Helping Babies Survive

Essential Care for Every Baby

**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 at home.

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.

**Learning Objectives**

- 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.

**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 Facilitator 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 three steps to support learning:

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

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.)

**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.

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 Facilitator 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 three steps to support learning:

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

Facilitators should:**EXPLAIN** the key points for understanding and **DEMONSTRATE** 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
After immediate care at birth

**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 breaths/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).**

**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.

**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.

**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).
After immediate care at birth

Continue skin-to-skin care and monitor breathing

To keep babies warm and identify problems early
Within one hour after birth

**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.

**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?

**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.

**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

**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.

Materials for 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**
Within one hour after birth

Initiate breastfeeding

To increase the success of breastfeeding
Within 90 minutes after birth

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

*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.

Materials for practice:
- Ointment or drops
- Doll or manikin
- Cloth for clean-up
Within 90 minutes after birth

Provide eye care

To help prevent serious eye infections
**Within 90 minutes after birth**

**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.

**Materials for practice:**
- Doll or manikin with umbilical cord
- Clean water
- Clean cloth
- Umbilical cord tie
Within 90 minutes after birth

Provide cord care

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

**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

**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.

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

**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 <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.
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

Within 90 minutes after birth

**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 breaths/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

**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 if 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.

**Materials for practice:**
- 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
Within 90 minutes after birth

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 or 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

**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
- 36.0°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

**Equipment for practice:**
- Doll or manikin
- Thermometer (type used locally)
- Form to record temperature
- Pen
- 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
**Within 90 minutes after birth**

**Weigh the baby**

Within 90 minutes after birth, weigh the baby.

**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.

**Materials for practice:**
- 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

**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
Within 90 minutes after birth

Weigh the baby

To help identify babies at higher risk
By 90 minutes after birth

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.

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

Materials for practice:
Paper and pencil

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)

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.

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

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.
By 90 minutes after birth

Classify the baby

To determine further care
**Exercise: Essential care during the first 90 minutes (pages 2-10)**

- **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.
- **Provide treatments to prevent disease and assess the baby**
  - Steps can be done in any order between 60-90 minutes
  - **Examine the baby**
    - Breathing, skin color, movements, activity, cord appearance, other physical features
  - **Measure temperature**
    - Tell mother if temperature is normal, low, or high.
  - **Weigh the baby**
    - Tell mother the baby’s weight.
  - **Provide eye care**
    - Explain that eye care prevents infections.
  - **Provide cord care**
    - Explain that cord care prevents infections.
  - **Give vitamin K**
    - Explain that vitamin K prevents serious bleeding.
  - **Classify the baby as being Normal, having a Problem, or showing a Danger Sign**

**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.

Provide treatment to prevent disease and assess the baby
(steps can be done in any order between 60-90 minutes)
- Examine the baby
  - Breathing, skin color, movements, activity, cord appearance, other physical features
  - Describe the findings to the mother.
- Measure temperature
  - Tell mother if temperature is normal, low, or high.
- Weigh the baby
  - Tell mother the baby’s weight.
- Provide eye care
  - Explain that eye care prevents infections.
- Provide cord care
  - Explain that cord care prevents infections.
- Give vitamin K
  - Explain that vitamin K prevents serious bleeding.
- Classify the baby as being Normal, having a Problem, or showing a Danger Sign

**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

**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 preventative 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
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.

Materials for practice:
- 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 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 adequately 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

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.

Materials for practice:

- 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
Before discharge

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

**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.

Materials for practice:
- Doll or manikin
- Head cover and blanket
- Breast model (optional)

**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.

**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
Before discharge

Advise about breastfeeding problems

Engorgement
Cracked nipples
Mastitis

To improve the success of breastfeeding
**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** (tuberculosis vaccine) – 0.05 mL intradermal in the arm
- **Oral polio** – 2 drops on the tongue

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.

Materials for practice:
- Doll or manikin (to show injection site only)
- Alcohol and swabs
- A container with a lid to dispose of syringes, needles
- Recording form and pen or pencil

**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
Within one day after birth

**Begin immunizations**

To help prevent serious childhood illnesses
When considering discharge
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
When 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.

Key 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.

Materials for practice:
- Doll or manikin
- Parent Guide or other appropriate document
- Pen

Parents should 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.

Key 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.

Materials for practice:
- Doll or manikin
- Parent Guide or other appropriate document
- Pen

Parents should 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.

Key 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.

Materials for practice:
- Doll or manikin
- Parent Guide or other appropriate document
- Pen

Parents should 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.

Key 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.
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)

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.

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.

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.

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

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

- Maintain temperature
- Support breastfeeding
- Advise about breastfeeding problems
- Begin immunizations
- Reassess and give parents guidance for home care
If the baby has an abnormal temperature

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

**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**

1. 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 baby cannot maintain normal temperature when wrapped or weighs less than 2000 grams

**Prolong skin-to-skin care**

To keep the baby warm
Express breast milk

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

**Express breast milk**

- 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)

**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.
- Compress the breast between the thumb and finger, Avoid sliding the thumb and finger on the skin of the breast.

**Materials for practice:**

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

**Educational advice**

If possible, demonstrate breast milk expression with a mother who is breastfeeding. 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 assisting her.

**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.
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

** facilite 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

**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

**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.

**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?

**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.
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)

- Improve thermal care
- Prolong skin-to-skin care
- Express breast milk
- Use an alternative method to feed breast milk

**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 actions 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 text) and communicates with the mother (green text). 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.

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

**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
If a baby has a Danger Sign

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.

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.

Materials for practice:
• Doll or manikin
• Syringes of appropriate sizes
• Vial or other container of water
• Pen and medication administration record (or paper).

Educational advice
Have learners demonstrate assessment for Danger Signs.

Ampicillin IM
Dose: 50 mg/kg every 12 hours
Add 2.5 ml sterile water to 500 mg vial - 200 mg/ml

Gentamicin IM
Dose: 5 mg/kg every 24 hours if term;
4 mg/kg every 24 hours if preterm

<table>
<thead>
<tr>
<th>Weight</th>
<th>Ampicillin IM</th>
<th>Gentamicin IM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 - 1.4 kg</td>
<td>0.35 ml</td>
<td>0.5 ml</td>
</tr>
<tr>
<td>1.5 - 1.9 kg</td>
<td>0.5 ml</td>
<td>0.7 ml</td>
</tr>
<tr>
<td>2.0 - 2.4 kg</td>
<td>0.6 ml</td>
<td>0.9 ml</td>
</tr>
<tr>
<td>2.5 - 2.9 kg</td>
<td>0.75 ml</td>
<td>1.35 ml</td>
</tr>
<tr>
<td>3.0 - 3.4 kg</td>
<td>0.85 ml</td>
<td>1.6 ml</td>
</tr>
<tr>
<td>3.5 - 3.9 kg</td>
<td>1 ml</td>
<td>1.86 ml</td>
</tr>
<tr>
<td>4.0 - 4.4 kg</td>
<td>1.1 ml</td>
<td>2.1 ml</td>
</tr>
</tbody>
</table>

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.
If a baby has a Danger Sign

Give Antibiotics

To reduce the risk of death
If the face is yellow on the first day, or the palms and soles at any time

**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**

1. 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
If a baby has a Danger Sign, is <1500 g, has severe jaundice, or needs extra support for another problem

Seek Advanced Care

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.

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

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, anti-convulsion 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*
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°C) or too high (>37.5°C).
  ✓ Not feeding
    Ask about time between feeds, quality of feeding, vomiting.
  ✓ No movement
    Describe floppiness or lethargy when stimulated.
  ✓ Convulsions
    Describe rhythmic movements of the limbs.

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

☐ Give antibiotics
  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

Identify a Danger Sign

Give antibiotics

Seek advanced care
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?

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
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

Case Scenarios

Case #1
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

Helping Babies Survive
Essential Care for Every Baby

ACTION PLAN

1. Continue skin-to-skin care and monitor breathing
2. Initiate breastfeeding
3. Prevent disease: eye and cord care, Give Vitamin K
4. Assess: exam, temperature, weight
5. CLASSIFY: Normal
6. Prevent disease: eye and cord care, Give Vitamin K
7. Assess: exam, temperature, weight
8. CLASSIFY: Low temperature
9. Maintain normal temperature
10. Support breastfeeding
11. Advise about breastfeeding problems
12. CLASSIFY: Low temperature
13. Improve thermal care
14. Support breastfeeding
15. Advise about breastfeeding problems
16. CLASSIFY: Poor feeding
17. Immunize
18. Reasses baby for discharge
19. Exam normal and breastfeeding adequate
20. Give guidance for home care
21. CLASSIFY: Danger Sign
22. Immunize
23. Reasses baby for discharge
24. Exam normal and breastfeeding adequate
25. Give parents guidance for home care
26. CLASSIFY: < 1500 grams or severe jaundice
27. Immunize
28. Requires continued support
29. Prolong skin-to-skin care
30. Continue inpatient care
31. Give antibiotics
32. Requires continued support
33. Express breast milk
34. Use alternative feeding method
35. Reasses baby for discharge
36. Continue inpatient care
37. Immunize
38. Immunize
39. Continue inpatient care
40. Seek advanced care
41. Immunize
42. Immunize
43. Immunize
44. Immunize
45. Seek advanced care
46. Seek advanced care

If at any time a 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.

1. 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 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. Once during the hour
   b. As long as it is convenient for the mother
   c. When the mother has engorged breasts
   d. At least one hour

5. What is an early sign that a baby is ready to breastfeed?
   a. Never
   b. When the baby cries between feedings
   c. When the mother has engorged breasts
   d. When the baby does not feed at the breast within the first hour after birth

6. Why is it important to begin breastfeeding within the first hour after birth?
   a. The baby's mouth is wide open on the breast.
   b. The baby's mouth is tightly closed.
   c. The baby has a feeding problem, and should be cup fed.
   d. The baby's mouth is wide open on the breast.

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. Birth weight may identify babies who need vitamin K
   c. Birth weight may identify babies who need special care
   d. Birth weight may identify babies who need special care

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. On the outside of the eyelid
   d. In the corner of the eye only

9. What is the normal temperature range for a healthy baby?
   a. 39.5°C - 39.7°C
   b. 35.0°C - 35.5°C
   c. 35.5°C - 36.0°C
   d. 37.5°C - 38.0°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. Exposing to sunshine
    d. Placing near warm stones

12. How soon after birth can a healthy baby be bathed?
    a. As soon as normal breathing has been established
    b. Immediately after the first breastfeeding
    c. At least six hours following birth
    d. As soon as possible after a Danger Sign has been identified

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. The tip of the breast is in the baby's mouth.
    d. The baby's body 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. If the baby cries often
    c. If the baby appears to be in pain
    d. If the baby's mouth is wide open on the breast

20. When should the first dose of an antibiotic be given?
    a. As soon as possible after a Danger Sign is present
    b. After transfer for advanced care
    c. After all family members have been contacted
    d. At a time that is convenient for the health care provider

21. After the first day following birth, jaundice is severe when it appears on what body area?
    a. Back and abdomen
    b. Eyes closed and hands open
    c. Inside the upper eyelid
    d. On the outside of the eyelid

22. How often should a mother express milk for a baby who cannot breast 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. Drip a continuous stream of milk into the mouth
    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 if preterm,
   5 mg per kg every 24 hours if term;
   Dose:
   5 mg per kg
   20 mg per 2 ml vial - 10 mg/ml

Gentamicin IM
   Dose: 5 mg per kg every 24 hours if term;
   4 mg per kg every 24 hours if preterm
   Add 2.5 ml sterile water to 500 mg sol - 200 mL

Weight

| 1.0 - 1.4 kg | 0.35 ml |
| 1.5 - 1.9 kg | 0.5 ml |
| 2.0 - 2.4 kg | 0.6 ml |
| 2.5 - 2.9 kg | 0.75 ml |
| 3.0 - 3.4 kg | 0.85 ml |
| 3.5 - 3.9 kg | 1 ml |
| 4.0 - 4.4 kg | 1.1 ml |
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 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 16 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

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

Advice for course facilitators
### 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.

<table>
<thead>
<tr>
<th>Action</th>
<th>Done</th>
<th>Not Done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washes hands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continues skin-to-skin care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitors breathing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognizes baby is breathing well</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt: Show or say baby is breathing well</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiates breastfeeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt: Baby has nursed well for 15 minutes. What would you do now?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides eye care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides cord care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examines baby</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breathing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movements and tone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin color</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cord appearance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt: Provide the following information if asked by the learner.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baby is breathing normally and is pink, the limbs are flexed, and there is no bleeding from the cord</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measures temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Places thermometer in the armpit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reads and records temperature accurately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt: Temperature is 37°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weighs baby</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleans scale, puts baby on scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measures and records weight accurately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prompt: Weight is 2900 grams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gives vitamin K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draws into syringe the correct amount of vitamin K</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicates correct location for injection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supports breastfeeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assists with positioning of mother and baby</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describes good attachment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss successful feeding with mother</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SCORING:**

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

Examing, 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 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 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”.

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

**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
Facilitator Flip Chart

Editor
Carl Bose, MD, FAAP
University of North Carolina
Chapel Hill, NC, USA

Associate Editor
Nalini Singhal, MD, FRCP, FAAP
University of Calgary
Calgary, AB, Canada

Contributing Editors
Sara Berkelhammer, MD, FAAP
Northwestern University
Chicago, IL, USA
Sherri Bucher, PhD
Indiana University
Indianapolis, IN, USA
William Keenan, MD, FAAP
St. Louis University
St. Louis, MO, USA
Douglas McMillan, MD, FRCP, FAAP
Dalhousie University
Halifax, NS, Canada
Susan Niermeyer, MD, MPH, FAAP
University of Colorado
Aurora, CO, USA
Jonathan Spector, MD, MPH, FAAP
Massachusetts General Hospital
Boston, MA, USA

Managing Editor
Erick Amick, MPH, MA
American Academy of Pediatrics
Elk Grove Village, IL, USA

Special Review Editor
Joseph de Graft-Johnson, MD, MPH, PhD
Maternal and Child Integrated Program
Save the Children
Washington, DC, USA

Educational Design Editor
Harald Eikeland
Laerdal Global Health
Stavanger, Norway

Illustrator/Art Director
Anne Jorunn Svalastog Johnsen
Laerdal Global Health
Stavanger, Norway

Illustrator
Bjørn Mike Boge
Laerdal Global Health
Stavanger, Norway

Liaisons
Maternal and Child Integrated Program
Save the Children
Joseph de Graft-Johnson, MD, MPH, PhD
Washington, DC, USA

World Health Organization
Bernadette Daelmans, MD
Severin von Xylander, MD
Rajiv Bahl, MBBS, MD, PhD
Geneva Switzerland

US Agency for International Development
Lily Kak, PhD
Washington DC, USA

International Pediatric Association and American Academy of Pediatrics
William Keenan, MD, FAAP
Elk Grove Village, IL, USA

Following its introduction in 2010, the Helping Babies Breathe (HBB) program was adopted in many areas as a preferred program for teaching newborn care at the time of birth. However, many of those who used HBB struggled with how to integrate this program into existing programs teaching other aspects of essential newborn care. The Essential Care for Every Baby program was developed to facilitate this integration and complemented the ongoing efforts in many countries, including Uganda, Kenya, and Bangladesh. Its development was an international effort. The original content outline was reviewed by a distinguished group of professionals representing resource-limited countries around the world. The first version of the flip chart and other teaching materials were reviewed by a panel of experts assembled by the World Health Organization. Following revisions 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.

Terms and Conditions of Use

Disclaimer
This material is provided on an “as-is” basis. The American Academy of Pediatrics disclaims all responsibility for any loss, injury, claim, liability, or damage of any kind resulting from, arising out of, or any way related to any errors in or omissions from this content, including but not limited to technical inaccuracies and typographical errors.

Every effort is made to provide accurate and complete information, but we cannot guarantee that there will be no errors. The American Academy of Pediatrics makes no claims, promises, or guarantees about the accuracy, completeness, or adequacy of the contents and expressly disclaims liability for errors and omissions in the contents.

Copyright Notice
The American Academy of Pediatrics is pleased to make this material available for public health purposes. The materials may not be modified or adapted in any manner without permission and may only be used for non-profit educational purposes. They may not be used, reproduced, distributed, displayed or exploited for any party’s commercial advantage, profit or monetary gain. If you download multiple copies or share files, please notify the American Academy of Pediatrics at hbb@aap.org. The contents of the site are protected by U.S. and international copyright laws. Any publication or distribution of the electronic or paper-based materials for the permitted purposes must include the American Academy of Pediatrics or the owner’s copyright notice and an acknowledgment of the source of the materials. Users may not falsify or delete any copyright management information such as the title of the material, author attributions, copyright notice, proprietary designations, trademarks, or other identifying information and material contained in a file that is downloaded.

It is the user’s responsibility to be aware of current copyright law and applications. The user agrees to indemnify the American Academy of Pediatrics from any costs or claims for infringement or copyright in relation to copies of images or text from this publication.

© 2010 by American Academy of Pediatrics

ISBN-978-82-8276-062-1
20-07950 Rev A