

An Uncomplicated Birth

Educational Focus

Scenario Outline

This scenario presents the vaginal birth of a healthy, full-term infant with clear amniotic fluid. Learners are expected to prepare for the birth by asking the 4 pre-birth questions, assembling a resuscitation team based on assessment of perinatal risk and performing the equipment check. This scenario presents no risk factors that increase the likelihood of resuscitation; therefore, a single learner may manage this newborn. The infant, who stays with her mother, remains persistently cyanotic, necessitating placement of a pulse oximeter and recognition of appropriate oxygen saturation for the newborn's age in minutes.

Learning Objectives

Upon completion of the simulation, the learners will be able to:

- Demonstrate correct technique for performing initial steps of newborn care with the newborn placed on the mother's chest or abdomen
- Demonstrate accuracy when counting a newborn's heart rate
- Demonstrate correct placement of the oximeter sensor and interpret the target oxygen saturation table to guide oxygen administration

Debriefing Points

Points for discussion during debriefing could include:

- Criterion for deciding if the newborn should stay with the mother or be moved to the radiant warmer
- Indications for use of supplemental oxygen
- Use of NRP Key Behavioral Skills

Reference Materials

Textbook of Neonatal Resuscitation, 8th edition, Lesson 2: Anticipating and Preparing for Resuscitation

Textbook of Neonatal Resuscitation, 8th edition, Lesson 3: Initial Steps of Newborn Care

Setup & Simulation

Equipment

For setup:

- Damp, lightly blood-stained blanket or towel
- Segment of simulated umbilical cord
- Simulated amniotic fluid or water
- Simulated blood

For use during simulation:

- All items included in the NRP Quick Equipment Checklist
- Umbilical cord clamps

Setup & Preparation

- Setting: Delivery room.
- Moisten the simulator's skin with simulated amniotic fluid and blood and insert the umbilical cord segment into the abdomen.
- Wrap the simulator in a damp, lightly blood-stained blanket or towel, without a diaper, and place it under a blanket or towel on the mother's abdomen.

Learner Brief

Provide this information to the participants as they enter the simulation:

You are called to attend a vaginal birth. The mother is a 24-year old woman who has been admitted in active labor. The obstetric provider is present. Please prepare for the birth.

Additional Information

Provide this information to the participants, if asked during simulation:

| | |
|---------------------------------|---|
| Gestational age: | 39 2/7 weeks |
| Amniotic fluid: | Clear |
| Additional risk factors: | None known |
| Estimated fetal weight: | 3500 g (7 lb 11 oz). |
| Umbilical cord management plan: | Plan to delay cord clamping for 30-60 seconds if baby is vigorous |

Scenario Progression

Before birth

Vaginal birth

- 39 2/7 weeks gestation • Clear amniotic fluid
- No known risk factors, estimated birth weight 3500 g
- Plan to delay cord clamping for 30-60 seconds

CRITICAL PERFORMANCE STEPS

- Ask the 4 pre-birth questions to assess perinatal risk:**
 - What is the expected gestational age
 - Is the amniotic fluid clear?
 - Are there additional risk factors?
 - What is our umbilical cord management plan?
- Conduct pre-birth team briefing:**
 - Assemble team based on perinatal risk. Perinatal risk is low; therefore, one person may manage this newborn at birth.
- Perform equipment check**
- Apply gloves and personal protective equipment**

The baby has been born

L4



Strong cry

Does not provide initial steps/routine care

L3



Weak cry

Provides routine care

Provides initial steps/routine care

L4



Strong cry

3 minutes after birth, the mother asks:
"Is my baby ok? He's blue. Is something wrong?"

3-4 minutes after birth

L5

SpO₂
85

End of simulation

- Ask the 3 rapid evaluation questions:**
 - Term?
 - Good muscle tone?
 - Breathing or crying?
- Place newborn skin-to-skin with mother for routine care.**
Delayed cord clamping may be in progress.
- Provide initial steps and routine care, including:**
 - Dry and stimulate if needed
 - Cover with warm blanket and put hat on baby's head
 - Position baby's head to open airway

- Provide ongoing evaluation of respirations, heart rate, tone, activity, color, and temperature**
- At 3 to 4 minutes after birth, place pulse oximeter sensor on right hand or wrist**
- Identify target oxygen saturation for age in minutes by using the target oxygen saturation table.**
May leave oximeter sensor in place for a few minutes to ensure stability within target range

- Communicate effectively with the medical team and mother**
- Continue ongoing evaluation**

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