Sample Course Objectives and Agenda

Combined Neonatal Resuscitation Program® Essentials and Advanced Course: Sequential Practice and Evaluation Format

Every hospital's program must determine the best use of resources and personnel when planning instructor-led courses for their setting. The recommended ratio is 1 instructor to 3 to 4 learners. The length of the course depends on the scope of the learners' roles and responsibilities, the number of participants, and the number of instructors available to conduct demonstrations and scenarios.

Consider this sample agendas to get you started.

Sample Learning Objectives

At the end of the Neonatal Resuscitation Program (NRP®) Essentials/Advanced instructor-led course, the learner will be able to

- 1. Locate neonatal resuscitation supplies and equipment in settings where neonatal resuscitation may be required, including access to supplies and equipment needed for complex resuscitation.
- 2. Demonstrate the ability to prepare for a birth and assess perinatal risk by asking the obstetric team the 4 pre-birth questions and state when, according to hospital protocol, 1 qualified person may attend a birth.
- 3. Perform a standardized equipment check in the resuscitation setting, including preparing supplies and equipment for use, including positive-pressure ventilation (PPV) device(s).
- 4. Demonstrate the ability to assume sole responsibility for a newborn at birth, including correct use of pulse oximetry and free-flow oxygen management, initiating face-mask PPV, inserting a laryngeal mask if needed, and using the hospital protocol to summon emergency assistance.
- 5. NRP Advanced learners will demonstrate the ability to use NRP Key Behavioral Skills during complex resuscitation of the newborn.
- 6. In addition to NRP Essentials skills, NRP Advanced learners will demonstrate the ability to initiate continuous positive airway pressure (CPAP) in the delivery room, intubate (or assist with intubation), perform chest compressions, insert an emergency umbilical venous catheter (or assist with insertion), and administer epinephrine and volume expander, using correct technique and in NRP 8th edition Algorithm sequence.

Sequential Practice and Evaluation format

Agenda timing assumes Learner Station classroom setup with 3 to 4 learners per station. Experienced learners may require less practice time than novice learners.

5 mins	Welcome, introductions, administrative housekeeping as needed (eg, continuing education credit, confidentiality agreement, post-course expectations).
5 mins	How the course works and expectations for successful course completion; discuss ground rules and confidentiality.
10 mins	Instructors demonstrate a simulation scenario (beginning with 4 pre-birth questions and ending after PPV) and debriefing.
10 mins	Teams report to their learning station or skills station where they will orient to the setting, locate supplies and equipment, and learn how the manikin's vital signs are conveyed.
30 mins	Lessons 2 and 3

- Selected Knowledge Check Questions.
- Instructor demonstrates the 4 pre-birth questions and assesses risk, and demonstrates equipment check, including PPV device preparation and rapid evaluation. Instructor may demonstrate performing initial steps and newborn

routine care with mother, as well as moving the baby to the radiant warmer for initial steps, pulse oximetry check, and free-flow supplemental oxygen.

Learners practice and demonstrate the above skills.

- Learners "talk through" a few scenarios together if necessary, as the instructor conveys the manikin's responses (if using a nonelectronic manikin), and learners ask questions and clarify interventions.
- Learners take turns leading and participating in the textbook Lesson 3 Practice Scenario Options 1 through 4 (simple Scenario Options 1 and 3 may be done as a group; individuals should perform Scenario Options 2 and 4 to ensure comprehension).
 - 1. Vigorous term newborn who may stay with the mother for initial steps
 - 2. Vigorous term newborn with meconium-stained fluid and persistent cyanosis (this scenario is designed for a 2-person team)
 - 3. Term newborn requires initial steps at radiant warmer, returned to mother for skin-to-skin care
 - 4. Late preterm newborn with clear fluid, requires initial steps at radiant warmer, remains apneic

When the learner can lead team members in the correct NRP 8th edition Algorithm sequence and perform skills with appropriate technique, they may proceed to the next practice and evaluation section.

30 mins Lesson 4 Part 1: PPV (Learners work in pairs)

- Selected Knowledge Check questions
- Instructor demonstrates face-mask PPV and MR. SOPA ventilation corrective steps. Demonstrates how to request immediate assistance at the warmer and how to summon additional resuscitation team members for an unanticipated resuscitation. Instructor demonstrates how to ask the assistant to report heart rate, increasing or decreasing, and presence of chest movement with assisted breaths.
- Instructor demonstrates how to insert an orogastric tube.
- Instructor demonstrates how to administer CPAP (if applicable).

Learners practice PPV and MR. SOPA steps with instructor guidance (and CPAP, if applicable).

• If necessary, learners talk through a scenario together and ask questions, clarify interventions.

Learners take turns leading and participating in the textbook Lesson 4 Practice Scenario Options 1 and 2.

- Scenario 1: Term newborn without known risk factors unexpectedly requires PPV.
- Scenario 2: Term newborn with risk factors requires PPV (2-person team).
- CPAP and orogastric tube insertion are optional in this scenario.

When the learner can lead team members in the correct 8th edition Algorithm sequence and perform skills with appropriate technique, they may proceed to laryngeal mask placement.

30 mins Lesson 4 Part 2: Laryngeal mask placement (Learners work in pairs)

- Selected Knowledge Check questions
- Instructor demonstrates laryngeal mask placement and PPV.
- Instructor demonstrates how to insert an orogastric tube if the laryngeal mask has an insertion port.
- Instructor demonstrates removal of laryngeal mask

Learners practice laryngeal mask insertion with instructor guidance (and orogastric insertion, if applicable)

- If necessary, learners talk through a scenario together and ask questions, clarify interventions
- Learners take turns leading and participating in the textbook Lesson 4 Practice Scenario 3.
 - Scenario 3: Term newborn is difficult to ventilate with a face mask and requires a laryngeal mask.

When the learner can lead team members in the correct 8th edition Algorithm sequence and perform skills with appropriate technique, they have passed the second and final point of evaluation in the NRP Essentials Instructor-led Provider course.

30 mins **Simulation and Debriefing**

Simulation and Debriefing is a required component of instructor-led provider courses. The instructor may repeat selected Practice Scenarios or create new scenarios (for instructor help, use the <u>Scenario Builder</u> and the Ready Set <u>Go</u>: Neonatal Resuscitation Program Instructor Reference for Simulation and Debriefing sheet).

10 mins **Break**

Advanced Course learners report to their learning or skills station.

35 mins Lesson 5 Endotracheal Intubation and Chest Compressions

Scenario practice may combine intubation and chest compressions.

- Selected Knowledge Check questions; include discussion about the use of the tracheal aspirator for a suspected obstructed airway and provide a brief demonstration of how to use the aspirator
- Instructor demonstrates intubation (or uses NRP Skills Video) and describes or asks a learner to demonstrate the assistant's role during intubation.
- Instructor demonstrates how to estimate the endotracheal tube insertion depth and secure the tube
- Instructor demonstrates primary methods (and additional methods) for confirming placement in the trachea

Learners work in pairs practicing intubation and the assistant role with instructor guidance.

Lesson 6 Chest Compressions

- Selected Knowledge Check questions
- Instructor demonstrates chest compression technique (or uses NRP Skills Video)

Learners practice coordinating chest compressions and ventilations in 100% oxygen; pause compressions every 60 seconds to assess heart rate using cardiac monitor

30 mins Lesson 7 Umbilical Venous Catheter Insertion and Medication Administration

- Selected Knowledge Check questions
- Instructor demonstrates umbilical venous catheter preparation and insertion (ideally, as learners follow along at umbilical venous catheter Skills <u>Station</u>) or use NRP Skills Video).
- Instructor demonstrates how to draw up epinephrine and administer the medication (ideally, as learners follow along at umbilical venous catheter Skills Station) or use NRP Skills Video).

If necessary, learners talk through a complex scenario together and ask questions, clarify interventions

• Learners take turns leading and participating in the textbook Lesson 7, Practice Scenario 3.

When the learner can lead team members in correct 8th edition Algorithm sequence and perform skills with appropriate technique, they have passed the second and final point of evaluation in the NRP Advanced Instructor-led Provider course.

30 mins **Simulation and Debriefing**

Simulation and Debriefing is a required component of instructor-led Provider Courses. The instructor may repeat selected Practice Scenarios or create new scenarios (for instructor help, use the Scenario <u>Builder</u> and the Ready Set <u>Go</u>: Neonatal Resuscitation Program Instructor Reference for Simulation and Debriefing sheet).