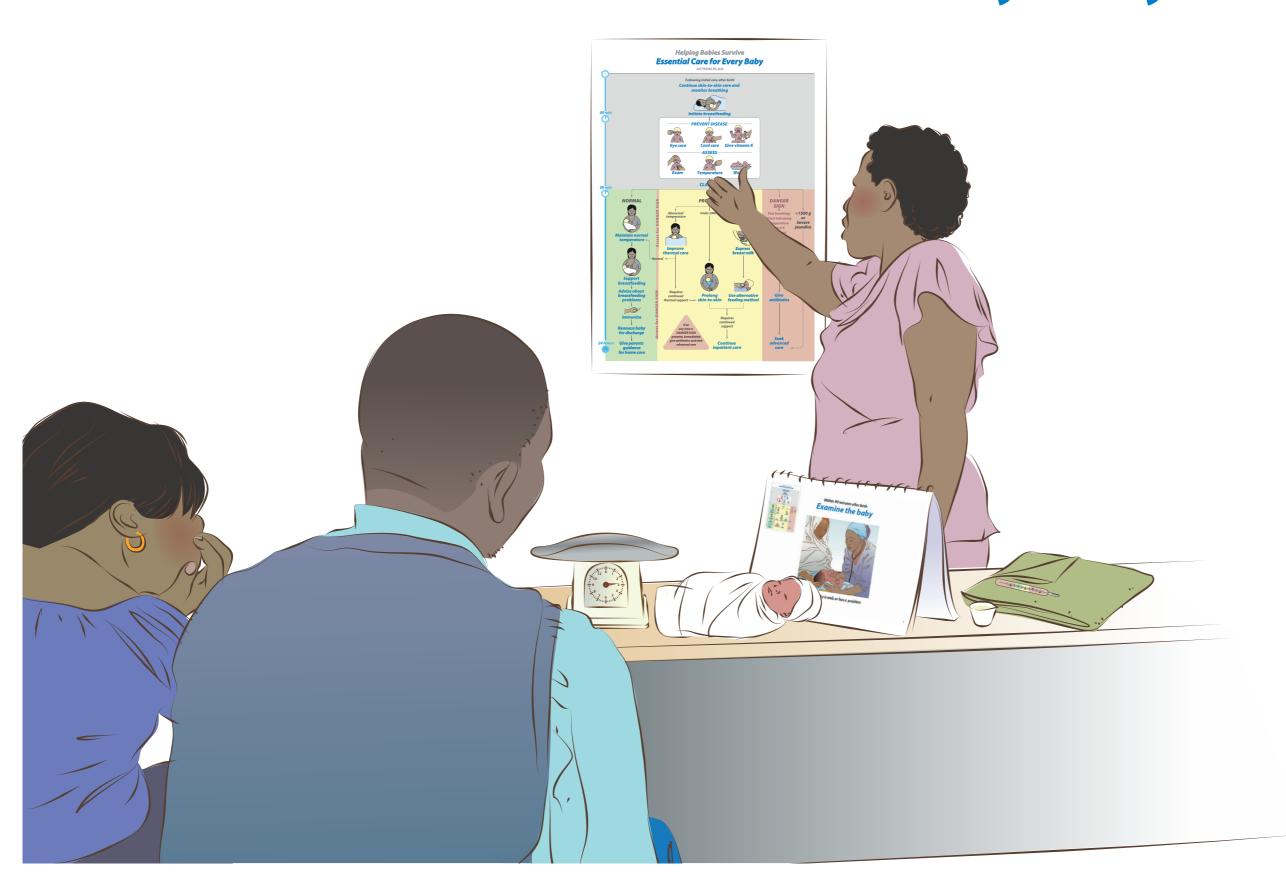
Invite participants to share their experiences.

Introduce and explain the use of the Action Plan and Flip Chart. Each step in the Action Plan is presented on the Facilitator Flip Chart. The front is viewed by the learner. The back, viewed by the facilitator, is organized into to three steps to support learning:

- 1. Explain and demonstrate
- 2. Invite discussion
- 3. Facilitate practice

Facilitators should: **EXPLAIN** the key points for understanding and **DEMON-STRATE** skills correctly. **INVITE DISCUSSION** to identify barriers and find solutions for incorporating knowledge and skills into practice. The discussion can also highlight important local practices. **FACILITATE PRACTICE** by providing materials for practice of the skill in pairs or by giving clear instructions for a role play by the paired learners. Role plays give learners practice in communicating important messages to mothers and fathers. Organize learners into pairs for cooperative learning. Each facilitator should assist 3 pairs of learners.

Helping Babies Survive Essential Care for Every Baby



Continue skin-to-skin care and monitor breathing

Explain and demonstrate

Continued skin-to-skin care keeps babies warm. Monitoring breathing helps identify problems early.

Continued skin-to-skin care

- Prevents heat loss
- Avoids low body temperature
- · Promotes early breastfeeding and bonding

To continue skin-to-skin care

- Remove wet towels and other cloths
- Place baby naked between breasts
- Cover with clean, dry drape or cloth, and cover the head
- Continue for at least one hour
- Interrupt only for essential care

Monitor for rapid breathing (>60 breathes/ minute) and chest indrawing every 15 minutes until first complete exam.

- Many babies who breathe fast but without increased effort gradually improve.
- Babies with severe breathing problems or babies with mild breathing problems who do not improve need advanced care.

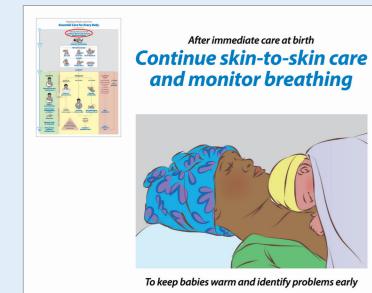
Monitor the baby's body temperature about every 15-30 minutes during skin-to-skin care by feeling the baby's skin (foot or forehead) to estimate temperature. If the baby's skin feels cool, measure temperature (see page 8b).

Invite discussion

- 1. Are babies separated from mothers during the first hours after birth? Why?
- 2. Who monitors a baby's breathing during the first hour after birth?

Facilitate practice

Combine practice of this action with Initiate breastfeeding (see next page).



Background

Immediately after birth, the most common problems are **low temperature** and **rapid breathing**.

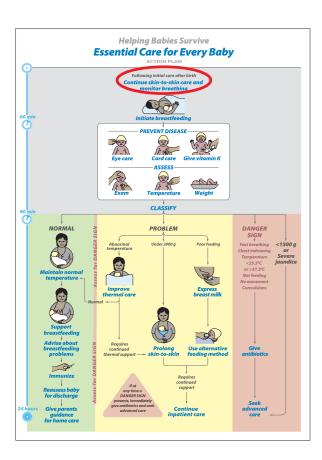
A baby begins to lose heat immediately after birth. Heat loss can be prevented and **low temperature** can be avoided by drying the baby immediately after birth and removing wet towels or clothing. The baby should be placed naked between the mother's breasts, and the mother and baby should be covered with a clean, dry drape or cloth. The baby's head should be covered. Monitor the baby's temperature about every 15-30 minutes by feeling the skin. Measure the temperature if the skin is cool.

Skin-to-skin care should begin at birth and should continue for at least one hour. If a mother is not well, other family members can provide skin-to-skin care.

Rapid breathing after birth often occurs because of delay in absorption of lung fluid and usually resolves rapidly. However, rapid breathing may persist or be caused by a more serious problem that would require advanced care. Breathing in all babies should be monitored every 15 minutes for rapid breathing (>60/min) and chest indrawing (see Danger Signs) until the time of the first complete exam. This can be done by observation alone without handling if the baby appears well.

Educational advice

Explain to learners that they will practice this action with the next action, Initiate breastfeeding, because these actions occur at the same time.



After immediate care at birth

Continue skin-to-skin care and monitor breathing



To keep babies warm and identify problems early

Initiate breastfeeding

Explain and demonstrate

Breast milk is the best food for all babies because it

- Is highly nutritious
- Protects against infection
- Prevents some deaths

Early breastfeeding

- Helps establish successful and exclusive breastfeeding
- Helps the uterus contract to decrease bleeding after birth
- Encourages maternal-baby bonding

To encourage early breastfeeding, position the baby near the mother's breasts, where the baby can latch when ready to feed.

Within one hour after birth Initiate breastfeeding To increase the success of breastfeeding

Help mother recognize when the baby is ready to breastfeed

- Opens eyes
- Seeks breast
- Head back slightly
- Tongue down and forward
- Opens mouth wide
- Licks

Some babies will not latch and feed during the first feeding.

Give no liquids other than breast milk (or colostrum) even if the baby does not feed.

Invite discussion

- 1. In your facility, are healthy babies encouraged to breastfeed soon after birth?
- 2. Do babies receive colostrum? Do mothers understand its importance?

3. What other liquids are fed to the baby? How can mothers be encouraged to give only breast milk?

Facilitate practice

Ask learners to role play

- Positioning the baby skin-to-skin
- · Covering the baby's body and head
- Monitoring breathing
- · Communicating findings with mother

Ask learners to role play assisting the mother with

- Positioning herself comfortably
- Positioning the baby near the breasts
- Recognizing the signs of readiness to breastfeed

Background

Breast milk is easy to digest and contains antibodies that protect against infection. Colostrum, milk that is produced by the breast during the first several days after birth, is often yellow in color and contains large amounts of antibodies. It is very important that the baby is fed colostrum. Babies who receive other food or liquids before six months of age are more likely to develop diarrhea and may have growth problems. Early and exclusive breastfeeding will lower the risk of serious infections and death. The benefits of breastfeeding should be discussed during antenatal visit.

Early breastfeeding increases the likelihood of successful and exclusive breastfeeding, promotes mother/baby bonding and helps contract the uterus, which may decrease uterine bleeding.

Although a baby may not feed successfully during the first hour after birth, 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 and turn toward the mother's breast but may not suck.

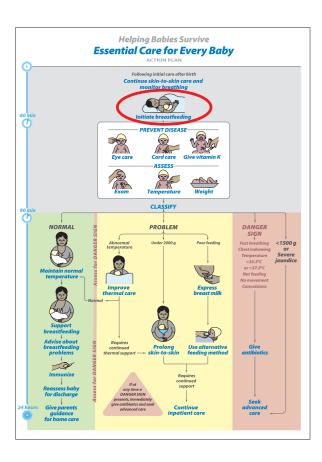
Signs that the baby is ready to feed include: the baby is awake and seeks the breast; the head is back slightly, with the mouth wide open; the tongue is down and forward; the baby may lick. Mothers should know how to recognize these signs and how to encourage the baby to latch onto the breast.

Some babies who are preterm, small, neurologically unwell, or have cleft lip and palate may not be able to breastfeed. Use alternate feeding methods (see page 21) to feed these babies.

Educational advice

Have learners role play with one acting as the mother and the other as the provider who will counsel the mother. The provider should describe his or her actions to the mother. The person playing the role of the mother can raise commonly asked questions. Reverse the roles and repeat the skill practice.

- Clean, dry drape or cloth
- Head covering for infant
- Newborn manikin



Within one hour after birth

Initiate breastfeeding



To increase the success of breastfeeding

Provide eye care

Explain and demonstrate

Early eye care can prevent serious infections and blindness.

Provide eye care

- Wash hands with soap and water.
- Pull down the lower lid of the eye.
- Place a portion (usually about 1 cm long if using ointment) of the locally approved medication inside the length of the lower lid, beginning from the side closest to the nose and extending to the opposite side of the lid.
- Repeat for the other eye.

Invite discussion

- 1. Do health care providers routinely treat all babies' eyes with medicine?
- 2. What eye medicine is recommended by your health authority?
- 3. Are there reasons parents do not want eye treatment with medicine after birth or do they put something else in the eyes?

Facilitate practice

Ask learners to practice with role play

- Applying medication to the eye of a doll of manikin
- Communicating to the family why antibiotics are used in the eyes



Within 90 minutes after birth Provide eye care



To help prevent serious eye infections

Background

Infections can pass from the mother to the baby during birth. Infections of the eye with bacteria such as gonococci and chlamydia can lead to blindness. Treatment of the eyes with medicine soon after birth may prevent these infections.

There are three medications recommended by the WHO: 1% silver nitrate eye drops, 2.5% polyvidone iodine eye drops and 1% tetracycline ointment. Any are acceptable for the prevention of eye infections. Your health authority may recommend one of these. Silver nitrate is used less frequently because it often causes swelling of the eyelids and drainage. Customs of placing other substances into the eyes should be discouraged as they may cause eye irritation or infection.

Many providers delay eye care until they perform the first exam and after the first breastfeeding, but eye care should be done within 90 minutes after birth. Eye care may be provided while a baby remains skin-to-skin.

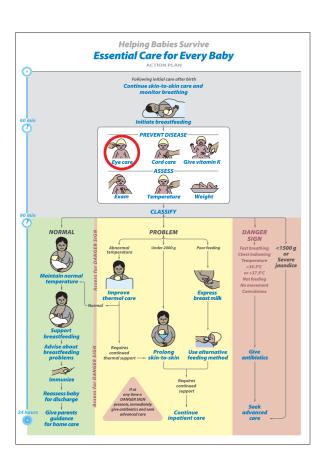
Educational advice

Ask learners to demonstrate eye care. To avoid injury to the eye, encourage them to administer the medicine inside the eyelid without touching the eye. Ideally, medications should be single use and the same tube not reused on other babies. If medications are reused a clean technique for application must be emphasized.

Use a doll or manikin or make a model of an eye from local materials that allows the lower eyelid to be pulled down. A doll whose eyes do not open may be used by applying ointment or drops along the lower lid and saying that the eyelid should be pulled down.

Learners should practice using an ointment or drops that are similar to the medication used in their facility. Eye drops can be given in a manner similar to ointment.

- Ointment or drops
- Doll or manikin
- Cloth for clean-up



Within 90 minutes after birth

Provide eye care



To help prevent serious eye infections

Provide cord care

Explain and demonstrate

Proper care of the umbilical cord can prevent serious infections.

Cleansing the baby after birth

- Remove blood or meconium by wiping.
- Delay the first bath for at least six hours after birth. If the baby is premature, has a low birth weight, has a low body temperature or is ill, bathing should be delayed even longer.

Cord care

- The cord should remain exposed.
- Nothing should be placed on the cord unless a medicine (for example, chlorhexidine) is recommended by the health authority.
- If the stump is soiled, wash it with clean water and dry with a clean cloth.
- If bleeding, put an extra tie tightly around the cord.

Invite discussion

- 1. What cord care practices are recommended by your health authority?
- 2. What traditions exist around cord care? How can parents be encouraged to put nothing on the cord?

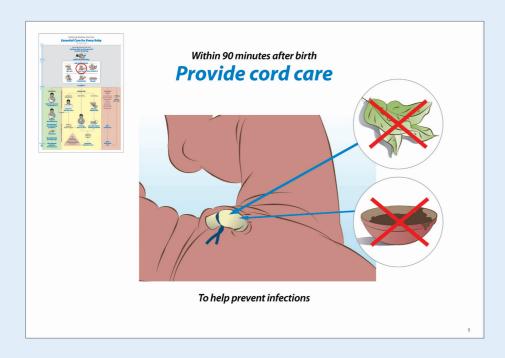
Facilitate practice

Ask learners to role play giving guidance to the mother about cord care.

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

OR

Ask learners to practice cord care as recommended by local health authorities.



Background

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

Cleansing the baby after birth: Soon after birth, remove blood or meconium by wiping. Vernix should not be removed. Do not bathe the baby until at least 6 hours after birth, and then only if the baby has no serious problems. Small babies may require further delay of bathing. Babies of mothers with HIV should be bathed after normal breathing and temperature have been established. Until the cord detaches, it should not be submerged under water.

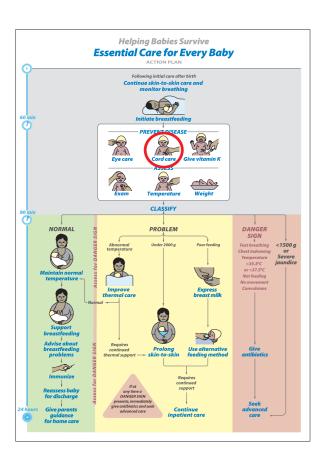
Cord care: Proper care of the cord may prevent infection. The cord should be kept exposed and dry. DO NOT apply anything to the cord, including herbs, animal dung or other substances, except for medications recommended for cord care. Do not place a bandage, diaper or a tight covering over the cord. If soiled, wash the cord.

Following a home birth in areas where neonatal mortality is high, cord care with 7.1% chlorhexidine digluconate (4% chlorhexidine) solution or gel saves lives. If the health authority recommends this or another treatment, the technique for application should be discussed, demonstrated and practiced.

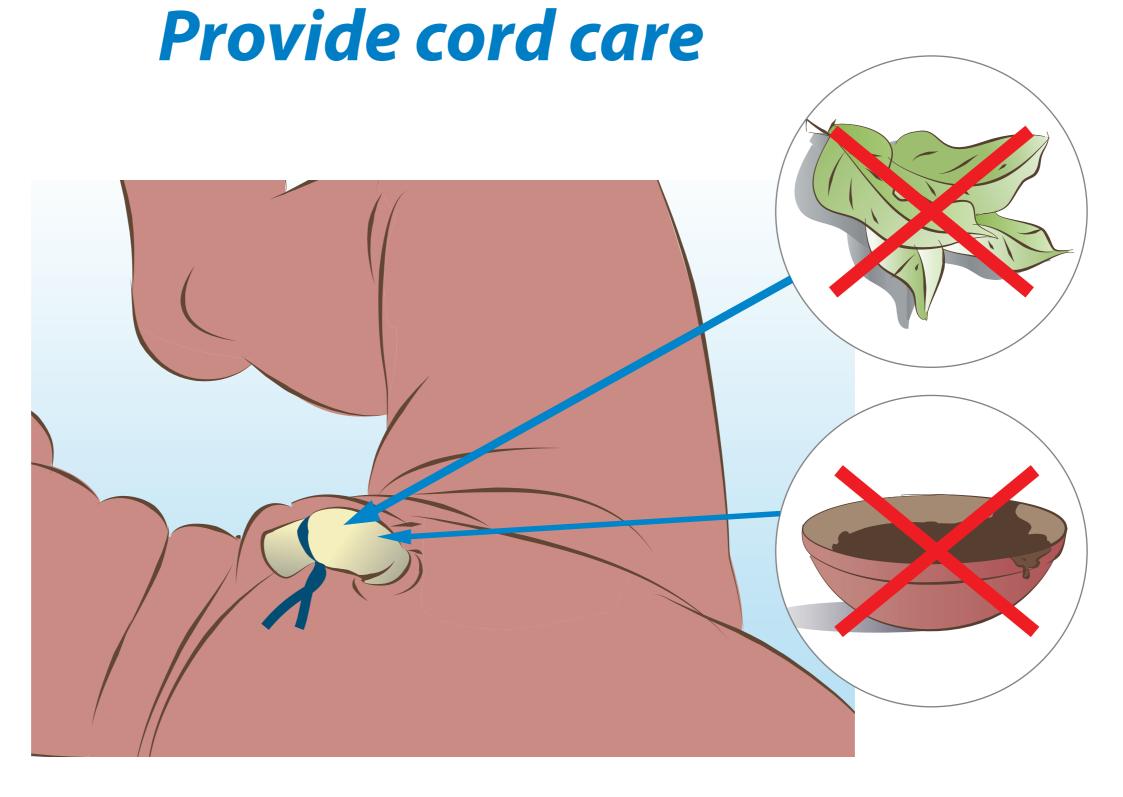
Educational advice

Have learners role play with one acting as the mother and the other as the provider. The provider should give guidance to the mother about cord care and bathing.

- Doll or manikin with umbilical cord
- Clean water
- Clean cloth
- Umbilical cord tie



Within 90 minutes after birth



To help prevent infections

Give vitamin K

Explain and demonstrate

Vitamin K will protect babies from serious bleeding.

Give vitamin K by intramuscular (IM) injection

- Wash hands with soap and water.
- Use gloves if available.
- Draw up 1 mg Vitamin K (0.5 mg for <1500 gram babies) into a 1 mL syringe (use a 25 or 27 gauge needle).
- Identify the site for injection (front, outside of mid-thigh).
- Swab skin with isopropyl alcohol; allow to dry.
- Insert needle (not done in this course) and aspirate gently to ensure that the needle is not in a blood vessel.
- Discuss the technique for proper disposal of syringes and needles.

Encourage mothers to breastfeed their baby during the injections for comfort.

Remind providers to use a new syringe and needle for each baby.

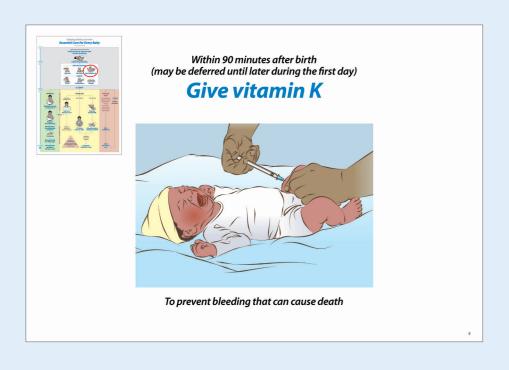
Invite discussion

- 1. Do all babies receive vitamin K?
- 2. Are sterile (single use) needles and syringes available where you work? What is the method for their disposal?

Facilitate practice

Ask learners to practice with role play

- Explaining to the mother the need for vitamin K and how it will be given
- Drawing up correct dose
- Identifying the correct injection site on the doll or manikin
- Cleaning the site of injection
- Demonstrating the technique for safe disposal of syringes and needles



Background

Vitamin K deficiency causes serious bleeding in about 1 out of 100 babies who are not given Vitamin K. This may result in death or brain damage. Every newborn should be given vitamin K. It prevents bleeding if given at any time during the first day after birth. To ensure that all babies are given vitamin K, it is often given around 90 minutes of age along with eye care. 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. It is best to give vitamin K 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). Check the volume of this dose carefully as more than one concentration may be available. Oral vitamin K is not recommended because repeated doses are required for adequate treatment.

Providers are not routinely required to wear gloves during injections (hands must be washed). However, the skin should be prepared with alcohol and sterile technique should be used. Needles should not be re-used and should be placed in a solid container with a lid after use to avoid needle injury and infection.

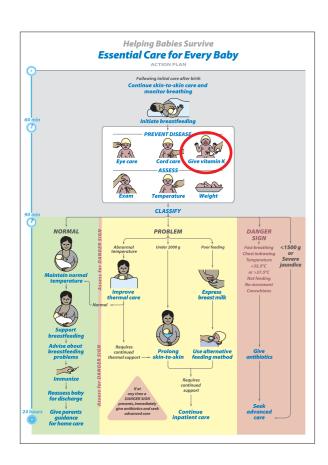
Educational advice

The performance of injections will not be taught in this course. If learners require further training in this skill, discuss how to acquire this training in your area.

Have learners work in pairs with one playing the role of the mother and the other acting as the provider. Have learners demonstrate the steps in performing an IM injection, and explaining to the mother what they are doing.

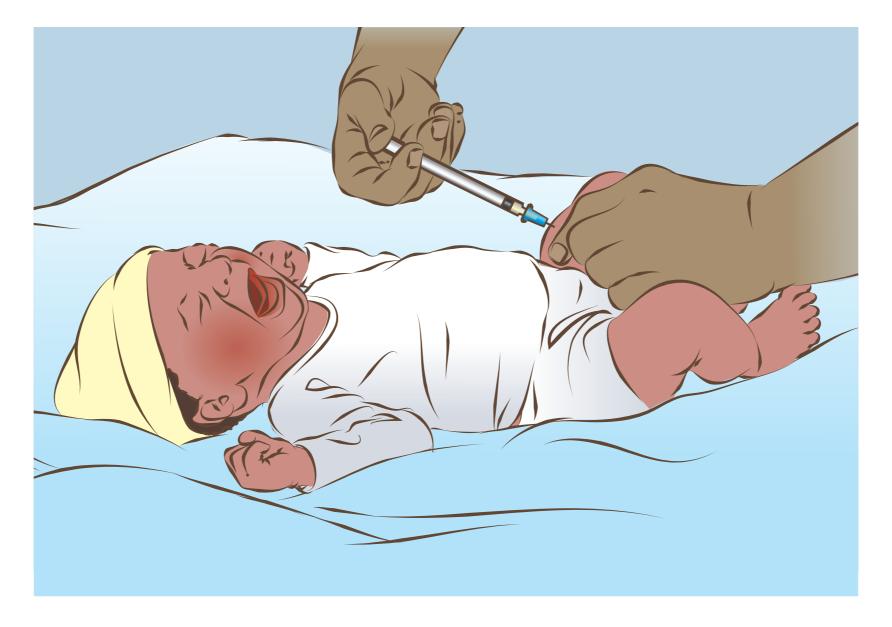
Some preparations of vitamin K may require dilution with sterile water. If these preparations are used locally, have learners practice dilution.

- Doll or manikin (to show injection site only)
- Alcohol and swabs
- Container with a lid for disposal



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

Give vitamin K



To prevent bleeding that can cause death

Examine the baby

Explain and demonstrate

A complete examination should be performed within about 90 minutes after birth

- Count the number of breaths during one minute.
- Observe the movement of the limbs when awake, their position when not moving and their tone.
- Observe the skin color.
- Inspect the following body areas for abnormalities: head, face, mouth and palate, chest, abdomen, genitalia, anus, limbs and skin.

A well baby should

- Breathe easily at 40-60 breathes/minute
- Move arms and legs equally when active and rest with limbs flexed
- Have pink skin
- Have no bleeding or drainage from the umbilical cord

Every examiner should

- · Explain the exam to the mother
- Advise the mother to continue to observe for abnormalities in the exam
- Advise the mother to report abnormalities to a provider immediately
- Record observations and findings of exam

Invite discussion

- 1. When are babies usually examined? Who examines them?
- 2. How do you record the findings of the physical exam?
- 3. Are parents routinely present for the exam or informed of findings?

Facilitate practice

Ask learners to practice with role play

- Describing and documenting the physical exam
 - breathing
 - movement, position and tone of arms and legs
 - skin color
 - cord appearance
 - other features of a general exam
- Communicating the features of the physical exam to the mother and advising her to monitor the baby's exam during the hospitalization



Within 90 minutes after birth **Examine the baby**



To tell if a baby is well, or has a problem

Background

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

Breathing: A baby should breathe effortlessly between 40-60 times a minute. To obtain a respiratory rate, a baby's breathing should be counted 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. The 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 cause serious health problems (see page 26b).

In addition to looking for these features, the baby's entire body should be inspected for abnormalities.

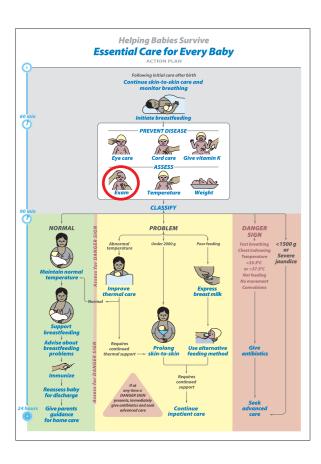
The examination should be performed while skin-to-skin care is continued if possible. Explain the exam to the mother, particularly the features listed above. Ask her to continue to observe for abnormalities in these features and to notify a provider immediately is she identifies a problem.

The results of the exam should be documented, even if all findings are normal.

Educational advice

Have learners practice how to examine a newborn systematically and describe normal findings. Have each learner tell the group how to document one part of the exam

- Doll or manikin
- Paper or local recording form for physical exam
- Pen
- Watch or other timing device



Within 90 minutes after birth

Examine the baby



To tell if a baby is well, or has a problem

Measure temperature

Explain and demonstrate

Abnormal temperature may cause death.

- 36.5°C 37.5°C is a normal 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 excess warming is a Danger Sign.

Using a thermometer to measure temperature is more exact than feeling the skin to estimate if a baby is too hot of too cold.

Measure 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. Digital thermometers can be read very soon (see manufacturer's recommendations); hold a mercury thermometer in the armpit for 5 minutes.

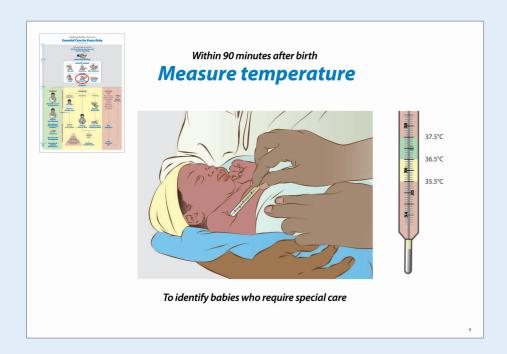
Invite discussion

- 1. What types of thermometers are available locally? Do they measure temperatures below 35.5°C
- 2. How do you clean and store a thermometer?

Facilitate practice

Ask the learners to practice

- Measuring temperature on the manikin or doll with all thermometer types available in the community
- Reading high and low temperatures after immersion in hot and cold water or on a simulated thermometer
- Classifying the temperature as normal, abnormal and requiring improvement of thermal care, or showing a Danger Sign



Background

Keeping a baby's body temperature normal improves outcomes and can avoid the death of some babies. Low body temperature is common in the first hours after birth, especially among premature and low-weight infants. A temperature below 35.5 that does not improve is a Danger Sign. Low temperature can be prevented, or corrected, with changes in care. It is better to prevent low temperature than try to warm a baby who is cold. Temperature can be taken while the baby is skin-to-skin. If the baby needs to be separated from the mother, other methods should be used to keep the baby warm.

Babies can also become too warm, either because of an infection (causing fever) or from over-warming. A temperature of 37.5°C which is not due to over-warming is a Danger Sign.

An axillary (armpit) temperature should be measured in all babies within approximately 90 minutes after birth. Feeling the skin of the face, abdomen, or foot can estimate the temperature. Measuring the temperature is more exact. Measuring axillary temperature is safer than measuring rectal temperature.

Two common types of thermometers are 1) mercury or gallium and 2) digital. For use in measuring the temperature of a baby, the thermometer must be capable of measuring temperatures below 35.5°C.

Educational advice

Prepare locally available solutions (alcohol, soap and water) for cleaning a thermometer or discuss these with the learners. Practice with all types of thermometers that are used locally. Use a manikin or doll to show the proper position of the

thermometer in the armpit. Practice reading the thermometer by simulating different temperatures. Dip the thermometer in hot water and have learners read high temperatures. Then reset the thermometer and simulate a low temperature using cold water.

If water is not available, you may use adult hands or armpits for temperature source. Practice with the thermometer usually used. If not available, make a set of drawings to practice reading the temperature. Ask learners to classify babies and state the actions they would take on the basis of temperatures from each of the four ranges, for example:

36.8°C - normal, maintain temperature

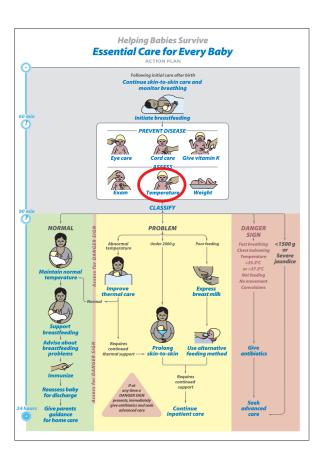
36.2°C - problem (low), improve thermal care

37.9°C - Danger Sign (high), improve thermal care, treat and refer

35.0°C - Danger Sign (low), improve thermal care, treat and refer

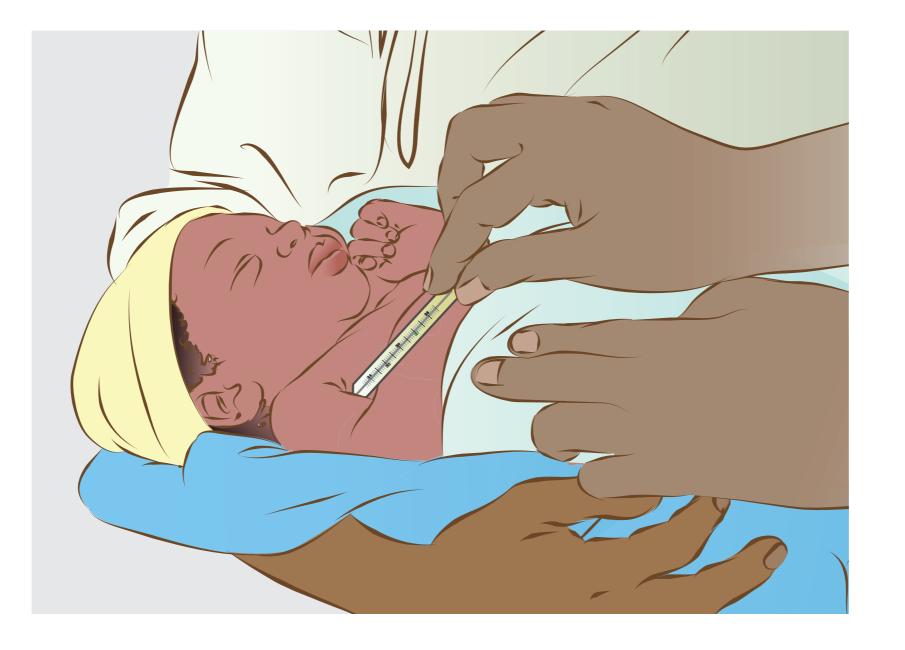


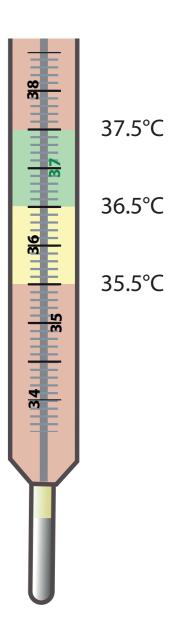
- Doll or manikin
- Form to record temperature
- Hot and cold water or simulated thermometer(s)
- Solution for cleaning



Within 90 minutes after birth

Measure temperature





To identify babies who require special care

Weigh the baby

Explain and demonstrate

Weighing helps identify babies at a higher risk of death.

- < 2500 grams may require special care to prevent low body temperature
- < 2000 grams should receive prolonged skin-to-skin
- < 1500 grams should receive advanced care

Weigh the baby

- If possible, take the scales to the baby.
- Clean the scale.
- Put a clean cloth or towel on the scale.
- Balance the scale to "zero."
- Wash hands with soap and water.
- Quickly place the baby on the scale naked (no diaper, clothing or blanket).

- Resume skin-to-skin care or ask the mother to dress the baby promptly after weighing.
- Record the birth weight in the baby's record.

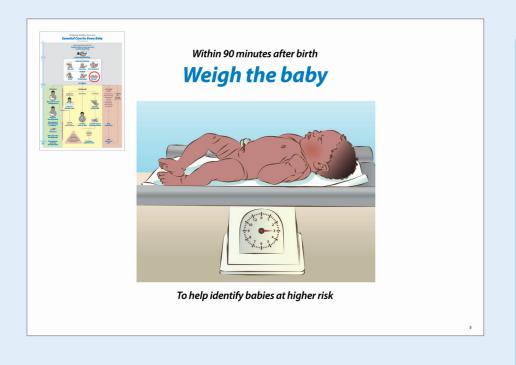
Invite discussion

- 1. What devices are available for weighing babies in your community?
- 2. How are these scales cleaned and maintained?
- 3. Are birth weights recorded? Who keeps these records?
- 4. How can you ensure that every baby is weighed?

Facilitate practice

Ask learners to practice how to

- Balance the scale to zero
- Weigh a baby (manikin or doll)
- Record the weight



Background

Birth weight helps identify babies at higher risk, provides a baseline for monitoring growth and may also be necessary for calculating drug doses.

Babies should be weighed within 90 minutes of birth. However, weighing should be deferred if an infant is cold unless needed for calculating antibiotic doses. Use scales designed for weighing babies. Zero the scales before each use to test that they function properly. Clean the scales with dilute bleach solution or other safe cleaning product before each use to prevent infection.

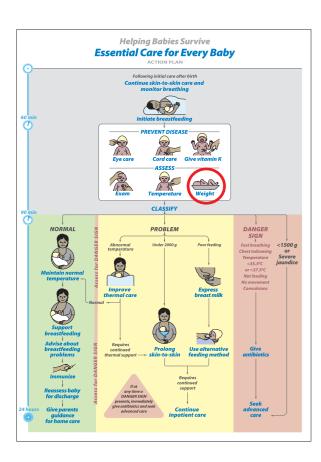
Babies with birth weights under 2500 grams may require special care to prevent low body temperature. Babies with birth weight under 2000 grams should receive prolonged skin-to-skin care (see page 20b). These babies may need alternative feeding methods (see page 22b) and more frequent assessment to identify problems and Danger Signs. Babies with birth weights under 1500 grams should be referred for advanced care when possible.

Always document birth weights. Use established regional or national forms and guidelines for documenting birth weight, for example on an antenatal card, baby's medical history, and/or the immunization record.

Educational advice

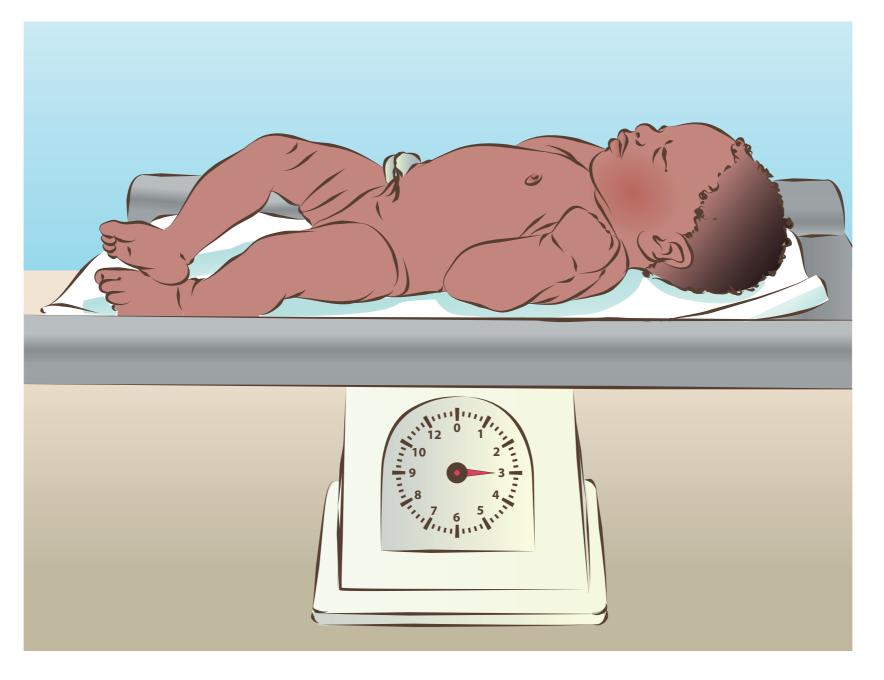
Have learners practice how to obtain an accurate birth weight on a manikin or doll that must be unwrapped and undressed. Have learners document the weight.

- Doll or manikin
- Baby scale
- Baby clothing or blanket
- Cleaning solution for scale
- Soap and water or hand cleaner
- Forms to record birth weight
- Pen



Within 90 minutes after birth

Weigh the baby



To help identify babies at higher risk

Classify the baby

Explain and demonstrate

Classify babies by 90 minutes

- · Based on their exam, temperature and weight
- To define further care

Classify babies as NORMAL if

- · Breathing normally and normal exam
- Temperature 36.5 to 37.5°C
- Weight >2000 grams

Classify babies as HAVING A PROBLEM if

- Temperature 35.5 to 36.4°C
- Weight 1500 to 2000 grams
- Feeding poorly

Classify babies as NEEDING ADVANCED CARE if

- A Danger Sign (page 24b) or severe jaundice (page 26b) present
- Birth weight <1500 grams

Classification should be delayed if a baby

 Has a normal exam but did not feed during the first 90 minutes after birth.

All babies should be classified by 4 hours.

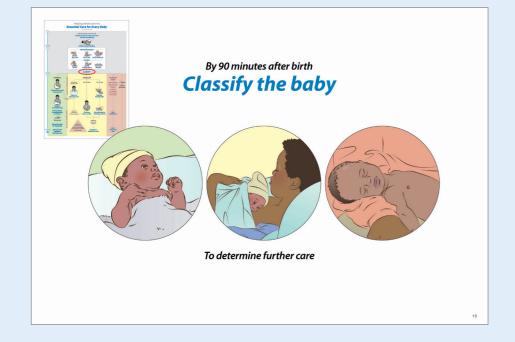
Invite discussion

- 1. Who is responsible for identifying babies who have a problem or a Danger Sign?
- 2. Which babies are difficult to classify?

Facilitate practice

Ask learners to practice with role play

- · Classifying a baby who
 - is breathing 55 times/minute at 90 minutes of age, temperature 36.8°C, and weight 2100 grams (green)
 - has a normal exam, temperature of 36.2°C, and weight 2500 grams (yellow)
 - has blue hands and feet but pink lips, temperature 36.5°C, and weight 2600 grams (green)
 - is breathing 80 times/minute with severe chest indrawing at 60 minutes, temperature 36.9°C, and weight 2700 grams (red)



Background

Classifying babies determines their needs for further care. Babies should be classified by 90 minutes as normal, having a problem or needing advanced care. Babies classified as **normal (GREEN Zone)** have a normal exam, and temperature, and weight over 2000 grams. Babies classified as **having a problem (YELLOW Zone)** may have low temperature (35.5-36.5) or weigh 1500-2000 grams. Babies are classified as **needing advanced care (RED Zone)** if they have a Danger Sign, severe jaundice or a weight < 1500 grams.

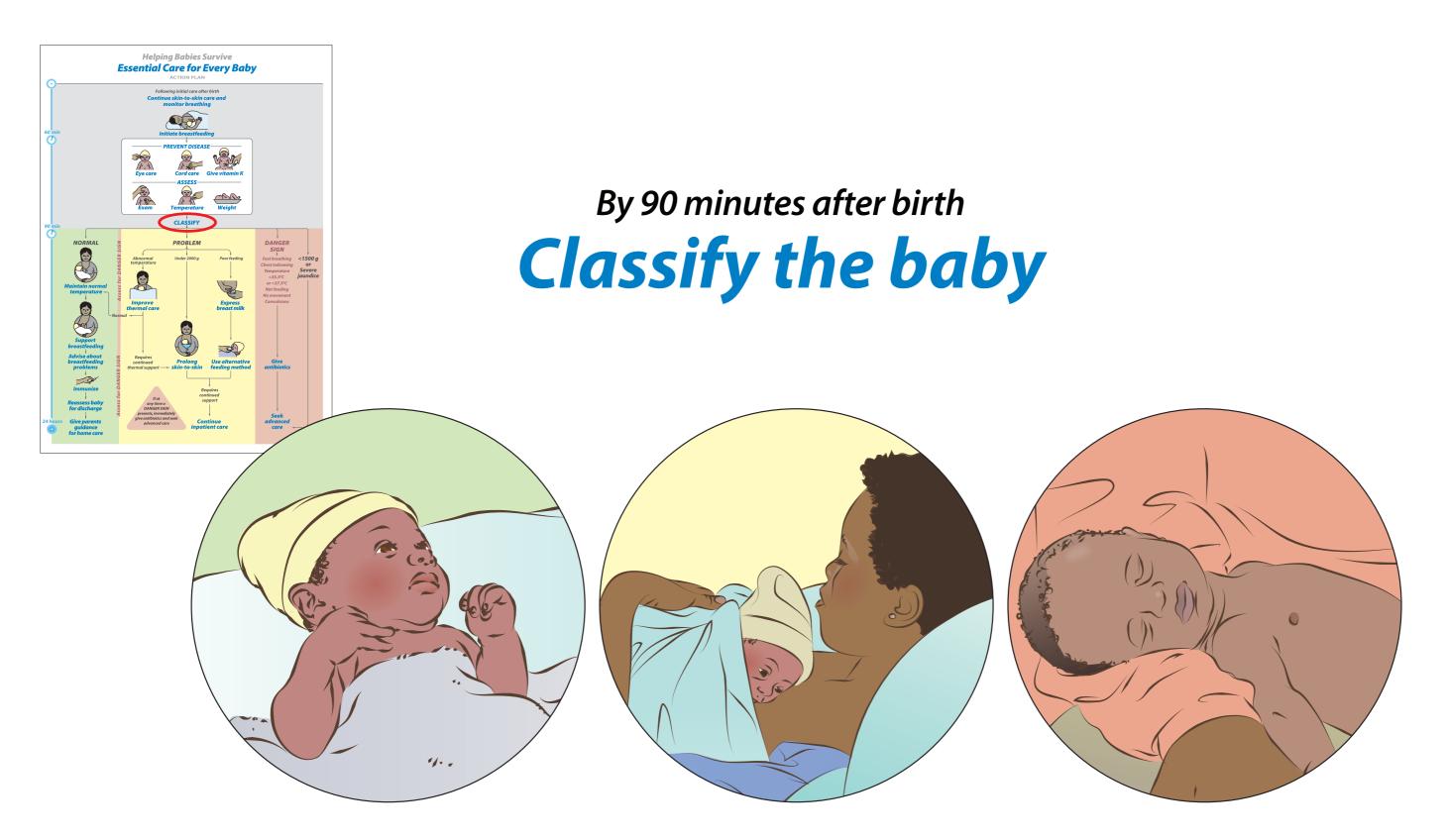
Not all babies can be classified at 90 minutes of age. Some babies will not attach to the breast during the first 90 minutes and therefore do not feed. If a baby is breathing normally, has a normal exam and temperature, but does not feed during the first 90 minutes, classification should be deferred until feeding is 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.

Some babies breathe fast and have chest indrawing soon after birth, but these signs gradually improve over the subsequent hours. Often, these babies breathe fast because they are taking longer to clear the fluid from their lungs. They may recover without specific treatment. In some facilities, the classification may be delayed if a baby who is breathing rapidly is comfortable and well in all other ways. These facilities must have experienced providers who can monitor the baby frequently. Babies who do not continuously improve should receive advanced care.

Educational advice

Present cases that learners can classify using the cases above as examples. This practice may done in small group discussion rather than in pairs.

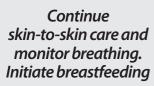
Materials for practice: Paper and pencil



To determine further care

Exercise: Essential care during the first 90 minutes (pages 2-10)







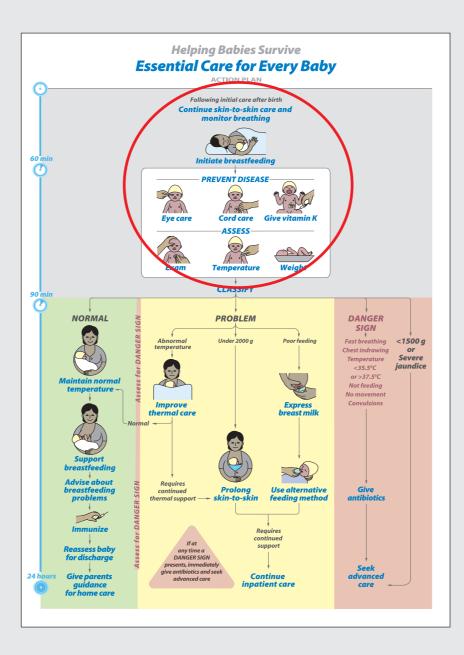
Provide treatments to prevent disease

Assess and Classify

Work in pairs. Demonstrate and describe care of a baby for the first 90 minutes after birth. One person takes the role of the mother. The other person takes the role of the health worker who performs the actions (black text) and communicates with the mother (green text). Switch roles and repeat the exercise with a different case scenario.

Materials for practice:

- Manikin
- Soap, basin and water
- Thermometer
- Cleaning solution
- Scale
- Ointment or drops for eyes
- 1.0 mL syringe
- Vial of vitamin K or water to simulate
- Documents for recording results of exam, weight and temperature
- Pen



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.

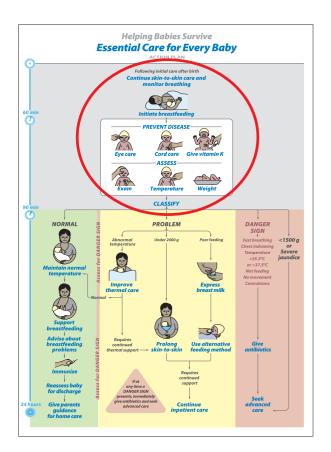
Checklist

	Wash hands
	Explain why it is important to wash hands before touching the baby.
	Monitor breathing
	Describe fast, difficult, noisy breathing.
	Continue skin-to-skin care
	Explain that skin-to-skin care helps the baby stay warm and begin breastfeeding.
	Initiate breastfeeding
	Describe the signs that a baby is ready to breastfeed and how to position a baby.
Prov	vide treatment to prevent disease and assess the baby
(ste	os can be done in any order between 60-90 minutes)
	Examine the baby
	Breathing, skin color, movements, activity, cord appearance, other physical feature
_	Describe the findings to the mother.
	Measure temperature
	Tell mother if temperature is normal, low, or high.
	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.
Ш	Give vitamin K
_	Explain that vitamin K prevents serious bleeding.
	Classify the baby as being Normal, having a Problem, or showing a Danger Sign

Educational advice

The purpose of this exercise is to assist the learner in understanding how to integrate essential actions and assessments while maintaining contact between mother and baby. The facilitator will demonstrate the actions that are performed during the first 90 minutes after birth, and describe explanations and advice given to the mother. The six actions to provide preventive treatments and assess can be performed in any order. Practice begins with the facilitator reading the case scenario.

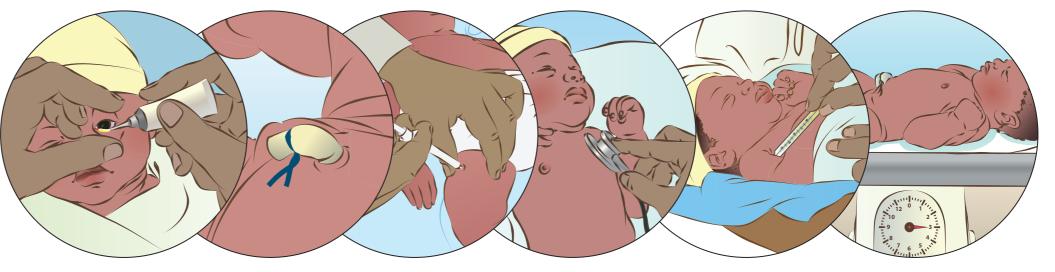
Learners will work in pairs. One person will play the role of the provider who performs the actions (black) and communicates with the mother (green). The other will play the role of the mother. Roles will switch after one person successfully completes the exercise. Learners may review the Action Plan during the exercise.



Exercise: Essential care during the first 90 minutes



Continue skin-to-skin care, monitor breathing, and initiate breastfeeding



Provide treatments to prevent disease

Assess and Classify

Maintain normal temperature

Explain and demonstrate

Even normal, well babies need care to avoid becoming too cold or too hot.

Prevent heat loss

- Continue initial skin-to-skin care for at least one hour after birth whenever possible.
- Do not bathe prior to six hours after birth.
- Avoid drafts and contact with wet or cold surfaces.

Maintain normal temperature when skin-to-skin care is not being used

- Clothe and wrap in a clean, dry blanket, and cover the head.
- Wrap securely but not tightly.

Prevent over-heating

 Do not place babies close to heat sources or in direct sunlight.

Assess temperature every four hours during routine care by touching the foot or forehead.

• If the skin feels too cool or too hot, measure a temperature.

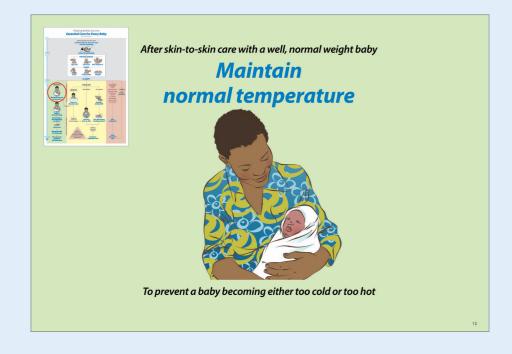
Invite discussion

- 1. What clothing and wraps are used locally to keep babies warm?
- 2. What ways are babies kept warm at home? Are these safe?

Facilitate practice

Ask learners to practice with role play

- Selecting or describing appropriate clothing and head covering for the region
- Wrapping the manikin to prevent heat loss



Background

A baby begins to lose heat even before the body temperature falls. For this reason, preventing heat loss should begin with skin-to-skin care at birth. Whenever possible, skin-to-skin care should continue for at least one hour after birth. If illness in the mother prevents skin-to-skin care with her, another adult may be able to provide skin-to-skin care.

Avoid heat loss by keeping the environment warm. Avoid drafts and contact with wet or cold surfaces. Do not bathe a baby prior to six hours after birth, or longer if the baby is low birth weight or small. (Exception: babies of HIV mothers should be bathed as soon as possible.)

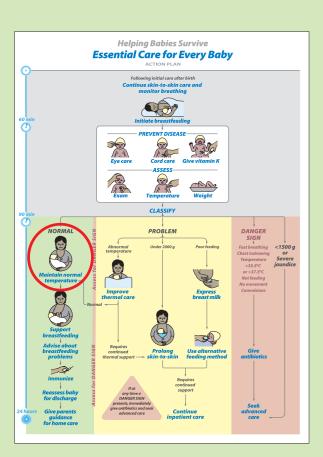
After skin-to-skin care, wrap the baby in a clean, dry blanket or cloth. Wrap securely, but not so tightly that breathing is difficult. Babies may also be dressed in a diaper and shirt. The head should be covered. The amount of clothing should be appropriate for the temperature around the baby. This usually means 1-2 layers of clothes more than is 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. Babies may also become too hot in medical devices with heaters (for example incubators or radiant warmers). The baby's temperature should be monitored closely when these devices are used.

Educational advice

Prepare clothing and wraps that are used locally for learners to practice. Show how a wet cloth, a cold surface, and a draft can cause a baby to lose heat by exposing the learners' bare skin to each one. Have learners demonstrate correct clothing, head covering, and wrapping for babies in the region.

- Doll or manikin
- Clothing, head covering, blankets



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

Support breastfeeding

Explain and demonstrate

Support of breastfeeding after birth will improve the chances of success.

- Keep mother and baby together unless it is absolutely necessary to separate them.
- Encourage breastfeeding whenever the baby shows signs of readiness (see page 3b).

Assist mother with positioning for feeding

- Head and body in a straight line
- Face opposite nipple
- Neck not flexed
- Whole body supported

Options for positioning for feeding:







Advise mother about

- Signs of good attachment
- mouth wide open
- lower lip turned downward
- chin touching breast
- most of dark portion of the nipple in the mouth
- Signs of poor attachment
- only nipple in mouth
- baby pulls on nipple
- Alternating the side on which the baby feeds first

Provide advice about signs that a baby is adquately fed.

- softening of the breast with feeding
- swallowing sounds heard during feeding
- feeds every 2-4 hours (8-12 times per day)
- baby sleeps well between feedings

Invite discussion

- 1. What policies in your facility encourage early and exclusive breastfeeding?
- 2. Who helps new mothers with breastfeeding?
- 3. Are there any local practices that interfere with exclusive breastfeeding

Facilitate practice

Combine practice of this action with Advise about breastfeeding problems (see next page).

Background Breastfooding often

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.

Good positioning during breastfeeding increases the likelihood of success. This occurs when the baby is positioned properly and the mother is comfortable. Advise the mother to place the baby with the head and body in a straight line with the face opposite the nipple, and the neck not flexed. The whole body should be supported. This can be done by holding the baby in several positions.

Good attachment occurs when 1) the mouth is open wide, 2) the lower lip is turned downward, 3) the chin is touching the breast, and 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. Poor attachment may cause the baby to take in air and have abdominal distention and pain. Mothers may experience severe nipple pain with poor attachment. Poor attachment can lead to engorgement, cracked nipples and mastitis. These problems may be prevented by supporting breastfeeding early.

The side on which the baby feeds first should be alternated. The baby may benefit from burping periodically during feeding.

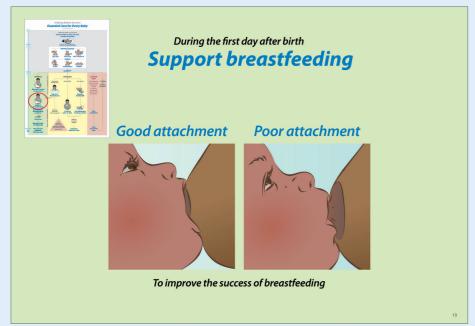
Signs of adequate feeding. The breast will soften during feeding if the breast is emptied. The mother may hear sounds as the baby swallows. Healthy babies should feed every 2-4 hours and 8-12 times per day. Babies who are getting enough milk sleep well between feedings.

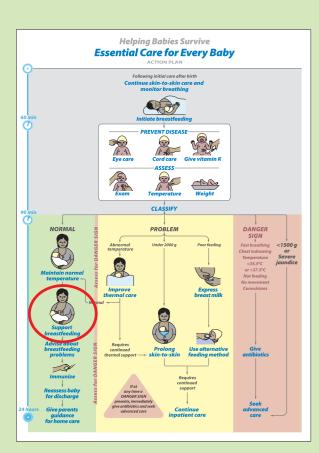
Educational advice

Have learners practice correct position for breastfeeding using a manikin or doll. One learner should take the role of the mother and a second should act as the provider. The provider should both assist and advise the mother.

Demonstrate incorrect and correct attachment on a model, by referring to the illustrations or by using a volunteer mother.

- Doll or manikin
- Head cover and blanket
- Breast model (optional)

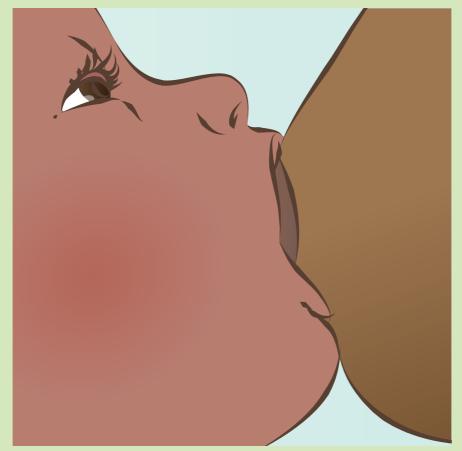


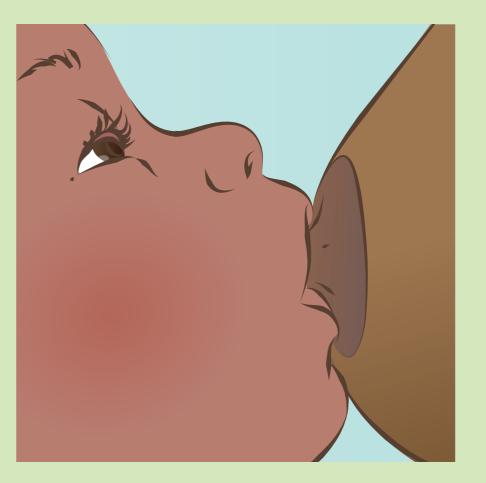


During the first day after birth

Support breastfeeding

Good attachment Poor attachment





To improve the success of breastfeeding

Advise about breastfeeding problems

Explain and demonstrate

Inverted nipples may interfere with successful breastfeeding by making good attachment more difficult. To improve attachment

- · Stimulate nipple before feeding
- Shape breast by supporting underneath with the fingers and pressing above with the thumb

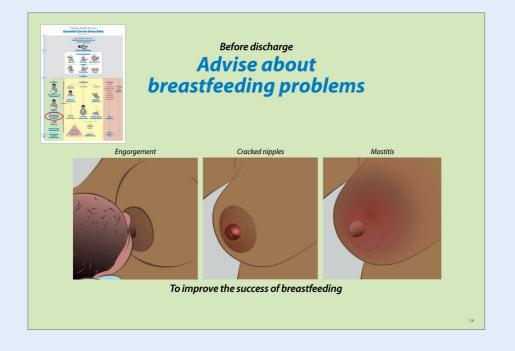
Teach mothers how to recognize and manage other common problems that may prevent successful breastfeeding.

Breast engorgement

- Swelling and shininess of both breasts
- No tenderness or redness
- Feed often, express milk

Sore or cracked nipples

- · Nipple tenderness and pain during feeding
- Cracks or fissures may be visible
- Ensure good attachment
- Avoid irritation from clothing
- Apply drops of milk



Mastitis

- Painful, red and firm area, usually in one breast only
- · Ill feeling often with fever
- Feed frequently, or express milk to ensure emptying
- Seek medical attention

Advise mothers about how to improve flow of milk

- Apply warm compresses
- Massage the back and neck
- Massage the breasts and nipples

To improve supply of milk

- · Increase maternal fluid intake
- Increase frequency of feedings

Invite discussion

1. Who helps new mothers with breast problems?

- 2. How are the common breast problems managed in your community?
- 3. How do mothers increase their breast milk supply?

Facilitate practice

Ask learners to practice with role play

- Positioning a manikin or doll
- Pointing out the features of good and poor attachment
- · Describing the signs that a baby is adequately fed
- Communicating this information to the mother

Ask learners to role play advising mothers about

- Inverted nipples
- Breast engorgement
- Cracked nipples
- Mastitis
- Low milk supply

Background

Problems with the breasts during the first week or two following delivery are common, and may prevent successful breastfeeding. Providers should understand the causes of these problems and strategies to prevent or treat them. Because the problems most commonly occur after discharge from the birth facility, providers should advise mothers about prevention, recognition and treatment.

Inverted nipples are relatively common and can interfere with breastfeeding because they make good attachment more difficult. Mothers with inverted nipples may need extra help when learning to breastfeed. Encourage mothers to stimulate the nipples before feeding and to shape the breast before attachment.

Breast Engorgement is a sign that the breasts are not being emptied adequately. When the breasts are engorged both breasts are swollen, shiny and patchy red, but the mother will not have fever. 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. Ensure good attachment and continued breastfeeding or expression of milk. Advise mothers to wash their breasts at least once a day and avoid soaps, medicated lotions, and ointments. Treat cracked nipples by applying the last drops of breast milk to the skin.

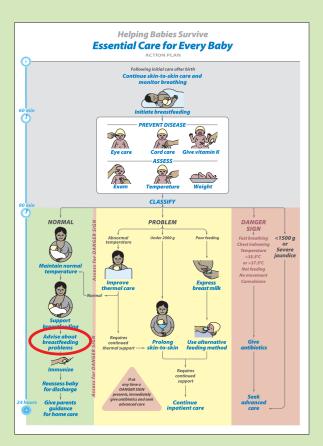
Mastitis may occur when blocked ducts limit drainage of milk or may result from infection. It typically occurs in one breast only, and is present when there is a well-defined, red, sore and swollen or hardened area. The goal of care is to promote the immediate resumption of milk flow by frequent breastfeeding or expressing milk. If a mother has a temperature of > 38°C, feels ill or does not improve in 2 days, she should seek medical care promptly. Further treatment may include antibiotics.

Improve milk supply by increasing maternal fluid intake and the frequency of feedings. **Flow of milk** during a feeding may be increased by applying warm compresses to the breast, back and neck, massaging breasts and nipples.

Educational advice

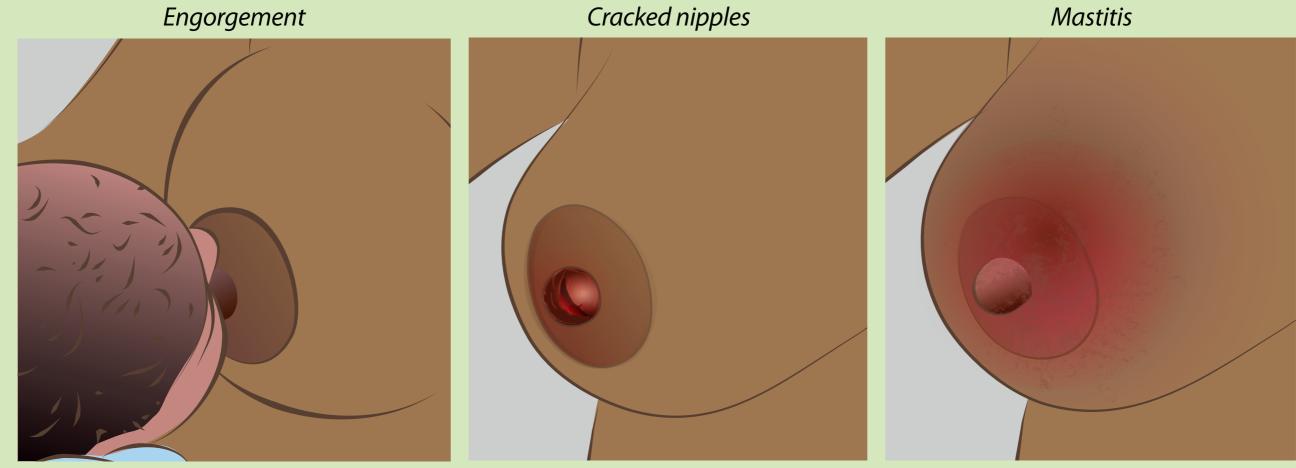
Use the illustrations on the front to enhance discussion of breast problems. Have learners role play advising a mother about the management of breast problems.

- Doll or manikin
- Head cover and blanket
- Breast model (optional)



Before discharge

Advise about breastfeeding problems



To improve the success of breastfeeding

Begin immunizations

Explain and demonstrate

Review the dose and how to give each immunization recommended by the health authority.

Demonstrate how to give the recommended immunizations, which might include:

- Hepatitis B 0.5 mL IM
- BCG (tuberculosis vaccine) 0.05 mL intradermal in the arm
- Oral polio 2 drops on the tongue

Remind providers to use a new syringe and needle for each baby.

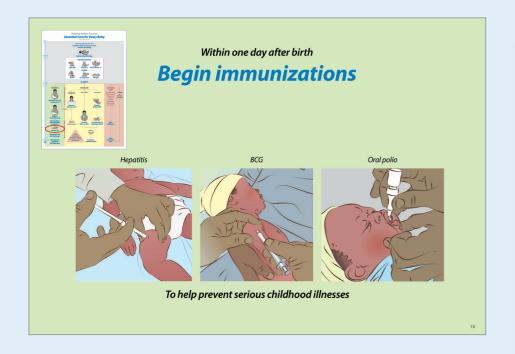
Invite discussion

- 1. What immunizations are recommended in your community?
- 2. How are they stored and who gives them?
- 3. Where is immunization recorded for each baby?

Facilitate practice

Ask learners to practice with role play

- Explaining to the mother the need for immunizations and how they will be given
- Drawing up oral, IM, and intradermal medications (use air or water for simulation)
- Identifying the correct injection site on the doll or manikin
- · Cleaning the site of injection
- · Recording immunizations in the baby's record
- Demonstrating the technique for safe disposal of syringes and needles



Background

Specific immunizations differ from one region to another. Follow the recommendations of your health authority. Common immunizations include the following:

Hepatitis B vaccine is given IM usually within 24 hours after birth.

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

Polio vaccine is given orally, and is often given at the same time as hepatitis B vaccine and BCG.

Remind mothers that additional doses of hepatitis B and polio vaccine will be required later. Immunizations against other diseases will also be needed later in infancy.

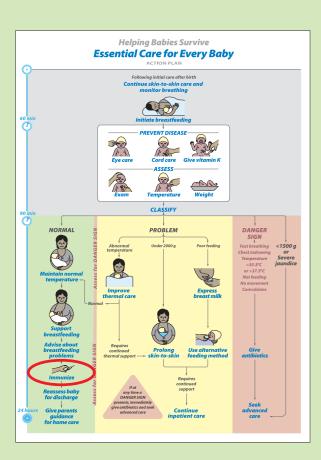
Providers are not routinely required to wear gloves during the administration of vaccines (hands must be washed). Sterility during administration is essential. Needles, with or without attached syringes, should be placed in a solid container with a lid to avoid needle injury and infection.

Educational advice

Have learners work in pairs with one playing the role of the mother and the other acting as the provider. Have learners demonstrate all the steps in performing IM and intradermal injections as well as oral administration while they explain to the mother what they are doing.

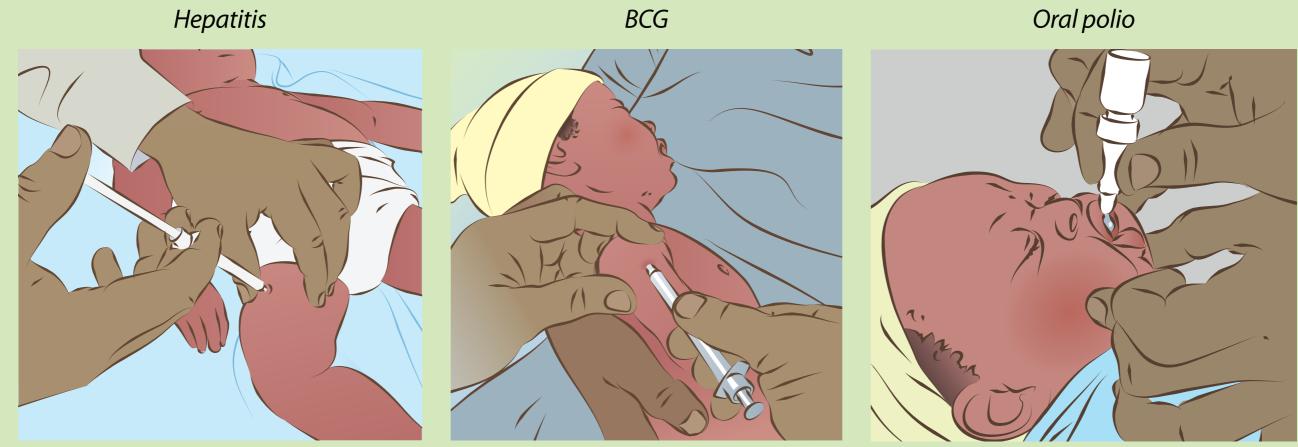
Review the importance of prior storage of medications.

- Doll or manikin (to show injection site only)
- Alcohol and swabs
- A container with a lid to dispose of syringes.
- Recording form and pen or pencil



Within one day after birth

Begin immunizations



To help prevent serious childhood illnesses

Reassess the baby and breastfeeding

Explain and demonstrate

Assessment breastfeeding

- Baby feeds every 2-4 hours and feeds at least 8 times per day.
- Baby suckles effectively.
- Baby settles with each feeding.
- Mother has little breast or nipple pain.

If problems with breastfeeding are present, observe breastfeeding, looking for signs of poor attachment.

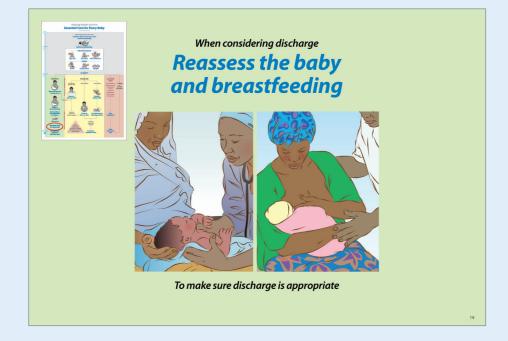
Perform a complete examination of the baby, with particular attention to signs of severe jaundice and infection of the umbilical cord.

Invite discussion

- 1. How long do mothers and babies usually stay in the birth facility?
- 2. Are there written criteria for discharge of babies from your facility?
- 3. Is the discharge of babies who have breathing or temperature problems soon after birth delayed? For how long?

Facilitate practice

Combine practice of this action with Give guidance for home care (see next page).

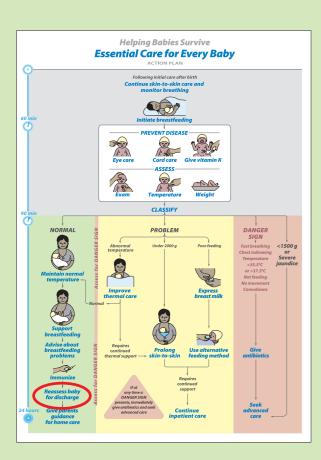


Background

When possible, discharge from the birth facility should not occur until 24 hours after birth. A longer period of hospitalization should be considered for infants who have had problems such as low birth weight, low temperature or breathing problems. Prior to discharge, preparedness for home care is established by assessment for potential problems in both the mother and the baby.

Signs of successful breastfeeding should be present prior to discharge. The baby should feed every 2-4 hours and at least 8 times per day, The baby should settle between feedings and should suckle effectively with slow, deep sucks and occasional pauses. If successful breastfeeding has not been established, a feeding should be observed for signs of poor attachment.

A second complete exam of the baby should be performed prior to discharge from the birth facility. The provider should look for signs of severe jaundice. The umbilicus should be examined for redness and swelling at the base of the umbilicus and drainage of pus from the cord. These are signs of infection of the cord. When present, the cord should be cleaned with soap and clean water. If these signs do not improve within 2 days, or if a Danger Sign is also present at any time, antibiotics should be given. During the exam, abnormal signs should be explained to the mother.



When considering discharge

Reassess the baby and breastfeeding



To make sure discharge is appropriate

Give parents guidance for home care

Explain and demonstrate

Parents will continue essential newborn care at home. They must

- Understand how to keep a baby healthy
- Be able to recognize problems
- Know to seek immediate care for Danger Signs and other serious medical problems.

Discuss with the family the following key messages

- Breast feed exclusively
- Manage common breast problems
- Wash hands before touching the baby
- Put nothing on the cord
- Complete all immunizations
- Seek immediate care for Danger Signs or severe jaundice

Identify the place and time for follow-up care.

 Record follow-up appointment on Parent Guide or local document.

Discuss any other guidance from the local health authority (e.g., birth registration).

Prior to taking the baby home, parents should be able to demonstrate knowledge about their responsibilities.

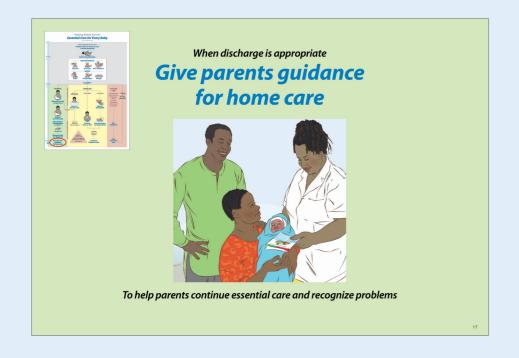
Invite discussion

- 1. How do you know that parents understand advice about home care?
- 2. What resources are available for families who may have difficulty delivering essential care?
- 3. What printed information or records are given to the parents?

Facilitate practice

Ask learners to practice with role play

- Completing a pre-discharge assessment of breastfeeding and examination of the baby
- · Identifying the baby who cannot be discharged
- Discussing key messages for home care with parents
- Assessing the family's knowledge of essential care
- Identifying the place and time for follow-up care



Background

Prepare parents for caring for their baby by helping them understand the key messages about home care.

Kev messages

Exclusive breastfeeding for at least 6 months provides the best nutrition for babies, and helps protect against infection. Healthy babies feed every 2-4 hours or 8-12 times per day and sleep well between feedings. From around day six after birth, well-fed babies urinate 6-8 times per day.

Recognition and management of common breastfeeding problems, including engorgement, cracked nipples, and mastitis (see Advise about breastfeeding problems, page 14b). This can help improve rates of exclusive breastfeeding. Advise mothers that nipple pain should not be felt and is usually a sign of poor attachment. If mothers with breastfeeding problems develop a fever, or in general feel unwell, they should seek health care.

Washing hands before touching the baby and putting nothing on the cord helps prevent infection.

Completion of all scheduled immunizations to ensure that the baby is protected from dangerous illnesses. Remind parents of the immunization schedule that is recommended in your setting.

Recognition of Danger Signs, or severe jaundice, and seeking appropriate care helps babies receive advanced care, which can be lifesaving.

Parents should demonstrate their knowledge of the key messages. This can be done by asking parents to repeat key messages. Additional efforts to prepare parents for home care should focus on gaps in their knowledge about key messages.

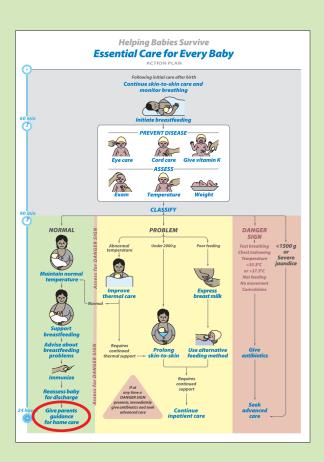
Advise parents about other healthy practices that are recommended in your setting. This might include advice regarding prevention of malaria, well-child visits, and family planning.

Advise parents about the time and place of the first follow up appointment.Record these details in the Parent Guide or similar document.

Educational advice

Have learners role play with one acting as the mother and the other acting as the provider. The provider assesses the mother for successful breastfeeding and performs a complete examination of the baby. The provider discusses key messages for home care and explains the contents of the Parent Guide. Emphasize that the family's understanding of the key messages is critical for effective home care.

- Doll or manikin
- Parent Guide or other appropriate document
- Pen



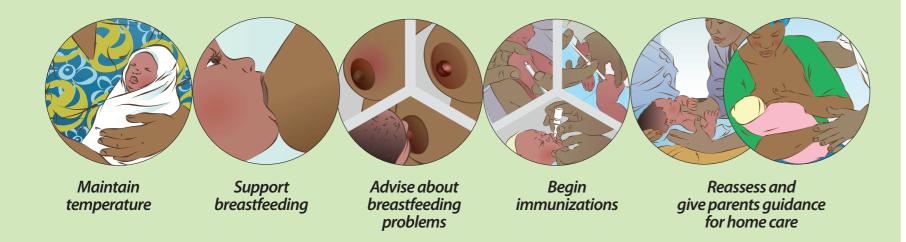
When discharge is appropriate

Give parents guidance for home care



To help parents continue essential care and recognize problems

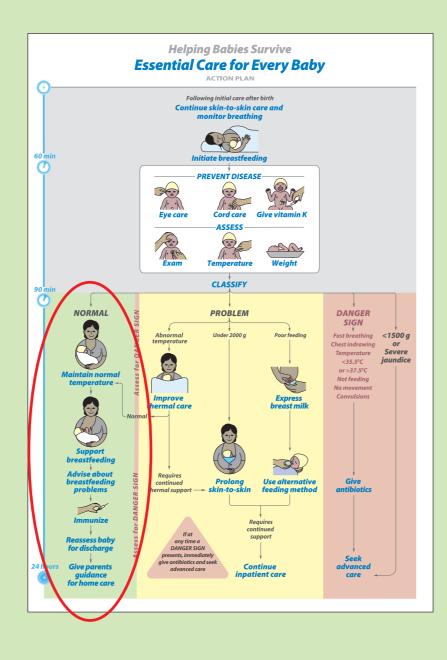
Exercise: Essential care for a well baby (pages 12-17)



Work in pairs. Demonstrate and describe care of a well baby following the first 90 minutes after birth. One person takes the role of the mother. The other person takes the role of the health worker who performs the actions (black text) and communicates with the mother (green text). Switch roles and repeat the exercise with a different case scenario.

Materials for practice:

- Manikin
- Head cover and blanket
- Syringes
- Parent Guide
- Recording form for assessment
- Pen



Case scenario:

At 2 hours of age, a baby with a birth weight of 2900 grams has a temperature of 36.7 °C and a normal physical exam.

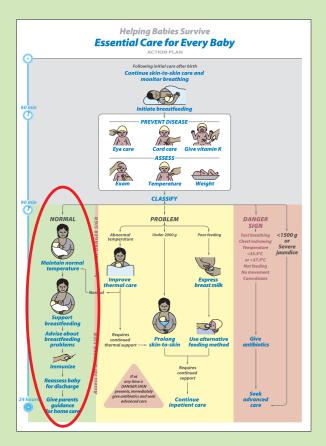
Checklist

☐ Wash hands
Reinforce why it is important to wash hands before touching the baby.
☐ Maintain normal temperature
Explain ways to prevent heat loss and how 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 and breastfeeding (temperature, feeding, breathing/color,
movements/activity, cord appearance, jaundice and adequacy of feeding)
Discuss any concerns with the family.
☐ Give parents guidance for home care
Review key messages in the Parent Guide and the plan for follow-up care.

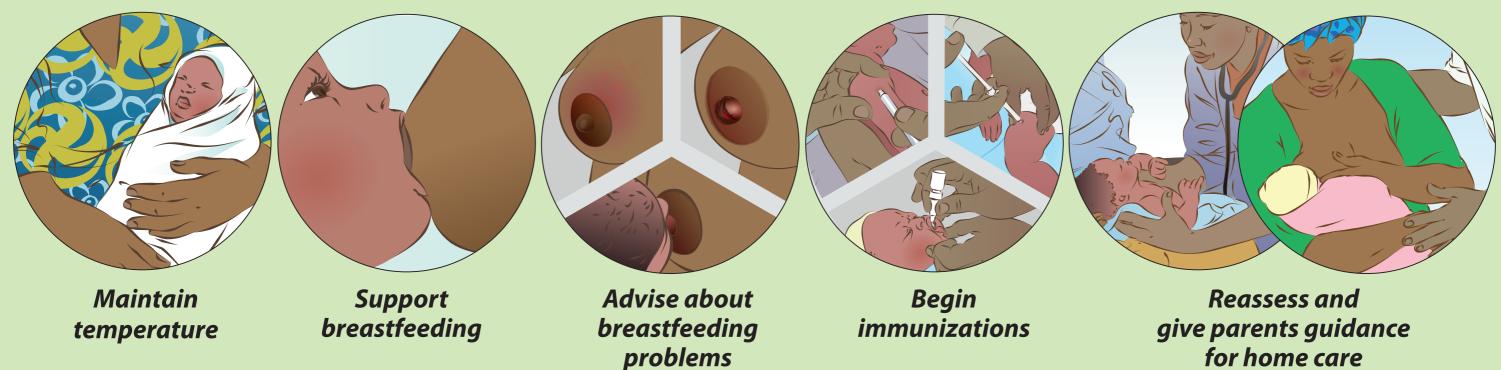
Educational advice

The purpose of this exercise is to assist the learner in understanding how to integrate essential care that is required following the initial period after birth (the first 90 minutes) until preparation for home care for a baby of normal weight who has no problems. The facilitator will demonstrate the actions that are performed during essential care of a well baby, and describe explanations and advice given to the mother and other family members. Practice begins with the facilitator reading the case scenario.

Learners will work in pairs. One person will play the role of the provider who performs the actions (black) and communicates with the mother (green). The other will play the role of the mother. Roles will switch after one learner successfully completes the exercise.



Exercise: Essential care for a well baby



Improve thermal care

Explain and demonstrate

Warm a baby whose temperature is <36.5°C

- Restart or improve skin-to-skin care.
- Increase room temperature and avoid drafts.
- Replace wet clothing, wrap and cover baby's head with a hat.
- Add a layer of clothing and socks.

Cool a baby who is > 37.5°C

- · Check for too much clothing.
- Move baby from direct sunlight or away from a heat source.

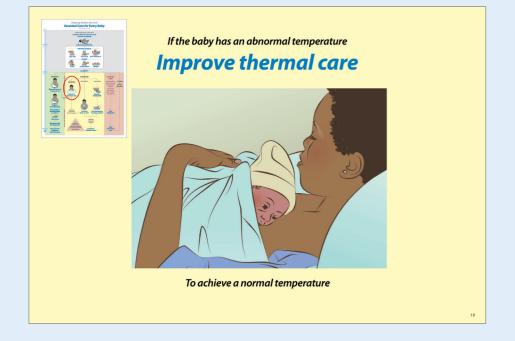
Measure baby's temperature hourly until normal. For a temperature <36.5°C or > 37.5°C, that does not improve after one hour of warming or cooling, seek advanced care.

Invite discussion

- 1. How can you control room temperature where babies are kept in the birth facility?
- 2. Why do babies become too cold or too hot where you work?

Facilitate practice

Combine practice of this action with Prolong skin-to-skin care (see next page).

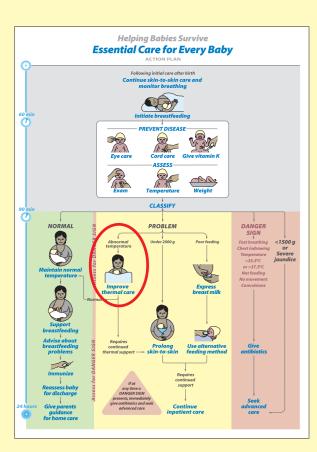


Background

If a baby's temperature is below normal, make sure that the room is warm (25-28°C) and without drafts. Make sure that the baby is dry, and is not wrapped in wet covers or clothing. Skin-to-skin care should be continued and improved, or resumed if stopped. Dress the baby in a diaper, hat and socks, and place on the mother's chest. Cover mother and baby with additional layers of warm, dry clothing and/or blankets. Check the temperature every hour until normal. Continue feeding during rewarming.

Using these steps, 90% of babies with a low temperature will have a normal temperature within 4 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 care during this time.

A temperature that is too high may also be dangerous. A high temperature may be caused by wrapping a baby in too many clothes, leaving a baby in direct sunlight, or placing a baby too close to a heat source. Inappropriate use of a radiant warmer may also cause a high temperature. Use of radiant warmers requires special training, and should include frequent temperature monitoring. A high temperature may also be a sign of infection. A temperature > 37.5°C that does not fall with appropriate thermal care is a Danger Sign.



If the baby has an abnormal temperature

Improve thermal care



To achieve a normal temperature

Prolong skin-to-skin care

Explain and demonstrate

Babies who cannot maintain normal temperature with wrapping and attention to other aspects of thermal care (e.g. dry clothing, warm room) may need prolonged (day and night) skin-to-skin care. Babies with birth weight <2000 grams often need prolonged skin-to-skin care.

Assist a mother with prolonged skin-to-skin care

- Ensure that mother's clothes fit loosely and that she wears a shirt that opens in the front.
- Cover the baby's genitalia with a small cloth or diaper.
- · Cover the head.

- Position the baby upright on the mother's skin between her breasts.
- · Place the baby in a frog position with flexed arms.
- Turn the head to one side.
- Secure snugly with a cloth wrap and close mother's shirt.

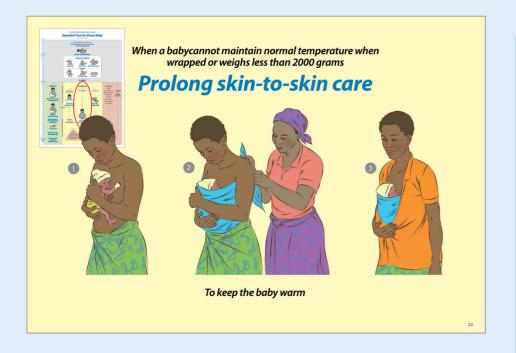
Invite discussion

- Have you ever cared for babies with prolonged skin-to-skin care?
 What type of babies were these?
- 2. What help is available for mothers and babies when skin-to-skin care is needed for more than one day?

Facilitate practice

Ask learners to practice with role play

- Warming a baby whose temperature is < 36.5°C
- Cooling a baby whose temperature is >37.5°C
- Maintaining normal temperature of a baby who has normal temperature when skin-to-skin but low temperature when properly wrapped
- Positioning and securing a manikin or doll for prolonged skin-to-skin care
- Explaining the steps to the mother while performing them



Background

Babies with low birth weights, particularly those with birth weights <2000 grams, develop low body temperature even when they have no other medical problems. These babies should remain in skin-to-skin care for greater than one hour. Other babies may have difficulty maintaining their body temperature with clothing and wraps alone. These babies may also benefit from prolonged skin-to-skin care. Prolonged skin-to-skin care may allow frequent breastfeeding and increase bonding between the mother and baby.

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

Other family members can also provide prolonged skin-to-skin care.

Because mothers may be in many positions during prolonged skin-to-skin care, it is important that the baby be bound securely in a wrap. In some areas, special wraps are available for this purpose.

Prolonged skin-to-skin care should be provided in a health care facility, and under the supervision of a provider. 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). Providers who assist mothers with KMC require special training.

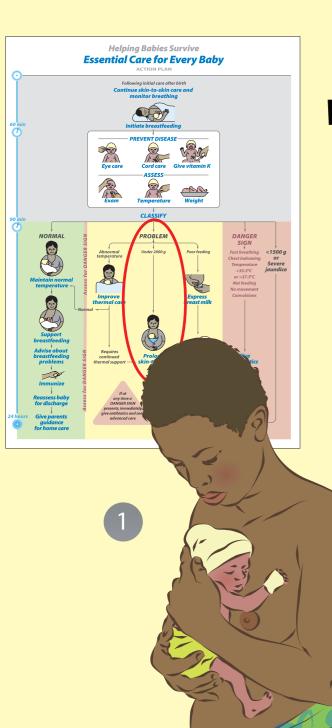
Educational advice

Have learners role play in pairs, with one acting as the mother and the other as the provider. Ask learners to practice the steps to take for a low and high temperature. Use a doll or manikin and describe a case scenario in which the baby becomes cold or hot. Also present a scenario in which the bay has a normal temperature during skin-to-skin care but has a low temperature when wrapped properly and is in a warm room. Have learners demonstrate how to prepare the mother and baby for prolonged skin-to-skin care.

The provider should explain to mother the steps she should take.

Materials for practice:

- Blanket
- Doll or manikin
- Shirt that opens in the front
- Diaper
- Head covering
- Support binder



When a babycannot maintain normal temperature when wrapped or weighs less than 2000 grams

Prolong skin-to-skin care





To keep the baby warm

Express breast milk

Explain and demonstrate

A mother may express breast milk

- To feed a baby who cannot feed directly from the breast
- To relieve breast engorgement

How to teach a mother 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 behind the nipple approximately 4 cm from the base of the nipple.
- Support the breast with other fingers.
- Press the breast gently towards the chest wall.
- Compress the breast between the thumb and finger. Avoid sliding the thumb and finger on the skin of the breast.

- Rotate the position of the thumb/finger around the breast with each compression.
- Express breast until milk drips; then express the other breast.
- Alternate between breasts 5-6 times (20 – 30 minutes).
- Massage breasts and apply warm compresses prior to or during expression to improve milk flow.

Express milk at the times when a baby would normally feed (every 2-4 hours and at least 8 times during a 24 hour period).

Expressed milk

- Stored in a clean, covered container.
- Be in the coolest place possible for up to six hours.
- Discarded after six hours unless refrigerated. (can be used up to 24 hours if refrigerated)

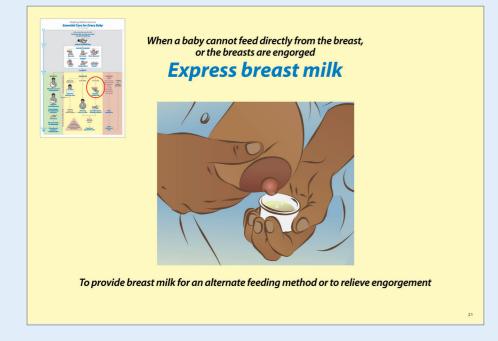
Invite discussion

- 1. How do you decide that a baby cannot feed directly from the breast?
- 2. What problems do mothers have with expressing and storing breast milk? How can you help?

Facilitate practice

Ask learners to practice with role play

- Following the sequence of steps to express breast milk
- Giving guidance to the mother while assisting her



Background

Mothers may express milk for babies who are unable to feed from the breast. Also, some mothers may express milk to relieve engorgement which helps the baby latch onto the nipple.

Milk should be expressed at the time intervals when a baby would normally feed (every 2-4 hours throughout the day and night). Breast milk may be produced in small amounts initially, but production typically increases after 2-3 days.

Mothers should have a comfortable place to express milk with privacy as needed. Mothers should clean their hands with soap and water and clean their breasts with water, but not soap. Rotating the compressions around the breast will help the breast to empty.

Collect breast milk in a clean container with a lid if it is to be stored. Keep in a cool place for up to six hours, or up to 24 hours if refrigerated. Use freshly expressed milk whenever possible.

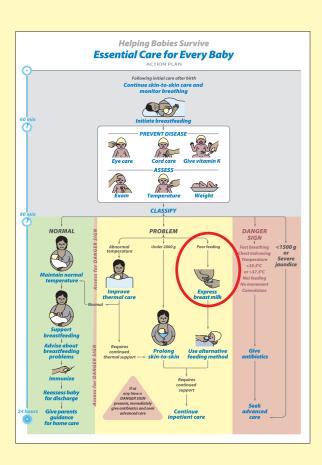
Educational advice

If possible, demonstrate breast milk expression with a mother who is breast-feeding. If available, a model of a breast may be used to show hand positioning and movement. Assemble examples of possible collection containers for breast milk that are available locally. Have learners select the most appropriate containers for storage and indicate how they would clean the container. Provide soap and water for the demonstration and practice.

Have learners role play in pairs, with one acting as the mother and the other as the provider. The learner who is taking the role of the provider should offer guidance to the mother while directing the technique.

Materials for practice:

- Breast model (if available)
- Collection container with lid
- Soap and clean water
- Cloth (warm compress)



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

Use an alternative method to feed breast milk

Explain and demonstrate

An alternate feeding method should be used for babies who are able to swallow but not able to feed adequately directly from the breast. These methods may also be used when a mother is too ill to breast feed.

When using an alternative method to feed breast milk

- Feed according to baby's cues every 2-4 hours, at least 8 feedings per day. The baby should be awake and alert.
- Determine the amount to be fed (based on weight and the day of life).
- Place a measured amount of milk in the cup (or spoon or paladai).
- Position the baby semi-upright.

- Rest the cup lightly on the baby's lower lip touching the outer, upper lip.
- Tip the cup so milk reaches the baby's lips.
- Allow the baby to take the milk. To avoid choking, do not pour milk into the mouth.
- Allow the baby to take small amounts frequently.
- Continue a feeding for up to 30 minutes.
 The baby is finished when the mouth closes, and the baby no longer appears interested.
- Burp the baby after feeding.

Invite discussion

- 1. What devices are used to feed babies when breastfeeding is not possible?
- 2. Who feeds the baby when breastfeeding is not possible?

Facilitate practice

Ask learners to practice with role play

- Selecting and cleaning appropriate containers for breast milk
- Determining and measuring the correct amount of milk for a feeding
- Practicing the technique for cup, spoon or paladai using a manikin, if possible
- Communicating the key points of alternative feeding to the mother



Background

Feeding mother's milk helps prevent infection and decreases mortality. Some small babies, sick babies, or those with an abnormality such as cleft lip and palate, may be able to swallow but cannot suck effectively, or they may suck effectively for a brief period but tire before an adequate volume has been taken. These babies may benefit from being fed expressed milk with a cup, spoon or paladai.

The baby is ready to feed when awake, looking around, with mouth open or licking. Allow the baby to lick the milk directly rather than pouring milk into the mouth, which may cause the baby to choke.

The amount a baby will take with each feeding will vary. Plan to start with 2-5 mL/kg per feeding and gradually increase the amount. Begin with a total intake of 40-60 mL/kg on the day of birth and increase 20-30 mL/kg/day per day until 150 mL/kg/ day is reached. Consider referral for advanced care (e.g. gavage feeding or intravenous fluids) if a baby is unable to swallow or cannot take the calculated daily amount.

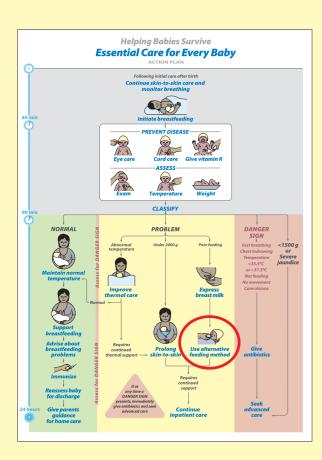
Educational advice

Demonstration and practice of alternative methods to feed breast milk can use a manikin or a baby whose mother has given her consent.

Water may be used to simulate breast milk when practicing with a manikin, but it should never be fed to a baby. Do not pour water into manikins not designed to demonstrate feeding.

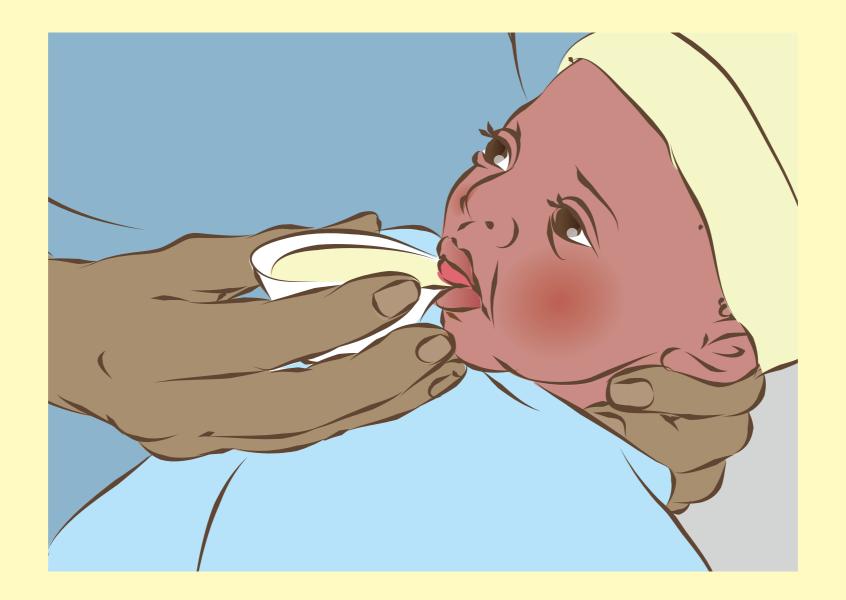
Materials for practice:

- Doll or manikin
- Cup, spoon or paladai
- Collection container with water
- Measuring container



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

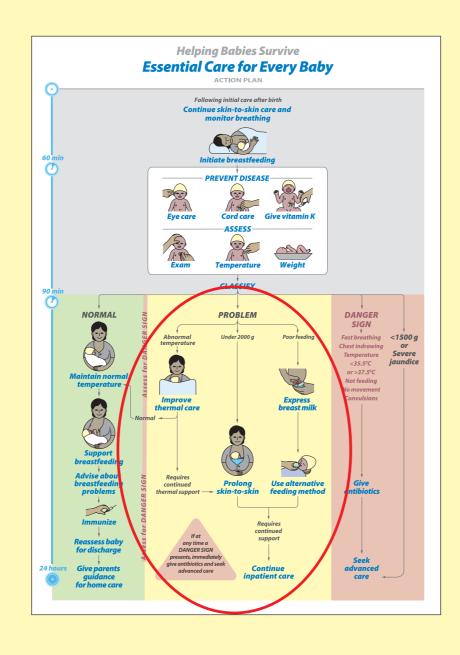
Exercise: Essential care for a baby with an abnormal temperature or feeding problem (pages 19-22)



Work in pairs. Demonstrate and describe care of a baby with a temperature or feeding problem. One person takes the role of the mother. The other person takes the role of the health worker who performs the actions (black text) and communicates with the mother (green text). Switch roles and repeat the exercise with a different case scenario.

Materials for practice:

- Manikin
- Diaper and head cover
- Support binder and maternal clothing for prolonged skin-to-skin care
- Soap, basin, cloth and water
- Collection container for breast milk
- Breast model
- Cup, spoon or paladai for feeding



Case scenario:

At 90 minutes of age, a baby with a birth weight of 1900 grams has a temperature of 35.8°C.
The baby can swallow but cannot attach to the breast.

Checklist

☐ 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.

Educational advice

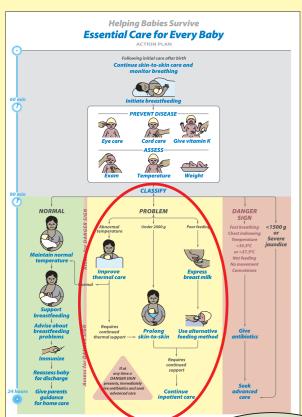
The purpose of this exercise is to assist the learner in understanding how to integrate essential care that is required for a baby who has a low/high temperature and who has feeding problems, as well as how to describe these action and give advice to the mother and other family members. Practice begins with the facilitator reading the case scenario.

Learners will work in pairs. One person will play the role of the provider who performs the actions (black) and communicates with the mother (green). The other will play the role of the mother. Switch roles after one learner successfully completes the exercise.

Many different scenarios can be created:

- a baby with low temperature or high temperature that returns to normal
- a baby with low temperature who requires skin-to-skin care
- a baby with low temperature and feeding problems
- a baby with feeding problems only

Once learners are familiar with the Danger Signs (page 24b), these findings can be introduced also.



Exercise:

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



Improve thermal care



Prolong skin-to-skin care



Express breast milk



Use an alternative method to feed breast milk

Assess for Danger Signs

Explain and demonstrate

A baby with a **Danger Sign** is at risk of death. If detected early, the life of the baby can often be saved.

Danger Signs are

- **Fast breathing:** breathing more than 60 breaths per minute
- **Chest indrawing:** spaces between, above or below the ribs indent with each breath
- Temperature too low or high: temperature < 35.5 °C or > 37.5 °C
- Not feeding: no suck, and/or swallow, or no interest in feeding
- **No movement:** no spontaneous movement or no movement when stimulated

 Convulsions: rhythmic movements of the limbs that do not stop with holding

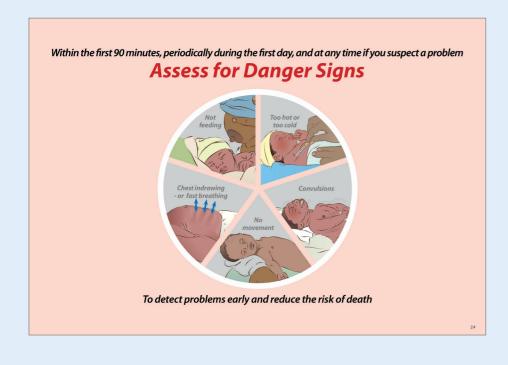
A baby with a **Danger Sign** needs urgent antibiotic treatment and advanced care.

Invite discussion

- 1. Who assesses a baby for Danger Signs in your facility?
- 2. When are babies assessed for Danger Signs where you work?
- 3. What are different words used by mothers and others in the community for describing Danger Signs?

Facilitate practice

Combine practice of this action with Give antibiotics (see next page).



Background

Danger Signs are caused by infection or other serious conditions and indicate that a baby is at risk of death. All babies should be assessed for **Danger Signs** in the first 90 minutes after birth and at frequent intervals thereafter. Any time a **Danger Sign** is detected, urgent action (antibiotic treatment and advanced care) is required.

Fast breathing and chest indrawing can be due to pneumonia or blood stream infection and are **Danger Signs**. Chest indrawing is when the spaces between, above or below the ribs indent with each breath. Fast breathing is a breathing rate more than 60 per minute. The breathing rate should be counted for one minute twice to determine if fast breathing is present. Babies with breathing problems may have a blue color of the skin or inside the mouth. These signs indicate that the baby is not getting enough oxygen.

Temperature that is too low (under 35.5°C) **or too high** (over 37.5°C) may be a sign of infection and is a Danger Sign. A temperature that is 35.5°C – 36.4°C and does not rise with re-warming (e.g., Improve thermal care, page 19b) is also a Danger Sign.

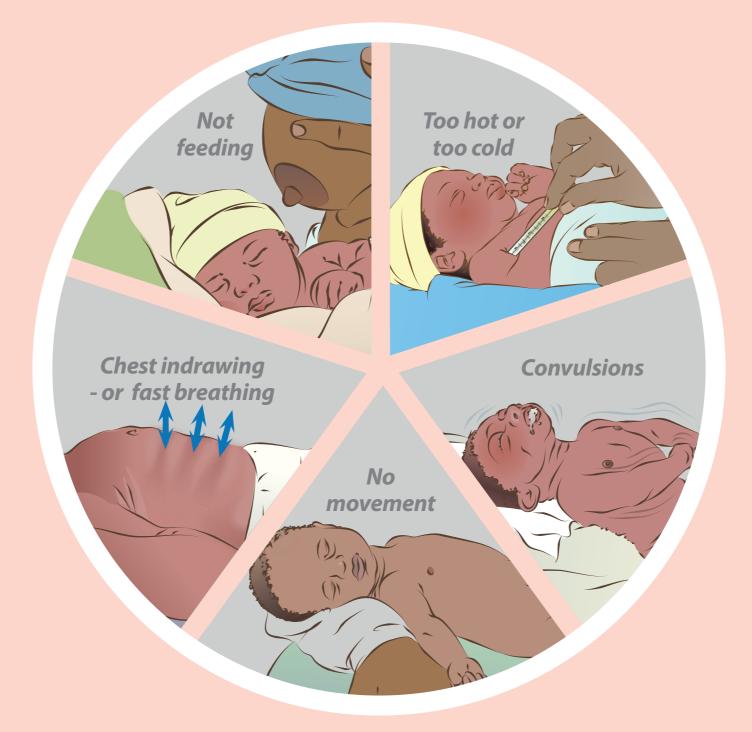
Not feeding may be a sign of infection, prematurity, or other serious problems and is a Danger Sign. Healthy babies usually feed every 2-4 hours and feed 8-12 times per day. A baby who is not feeding, feeds very poorly, or vomits large quantities of each feeding has a Danger Sign.

No **movement** or very little movement, even when stimulated, may be a sign of infection or other serious problems and is a Danger Sign.

Convulsions may result from infection or low blood sugar and is a Danger Sign. Convulsions are rhythmic, symmetrical movements of the limbs that cannot be stopped by holding the limb. Convulsions must be distinguished from the more common problem of jitteriness. Jitteriness does not involve rhythmic movement of all the limbs, and can be stopped by gently bending or holding a limb or initiating suckling. Unlike jitteriness, convulsions are sometimes accompanied by abnormal eye movements (staring; blinking; deviation). Jitteriness can be caused by an external stimulus, such as a loud noise or sudden movement, but convulsions are not.

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

Give antibiotics

Explain and demonstrate

A baby who has a **Danger Sign** is at risk of death from infection. You can prevent some deaths if you detect infections early and treat with antibiotics.

Give antibiotics

- Explain to the baby's parents the need for antibiotic treatment.
- Determine appropriate dosage.
- Give first dose of recommended antibiotics (see table at right for ampicillin and gentamicin; the technique for IM injection is on page 6b).
- Use a new needle and syringe for each antibiotic and dispose of needles safely.

- Record antibiotic administration in the baby's record.
- Plan who will give the next doses of antibiotics and when.

Any baby who receives antibiotics also needs advanced care.

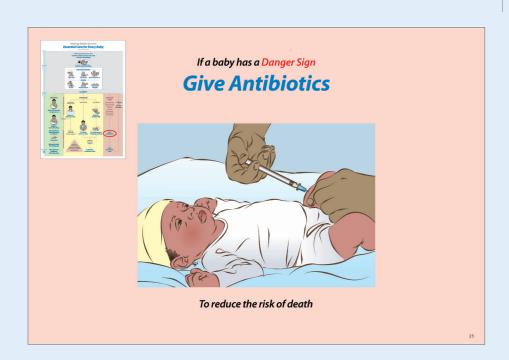
Invite discussion

- 1. Who can give antibiotics where you work?
- 2. What antibiotics are commonly given to babies? Why are these antibiotics chosen?

Facilitate practice

Ask the learners to practice with role play

- Describing the key points of the five pictures of Danger Signs
- · Counting a baby's breathing rate using a manikin
- Explaining to a baby's parents why the baby needs antibiotics and referral
- Choosing appropriate antibiotics and determining the dosage for babies with varying weights
- Withdrawing the correct volume of medication into a syringe
- Preparing the skin of the manikin or doll and indicating where the antibiotic should be given
- Documenting administration in a medication record (or on paper)



Background

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

The first doses of antibiotics should be given as soon as possible after the identification of a Danger Sign because early treatment may improve outcome. The dose will depend on the weight of the baby and the specific antibiotics that will be used. When resources are available, a blood culture should be obtained before antibiotics are given.

Educational advice

Have learners demonstrate assessment for Danger Signs.

Assemble antibiotics that are available locally and syringes that will be needed to administer the antibiotics. The following table can be used to calculate dosages of ampicillin and gentamicin according to the baby's weight., but only if these antibiotics and these concentrations are used locally. A similar table should be created for alternate antibiotics used locally. This table could be posted in the health facility.

For practice, use water to simulate preparation of the correct dose of each antibiotic. Have learners withdraw the appropriate amount of water for treatment of babies with varying weights, record drug administration in the patient's record.

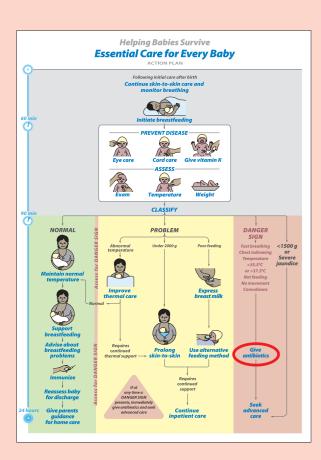
Gentamicin IN Dose: 5 mg per kg every 24 hours if term 4 mg per kg every 24 hours if pretern	Ampicillin IM Dose: 50 mg per kg every 12 hours	
20 mg per 2 ml vial - 10 mg/m	Add 2.5 ml sterile water to 500 mg vial - 200 mg/ml	Weight
0.5 m	0.35 ml	1.0 - 1.4 kg
0.7 m	0.5 ml	1.5 - 1.9 kg
0.9 m	0.6 ml	2.0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

Note

Specific drug doses should be calculated based on body weight and volume of administration determined by the drug concentration. The table above provides a guide of the amount to be given. The amount of drug in a vial may vary but is always indicated on the label. The instructions for reconstitution will therefore vary, as will the volume to be given to an individual baby. Providers who prepare and administer antibiotics must understand how to calculate the amount of water to add to the vial and the amount to be given to the baby. The table above is one example and only applies when the concentration of ampicillin and gentamicin is as indicated at the top of each column. A similar table should be constructed for locally used antibiotics.

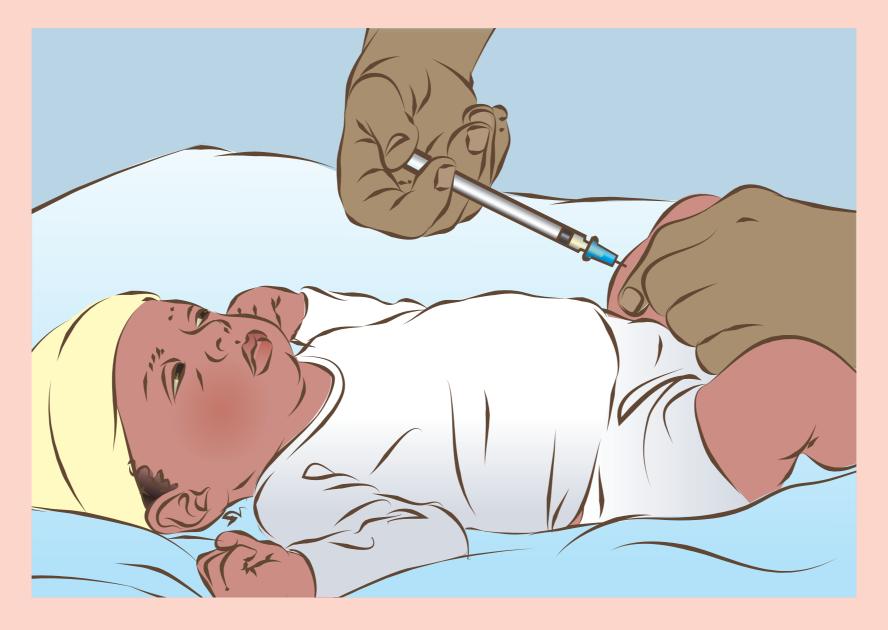
Materials for practice:

- Doll or manikin
- Syringes of appropriate sizes
- Vial or other container of water
- Pen and medication administration record (or paper).



If a baby has a Danger Sign

Give Antibiotics



To reduce the risk of death

Recognize severe jaundice

Explain and demonstrate

Severe jaundice is a serious problem which may cause brain damage or death.

Early recognition and treatment may prevent these outcomes.

Severe jaundice is present when

- The face is jaundiced (yellow) earlier than 24 hours after birth, or
- The palms or soles are jaundiced at any time

Detect jaundice by pressing one finger on the baby's forehead and observing if the skin is yellow when pressure is released.

Encourage breastfeeding or cup feed a baby with severe jaundice, and seek advanced care.

Invite discussion

- How do cultural beliefs affect the recognition and treatment of jaundice during the first week of life?
- 2. Does your facility provide phototherapy?
- 3. Where are babies with severe jaundice referred for treatment?

Facilitate practice

Ask learners to practice with role play

- Assessing a baby for severe jaundice on the first day of life
- Assessing the baby again for severe jaundice on day four
- Explaining to parents how and why to check for severe jaundice at home



Background

Jaundice is a yellow color of the skin caused by high levels of bilirubin in the blood. Bilirubin comes from the normal breakdown of red blood cells after birth. When levels are high, bilirubin can enter the brain and cause damage or death.

All babies have some jaundice. This usually appears during the first several days after birth and disappears over the next week. 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 and progresses down the body. **Jaundice is severe** if it appears on the face during the first day of life or extends to the palms and soles at any time.

Jaundice can be difficult to detect in dark-skinned babies. Pressing the baby's skin with the pressure of a finger may help detect jaundice in those babies.

Severe jaundice is life-threatening and requires urgent action. Immediately seek advanced care, which might include phototherapy or exchange transfusion.

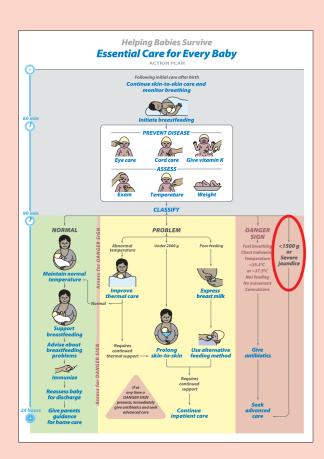
In all babies with jaundice, encourage breastfeeding every 2-3 hours. When breastfeeding is not possible, feed by cup or spoon. (See Alternative feeding, Page 22b)

Educational advice

Have learners demonstrate how to assess newborns for severe jaundice at different time points after birth. Discuss referral of babies with severe jaundice.

Materials for practice:

- Doll or manikin



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

Seek Advanced Care

Explain and demonstrate

A baby who has a Danger Sign, is <1500 g, has severe jaundice, or needs extra support for another problem is at risk of severe harm or death. These babies need advanced care.

- Advanced care means special monitoring and treatment.
- If advanced care is not available at your facility, then urgently transfer the baby to a facility that can provide advanced care.

Seek advanced care

- Explain to the baby's parents the need for advanced care and referral.
- Organize safe transfer and urgently refer the baby together with the mother.
- Send a referral note with the baby.
- Keep the baby warm with skin-to-skin care and encourage breastfeeding during transport.

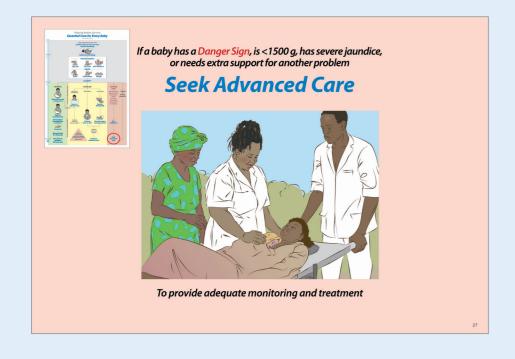
Invite discussion

- Can you provide advanced care in your facility? Will you transfer small and sick babies to a referral center?
- 2. Where will you refer babies? How do you transfer them safely and quickly?
- 3. Do you always provide a referral note? Do you call the receiving facility before transfer?

Facilitate practice

Ask learners to practice with role play

- Explaining to a baby's parents why referral is needed
- Communicating a plan for transfer with the facility that will provide advanced care
- Preparing a referral note



Background

A baby who has a Danger Sign, is <1500 g, has severe jaundice, or needs extra support for another problem needs **advanced care**. Advanced care may save the baby's life.

Advanced care may include special monitoring. Special monitoring means that the baby's health is watched very closely. Often this means frequently checking the baby's vital signs and activities, such as feeding. Close observation will enable life-saving interventions to be given if the baby's health deteriorates.

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, anticonvulsion 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.

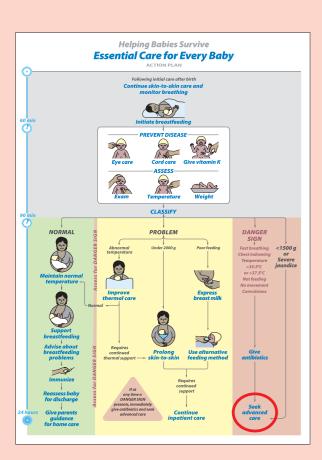
Before referring a baby for advanced care, the provider should contact the facility that will receive the baby. A referral note should be sent with the baby that contains the following information: name, problem for which the baby is being referred, obstetrical complications, time/date of birth, sex, birth weight, results of examinations, and treatments given.

Educational advice

Have learners demonstrate writing a referral note to accompany a baby who is transferred to a referral center for advanced care and role play explaining referral for advanced care to parents.

Materials for practice:

- Paper or referral form (a template of a referral form is found in the Provider Guide. Adapt as necessary for the local setting.)
- Pen



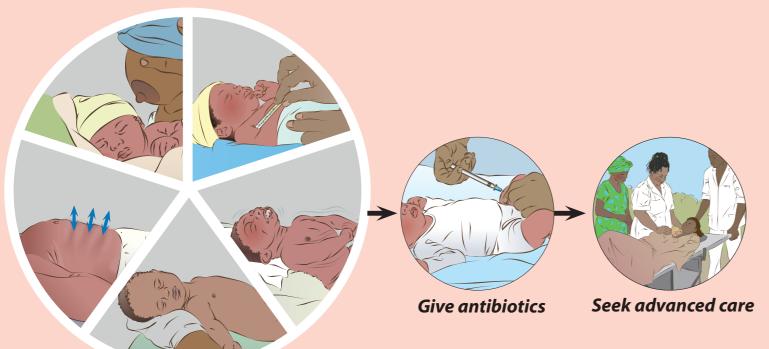
If a baby has a Danger Sign, is <1500 g, has severe jaundice, or needs extra support for another problem

Seek Advanced Care



To provide adequate monitoring and treatment

Exercise: Essential care for a baby with a Danger sign (pages 24-27)



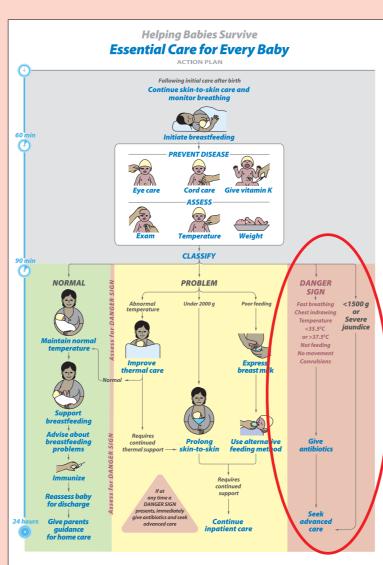
Identify a Danger Sign

Work in pairs. Demonstrate and describe care of a baby with a Danger Sign.

One person takes the role of the mother.
The other person takes the role of the health
worker who performs the actions (black text)
and communicates with the mother (green
text). Switch roles and repeat the exercise with
a different case scenario.

Materials for practice:

- Manikin
- Forms used for recording medical data and for referral



Case scenario:

Three hours following birth of a 2900 gram baby, the mother tells you that the baby does seem well.

Checklist

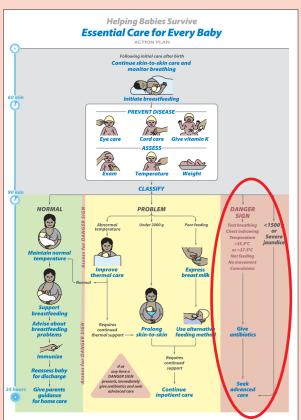
	Wash hands
	Reinforce why it is important to wash hands before touching the baby.
	Assess for Danger Signs:
(Chest indrawing or fast breathing
	Describe chest indrawing, fast breathing, and blue color of the skin.
\	Temperature too low or too high
	Define temperature that is too low ($<35.5^{\circ}$ C) or too high ($>37.5^{\circ}$ C).
1	Not feeding
	Ask about time between feeds, quality of feeding, vomiting.
1	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.

Educational advice

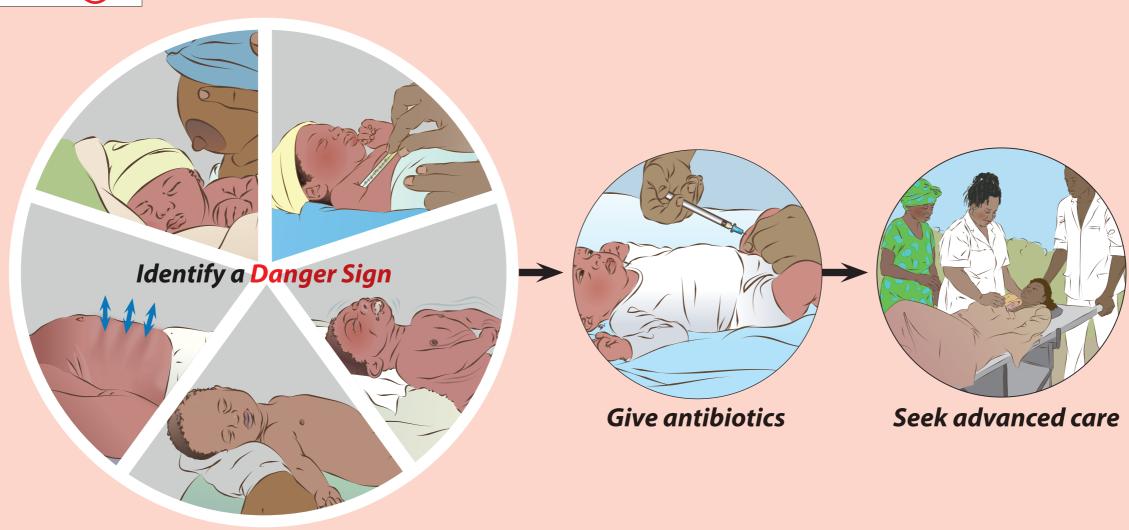
The purpose of this exercise is to assist the learner in understanding how to integrate essential care that is required for a baby with a Danger Sign, and describe explanations and advice given to the mother and other family members. Practice then with the facilitator reading the case scenario and providing the prompt where indicated by bold, black text.

Learners will work in pairs. One person will play the role of the provider who performs the actions (black) and communicates with the mother (green). The other will play the role of the mother. Switch roles after one learner successfully completes the exercise.

Danger Signs may be recognized at any time. Develop case scenarios that introduce Danger Signs during the assessment after birth, during routine care, or during the care of the baby with problems of abnormal temperature or poor feeding.



Exercise: Essential care for a baby with a Danger Sign



Explain use of the Provider Guide

Explain and demonstrate

After completion of a the *Essential Care for Every Baby* course, use the Provider Guide to maintain knowledge and skills and to improve your ability to provide essential care. Identify a partner, who has also completed the course.

In each activity in the Provider Guide

- Review the Background Knowledge section.
- Confirm your understanding of key knowledge by comparing your responses in the Review Key Knowledge section to the information provided in the Background Knowledge section.

- Practice key skills required to perform the action as outlined in the Practice Key Skills section.
- Discuss similarities and differences between how you performed this practice and how this element of care is performed in your facility.
- Consider improvements in equipment, supplies and protocols that might improve your ability to perform this element of essential care for all babies in your facility.

Complete and document each activity at the interval recommended in the table at the end of the Provider Guide (see page 60 in the Guide).

Invite discussion

- 1. Can you identify a partner for the activities outlined in the Provider Guide?
- 2. How can you arrange time to perform the activities in the Provider Guide?
- 3. What strategies exist in your facility for changing protocols and other routines of care?
- 4. With whom would you discuss improvements in the availability of resources for newborn care?

After completion of the course **Explain use of the Provider Guide**



To maintain knowledge and increase skill

Background

The Provider Guide will be used by some facilitators as preparation for the *Essential Care for Every Baby* course. When used in this manner, learners will be asked to read the Background Knowledge in each section, and to review this knowledge by completing the Review Key Knowledge sections.

The ability to provide essential newborn care requires knowledge and skill, and these will diminish over time if not refreshed and practiced. Practice and re-learning also increases this ability. After the completion of this course, the next step is to participate in activities that will help learners maintain and increase their ability to provide essential care by periodically reviewing knowledge and practicing key skills. These activities are outlined in the Provider Guide.

Most of the activities in the Provider Guide review one of the actions required for essential care, the actions that were learned in the course. In addition, there are four exercises that combine several actions. In the back, there is a table with a suggested

interval for completion of refresher training in which learners can document their training efforts.

The Provider Guide also includes a section on each page which encourages a discussion of how to improve the delivery of essential care.

Educational advice

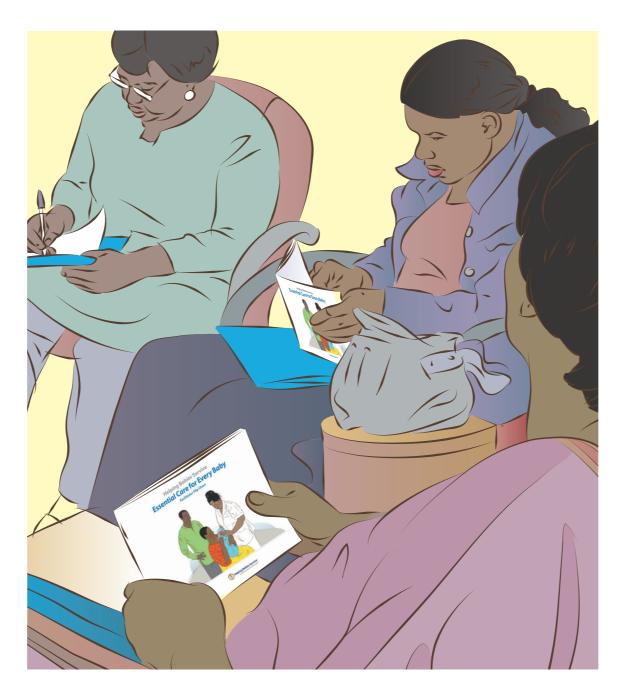
Distribute a Provider Guide to each learner if this was not done prior to the course.

Explain and demonstrate the organization of the Provider Guide.

Demonstrate use of the Provider Guide by discussing the completion of one exercise as an example.

After completion of the course

Explain use of the Provider Guide



To maintain knowledge and increase skills

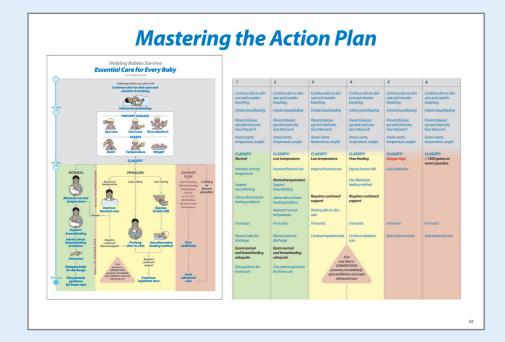
Mastering the Action Plan

Explain and demonstrate

The Action Plan serves as a framework for providing essential care.

- Some actions are required at *specific times* after birth.
 - Actions in the gray zone occur within 90 minutes after birth.
- Other actions occur in response to *observations* made by providers.
 - Actions are based on classifying a baby as normal (green zone), having a problem (yellow zone), or requiring advanced care (red zone).

Providing essential care requires a series of evaluation, decision, and action steps.



Facilitate Practice

The list to the right includes prompts for examples of case scenarios.

- Following the first portion of the prompt, the learner should classify the baby and describe the next action(s).
- The second portion of the prompt indicates the baby's response to the action(s). After this prompt, the learner should describe further actions.

Ask the learners to practice with role play

- Tracing the appropriate actions on the Action Plan for each case in the list on the right side of this page
- Describing cases from their own practice and tracing the care of these babies through the Action Plan

Educational advice

Prepare learners for practicing and evaluating what they have learned.

Give learners time to ask questions and discuss providing essential care in the facility in which they practice. Give them the opportunity to practice skills and work through case scenarios that are outlined in the table on the learner side of the Flip Chart. In addition to re-enforcing skills and knowledge learned during the course, this will help the learner prepare for the evaluations that are a component of this course, objective structured clinical evaluations (OSCEs), and knowledge check (multiple choice question examination). The six scenarios will be particularly helpful in preparing for the OSCEs.

Advise learners that the colors in the table correspond to areas on the Action Plan, and that phrases in blue font correspond to actions and phrases in black font correspond to observations or outcomes of an action. Cases are defined by these observations or outcomes. Learners can create new scenarios, for example ones that they recall from their practices, by changing these observations and outcomes.

Case Scenarios

Case

A baby born at 39 weeks gestation weighs 2900 grams. He has a temperature of 36.7 °C and a normal physical exam.

After essential care for a normal baby, the exam at 24 hours is normal and the infant is breastfeeding adequately.

Case #2

A baby born at 39 weeks gestation weighs 2900 grams. He has a temperature of 35.7 °C and a normal physical exam.

After improving thermal care, the temperature rises to 37.2 °C.

Case #3

A baby born at 36 weeks gestation weighs 2300 grams. He has a temperature of 35.7 °C and a normal physical exam.

After improving thermal care, the temperature rises to 36.9 °C, but falls to 36.2 °C when skin-to-skin care is stopped and the baby is wrapped.

Case #4

A baby born at 35 weeks gestation weighs 1900 grams. She has a temperature of 36.7 °C. The baby attempts to suck during breastfeeding but cannot attach properly.

After prolonged skin-to-skin care and alternate feeding method, the infant maintains a normal temperature and can feed effectively with a cup. However, the baby cannot attach to the breast well enough to breast feed.

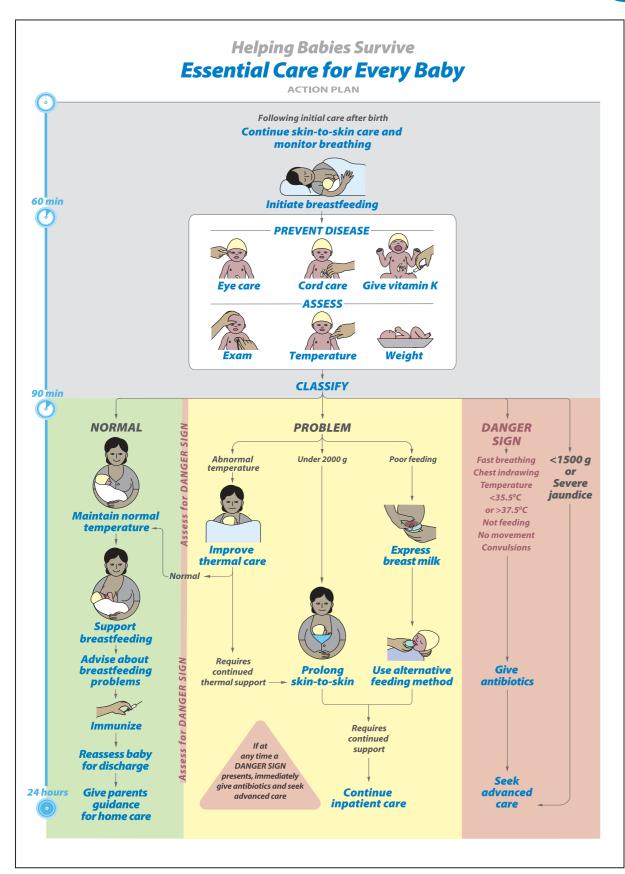
Case #5

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

Case #6

A baby born at 38 weeks gestation weighs 2900 grams. When the skin on his forehead and upper chest is blanched, it is yellow (jaundiced).

Mastering the Action Plan



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	Initiate breastfeeding	Initiate breastfeeding	Initiate breastfeeding	Initiate breastfeeding	Initiate breastfeeding	
Prevent disease: eye and cord care, Give Vitamin K	Prevent disease: eye and cord care, Give Vitamin K	Prevent disease: eye and cord care, Give Vitamin K	Prevent disease: eye and cord care, Give Vitamin K	Prevent disease: eye and cord care, Give Vitamin K	Prevent disease: eye and cord care, Give Vitamin K	
Assess: exam, temperature, weight	Assess: exam, temperature, weight	Assess: exam, temperature, weight	Assess: exam, temperature, weight	Assess: exam, temperature, weight	Assess: exam, temperature, weight	
CLASSIFY: Normal	CLASSIFY: Low temperature	CLASSIFY: Low temperature	CLASSIFY: Poor feeding	CLASSIFY: Danger Sign	CLASSIFY: < 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	If at any time a				
Give guidance for home care	Give parents guidance for home care	DANGER SIGN presents, immediately give antibiotics and seek advanced care				

Knowledge check

Select the best answer to each question or statement.

Circle the letter of the correct answer.

- How long should initial skin-to-skin care be provided by healthy mothers of well babies?
 - a. At least one hour
 - b. As long as it is convenient for the mother
 - c. Only until the baby's temperature is normal
 - d. At least 24 hours
- 2. During the first hour after birth, how often should babies be observed for breathing problems?
 - a. Once during the hour
 - b. Every 30 minutes
 - c. Every 15 minutes
 - d. Every 5 minutes
- 3. Why is it important to begin breastfeeding within the first hour after birth?
 - a. It helps babies breastfeed more successfully
 - b. It keeps the baby from crying
 - c. It keeps babies alert soon after birth
 - d. It helps babies breathe more easily
- 4. When should a baby be given liquids other than breast milk?
 - a. When the baby does not feed at the breast within the first hour after birth
- b. When the mother has engorged breasts
- c. When the baby cries between feedings
- d. Never
- 5. What is an early sign that a baby is ready to breast feed?
 - a. Crying for a long period of time
 - b. Opening the mouth and licking
 - c. Eyes closed and hands open
 - d. Breathing rapidly with the mouth open
- 6. How fast should a normal baby breathe?
 - a. At least 65 times per minute
 - b. At any rate as long as there is no chest in-drawing
 - c. 40-60 times per minute
 - d. 25 times per minute
- 7. What is the most important reason for weighing all babies soon after birth?
 - a. Birth weight may identify babies who need special care
 - b. Mother and family members often want to know the birth weight
 - c. Birth weight will determine how long a baby will breast feed at each feeding
 - d. Birth weight will identify babies who need vitamin K

- 8. In what part of the eye should medicine to prevent eye infections be given?
 - a. Inside the upper eyelid
 - b. Inside the lower eyelid
 - c. In the corner of the eye only
 - d. On the outside of the eyelid
- 9. What is the normal temperature range for a healthy baby?
 - a. 36.5°C 37.5°C
 - b. 34.0°C 35.5°C
 - c. 35.5°C 36.5°C
 - d. 37.5°C 38.5°C
- 10. Which babies should be given vitamin K after birth?
 - a. Only babies with bleeding
 - b. Only babies with birth weight >2500 grams
 - c. All babies
 - d. Only sick babies
- 11. How should a baby be kept warm after skin-to-skin care?
 - a. Bathing in warm water
 - b. Wrapping in a clean, dry blanket or cloth
 - c. Placing near warm stones
 - d. Exposing to sunshine
- 12. How soon after birth can a healthy baby be bathed?
 - a. As soon as the baby has a normal temperature
 - b. As soon as normal breathing has been established
 - c. At least six hours following birth
 - d. Immediately after the first breastfeeding
- 13. What is a sign of good attachment at the breast?
 - a. The baby's nose is pressed against the breast.
 - b. The baby bites down and pulls on the nipple.
 - c. Only the tip of breast is in the baby's mouth.
 - d. The baby's mouth is wide open on the breast.
- 14. What should mothers do if they have breast engorgement?
 - a. Feed more often or express milk
 - b. Stop breastfeeding for one day
- c. Take antibiotics
- d. Apply herbs to the breasts
- 15. At 90 minutes after birth, a 2700 gram baby is skin-to-skin with the mother and has a temperature of 36.0 °C. What should you do next?
 - a. Give antibiotics and seek advanced care.
 - b. This temperature is normal and no special care is needed.
 - c. Make the room warm and free of drafts and replace any wet clothing.
 - d. Place warm stones next to the baby.

16. Babies with what problem might benefit from cup feeding?

- a. Vomiting with every feeding
- b. Unable to awaken for feedings
- c. Able to swallow but unable to suck effectively
- d. Unable to swallow

17. When cup feeding a baby, what is the correct action?

- a. Allow the baby to lick the milk from the cup
- b. Pour small quantities of milk into the baby's mouth
- c. Place the baby flat on his back
- d. Drip a continuous stream of milk into the mouth

18. Which of the following would describe convulsions?

- a. Occur only in the legs
- b. Cannot be stopped by holding arms and legs
- c. Occur in response to a loud noise
- d. Occur only when the baby is awake

19. When should a baby be treated with antibiotics?

- a. If birth weight is less than 2000 grams
- b. When a Danger Sign is present
- c. If the baby cries often
- d. If the baby appears to be in pain

20. When should the first dose of an antibiotic be given?

- a. After transfer for advanced care
- b. As soon as possible after a Danger Sign has been identified
- c. After all family members have been contacted
- d. At a time that is convenient for the health care provider $% \left(x\right) =\left(x\right) +\left(x\right)$

21. After the first day following birth, jaundice is severe when it appears on what body area?

- a. Back and abdomen
- b. White part of the eye
- c. Legs and arms
- d. Palms and soles

22. How often should a mother express milk for a baby who cannot feed at the breast?

- a. As often as the baby would normally feed (8-12 times per 24 hours)
- b. 3 times during the daytime only
- c. Once in the morning and once before bedtime
- d. 4 times per 24 hours

23. A 3000 gram baby is unable to suck or swallow during the first 6 hours after birth. How would you classify this baby and what should you do?

- a. The baby is normal, and breastfeeding should be encouraged
- b. The baby has a Danger Sign, and you should seek advanced care
- c. The baby has a feeding problem, and should be cup fed.
- d. The baby will probably die, and no further care should be provided

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

- a. Crying within one hour after each feeding
- b. Vigorous sucking that causes nipple pain with each feeding
- c. Remains awake and active after each feeding
- d. Feeding 8 to 10 times per day

25. You have determined that a baby with a birthweight of 1800 grams needs antibiotics. How much ampicillin (200 mg/mL) should you give?

- a. 0.6 mL
- b. 0.5 mL
- c. 1.0 mL d. 0.35 mL

	Ampicillin IM Dose: 50 mg per kg every 12 hours Add 2.5 ml sterile water	Gentamicin IM Dose: 5 mg per kg every 24 hours if term; 4 mg per kg every 24 hours if preterm
Weight	to 500 mg vial - 200 mg/ml	20 mg per 2 ml vial - 10 mg/ml
1.0 - 1.4 kg	0.35 ml	0.5 ml
1.5 - 1.9 kg	0.5 ml	0.7 ml
2.0 - 2.4 kg	0.6 ml	0.9 ml
2.5 - 2.9 kg	0.75 ml	1.35 ml
3.0 - 3.4 kg	0.85 ml	1.6 ml
3.5 - 3.9 kg	1 ml	1.86 ml
4.0 - 4.4 kg	1.1 ml	2.1 ml

Advice for course facilitators

1. Assembling and organizing the teaching materials

Make sure you have all the educational materials, equipment, and supplies.

Make sure you have all of the educational materials, equipment and supplies. Learners will be organized in groups of six. Each group will use a Facilitator Flip Chart. Each learner will need a recording sheet for the Knowledge Check (multiple choice question exam) and Objective Structured Clinical Evaluations (OSCEs). All materials and supplies for the Facilitate practice exercises should be assembled in advance.

2. Prepare yourself

Review the Facilitator side of each Flip Chart page. Each page is divided into five sections:

- Background a brief summary of the reason why the action is an important element of essential care and other details about the action
- Educational advice advice that will assist you in creating the ideal learning experience [Note: decide in advance what aspects of the action will be explained and which will be demonstrated.]
- Explain and demonstrate key points that you will be expected to present to the learner
- Invite discussion suggested questions that will provoke discussion among the learners about the unique factors related to the action in the context of local care
- Facilitate practice guidance about how learners should practice skills required to perform each action [Note: practice of selected pairs of actions have been combined]

Familiarize yourself with other pages of the Flip Chart:

- Exercises includes four exercises that combine a series of actions to help the learner understand how to integrate these actions in the continuum of care
- Explain use of the Provider Guide guides your preparation of the learner to maintain and increase competence after completion of the course
- Mastering the Action Plan provides a template for practicing skills in the context of the Action Plan
- Knowledge check and OSCEs evaluates learners by testing cognitive knowledge and skills

Familiarize yourself with treatments that are standards of care in your facility that differ from treatments recommended in this program:

- · These treatments might include:
- Eye care
- Cord care
- Immunizations and Vitamin K
- Antibiotic usage
- The decision to teach a treatment that differs from one recommended in this program should be agreed upon in advance with the course director in consultation with the health authority.
- To facilitate learning, supplemental teaching material relevant to these treatments may need to be provided.
- Facilitators are urged to prepare a table of dosages for locally-used antibiotics (see page 25b).

3. Prepare the learners (optional)

For some courses, the learners will be given the Provider Guide in advance of the course and will be asked to review the Background material in each section.

4. Prepare the space for learning

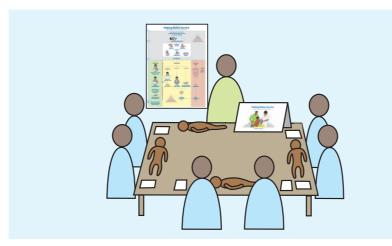
Arrange the classroom space so that all learners can view a poster-sized Action Plan. Each group of six should be able to view the learner side of the Flip Chart. Learners will work in pairs with a neonatal manikin or doll and a set of equipment and supplies. For each group of six learners, one facilitator will assist practice. Group discussions may include the entire group of learners.

5. Engage the learners

Most classroom time should be spent on practice and group discussion.

Encourage learners to participate actively. As a facilitator, you can help draw out the important lessons from your experiences, but encourage others to do the same.

Help learners practice correct technique. Provide feedback first, and then offer suggestions for improvement. Be respectful and positive when correcting mistakes.



6. Evaluate knowledge and skill

Describe to learners how they will be evaluated.

Two tools will be used:

- · Multiple choice question examination
- · Objective Structured Clinical Evaluations (OSCEs)

Knowledge check

At the end of the course, ask each learner to complete the 25-question written examination. If a learner has difficulty reading, you can read the questions aloud and mark the learners' responses. Every learner should successfully complete the multiple choice questions exam by correctly answering at least 21 out of 25 questions.

OSCEs A and B

The OSCEs should be administered individually. Once the learner starts the case, do not interrupt the learner. Provide only the information that the learner requests. This information can be provided through a simulator (e.g. respiratory rate if possible) or verbally by prompts. Every learner should successfully complete (indicated by "done") 16 of 20 actions in OSCE A and 10 of 13 actions in OSCE B. The facilitator will have to make a decision about which elements (unless specified) of each action will be used to determine successful completion of the action.

Master equipment list for flip chart

Basic course materials

- Action Plan visible by each participant
- Flip Chart visible by each participant
- Provider Guide copy for each participant
- Parent Guide copy for each participant
- Pen for each participant
- Newborn simulator/manikin for each pair of participants
- · Alcohol-based hand rub or soap/water for handwashing

First 90 minutes

- · Clean, dry drape or cloth to cover mother and baby
- Head covering for infant

- Ointment or drops for eye care (and cloth for clean-up)
- Clean water and clean cloth for cord care
- Umbilical cord tie
- Syringe and alcohol wipes
- Vial of vitamin K or water to simulate
- Recording form for physical exam (on admission and before discharge)
- Thermometer (type used locally)
- Hot and cold water (to demonstrate high and low temperatures)
- · Cleaning solution for thermometer
- Baby clothing, diaper, and blanket
- Infant scale
- Cloth to cover scale
- · Cleaning solution for scale
- Recording form for birth weight, temperature and exam

Green zone

- Breast model (optional)
- Syringe for immunizations
- · Water to simulate vaccines
- · Alcohol to cleanse skin
- · Recording form for and immunizations

Yellow zone

- · Wet and dry baby clothing
- Woman's shirt (with opening in front)
- Blanket
- Support binder for skin-to-skin care
- · Diaper and head covering for infant
- · Soap and clean water to wash mother's hands
- Cloth (to wash breasts or use as warm compress)
- Cup, spoon, or paladai
- Collection container (with water to simulate breast milk)
- Measuring container

Red zone

- Vials of antibiotics (may be discarded vials)
- Vial of sterile water (may refill with clean water)
- Syringes for antibiotic administration
- Alcohol to cleanse skin
- Calculator
- Medication administration record
- Referral form

Knowledge check – Answer key

1-a, 2-c, 3-a, 4-d, 5-b, 6-c, 7-a, 8-b, 9-a, 10-c, 11-b, 12-c, 13-d, 14-a, 15-c, 16-c, 17-a, 18-b. 19-b. 20-b. 21-d. 22-a. 23-b. 24-d. 25-b

OSCE A

Instructions to facilitator

Read aloud to the learner the following instructions and the case. Provide prompts where shown in italics (following the word "Prompt"). As you observe the learner, tick the boxes Done or Not Done. Indicate the baby's response to the learner's actions either with the doll or manikin or verbally.

"I am going to read a role play case. Please listen carefully, and then show me or tell me what you would do to take care of this baby. I will indicate the baby's response with the manikin, or I will answer any questions about the baby's condition. I will not volunteer information unless you ask. I will provide no other feedback until the end of the case."

"You have a maximum of 15 minutes to demonstrate the care of this baby."

"A 22-year-old mother has given birth to her first baby. The placenta has been delivered and mother is well. The baby cried at birth and is now 10 minutes old and wide awake. Show me what you would do to care for this baby over the next two hours.

Washes hands		Not Done
wasnes nanus	Ш	Ш
Continues skin-to-skin care	🗆	
Monitors breathing		
Recognizes baby is breathing well	🗆	
Prompt: Show or say baby is breathing well.		
Initiates breastfeeding	🗆	
Prompt: Baby has nursed well for 15 minutes. What would you do now?		
Provides eye care	🗆	
Provides cord care	🗆	
Examines baby		
Breathing	🔲	
Movements and tone	📙	
Skin color		
Cord appearance	Ш	
Prompt: Provide the following information if asked by the learner.		
Baby is breathing normally and is pink, the limbs are flexed, and there is no bleeding from the co	ord	
Measures temperature		
Places thermometer in the armpit	🗆	
Reads and records temperature accurately	🗆	
Prompt: Temperature is 37°C		
Weighs baby		
Cleans scale, puts baby on scale		
Measures and records weight accurately	🔲	
Prompt: Weight is 2900 grams		
Gives vitamin K	_	_
Draws into syringe the correct amount of vitamin K		
Indicates correct location for injection	Ш	
Classify baby for further care		
Recognizes baby is normal	Ш	
Prompt: If the learner has not said that the baby is normal, ask: how would you classify		
this baby? Then say: now demonstrate and discuss how you would support breastfeeding.		
Supports breastfeeding		
Assists with positioning of mother and baby		\sqcup
Describes good attachment		
Discuss successful feeding with mother	Ш	

SCORING:

Successful completion requires a total score of 16 correct of 20 "Done".

Incompletely done items should be marked as not done.

Examining, taking temperature, weighing baby, providing eye and cord care, and giving vitamin K can be done in any order.

OSCE B

Instructions to facilitator

Read aloud to the learner the following instructions and the case. Provide prompts where shown in italics (following the word "Prompt"). As you observe the learner, tick the boxes Done or Not Done. Indicate the baby's response to the learner's actions either with the manikin or verbally.

"I am going to read a role play case. Please listen carefully, and then show me or tell me what you would do to take care of this baby. I will indicate the baby's response with the manikin, or I will answer any questions about the baby's condition. I will not volunteer information unless you ask. I will provide no other feedback until the end of the case".

"You have a maximum of 10 minutes to demonstrate your care for this baby."

"A baby was born 60 minutes ago. She weighs 1700 grams. Eye and cord care have been provided, and vitamin K has been given. No other care has been initiated. She was kept skin-to-skin but was not able to breast feed. You just finished washing your hands".

	Done	Not Done
Examines baby		
Breathing		
Movements and tone		
Skin color		
Cord appearance		
Prompt: Provide the following information if asked by the learner. Baby's breathing is fa	ıst	
and labored. Color is pink. She is moving very little. Muscle tone is poor. The cord is not b	leeding.	
Measures temperature		
Places thermometer in the armpit		
Prompt: Temperature is 35°C		
Recognizes hypothermia		
Improves thermal care		
(Checks for wet clothing and wraps, raises room temperature, adds a layer of clothing/blank	æt	
and hat, improves skin-to-skin care; must indicate 3 of 4 for successful completion of this action	n.)	
Classifies baby for further care		
Recognizes baby has Danger Sign		
Gives antibiotics		
Calculates correct dose		
Draws up correct dose		
Plans for referral for advanced care		님
Indicates the need for a referral note	Ш	
Communicates with the mother/ family		
Communicates the need for transfer with family		
•		

SCORING:

Successful completion requires a total score of 10 correct of 13 "Done". Incompletely done items should be marked as not done.

Acknowledgements

Helping Babies Survive Essential Care for Every Baby

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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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