

NRP 8th Edition Busy People Update #1 – December 2020

In June 2021, the American Academy of Pediatrics (AAP) and American Heart Association (AHA) will release the 8th Edition of the Neonatal Resuscitation Program (NRP).

- The NRP 8th edition materials may be used beginning in June 2021; however, NRP 7th edition materials may be used until December 31, 2021. NRP 8th edition materials must be implemented by January 1, 2022.
- It is not necessary for NRP instructors to conduct NRP 8th edition Provider courses for all NRP providers by January 1, 2022. NRP instructors and providers may retain their current renewal date. Instructors should brief NRP providers about 8th edition changes in practice and when those changes will go live. See the Fall/Winter NRP Instructor Update for strategies to transition to NRP 8th edition recommendations for practice.
- NRP 8th edition Instructor course materials will be available in June 2021. Instructor candidates may continue to use the NRP 7th edition instructor course materials through 2021; however, all 7th edition instructor course requirements must be completed by December 31, 2021 or the instructor candidate must begin again with 8th edition instructor materials.

Some program components are still in development. More information will be available in early 2021.

SAVE THE DATE

Watch for announcements about the **Innov8te NRP: Introduction to the Neonatal Resuscitation Program, 8th Edition** webinar on February 18, 2021 that will answer all your questions about NRP 8th Edition and RQI for NRP.

NRP 8th EDITION MATERIALS – WHAT'S NEW

The Textbook of Neonatal Resuscitation, 8th edition, will be available on June 1, 2021.

- Textbook preorders begin January 1, 2021 with an arrival date around June 1, 2021.
- Translations of the textbook will follow shortly after the release of the English version.
- To guarantee that you receive a genuine AAP-produced resource, purchase textbooks from the AAP at shopaap.org.
- The textbook and eBook price is \$74.95.

The Textbook of Neonatal Resuscitation, 8th Edition has 11 lessons and 3 Supplemental Lessons

1. Foundations of Neonatal Resuscitation
2. Anticipating and Preparing for Resuscitation
3. Initial Steps of Newborn Care
4. Positive-Pressure Ventilation (includes Laryngeal Mask)
5. Endotracheal Intubation
6. Chest Compressions

7. Medications
8. Resuscitation and Stabilization of Babies Born Preterm
9. Post-resuscitation Care
10. Special Considerations
11. Ethics and Care at the End of Life

Supplemental Lessons (for enhanced learning; no exam questions for this material)

12. Improving Resuscitation Team Performance
13. Resuscitation Outside the Delivery Room
14. Bringing Quality Improvement to Your Resuscitation Team

The NRP 8th edition Algorithm

- The NRP 8th edition algorithm is very similar to the NRP 7th edition algorithm (see **Figure 1**).
- It differs from the algorithm published in the [2020 American Heart Association Guidelines for Cardio-pulmonary Resuscitation and Emergency Cardiovascular Care: Part 5: Neonatal Resuscitation](#) in style and word choice for educational efficiency, but it does not conflict with the published science in the 2020 guidelines.

NRP 8th edition Practice Changes

See **Table 1** for an overview of significant changes in recommended practice.

The Curriculum: NRP Essentials and NRP Advanced

- The NRP Steering Committee made the decision to offer two course options so that NRP providers could excel in the course material most relevant to their role and personnel resources.
- Each organization will decide who should be NRP Essentials providers and who should be NRP Advanced providers. This policy should be written before your NRP 8th edition Provider Courses begin.
- If a licensed healthcare professional is unsure about which NRP level to take, they should probably choose NRP Advanced.
- The AAP will not deter any NRP learner from taking either course option.

NRP Essentials: For anyone involved in the care of a newborn

- The NRP Essentials participant will be responsible for the material in Lessons 1 through 4 only.
- The NRP Essentials learner may study additional lessons for knowledge enhancement (Lessons 5 through 11 and Supplemental Lessons) but will not be tested on that material.
- NRP Essentials is most appropriate for those assigned responsibility for the newborn at birth when there are no apparent perinatal/neonatal risk factors and for those who care for healthy newborns after birth. NRP Essentials may not be appropriate for health care professionals who will participate in resuscitation beyond positive-pressure ventilation (PPV).

NRP Advanced: For anyone expected to participate in resuscitation beyond PPV

- The NRP Advanced learner will be responsible for the material in Lessons 1 through 11. The NRP Advanced

learner may study Supplemental Lessons but will not be tested on those lessons.

- NRP Advanced is suited for health care professionals who serve as members of the resuscitation team in the delivery room or in other settings where complex neonatal resuscitation is required.
- NRP Advanced may also be appropriate for health care professionals in smaller hospital facilities with fewer personnel where most health care professionals who attend births or care for newborns are expected to participate in newborn resuscitation.

Provider Course Format

The NRP Provider course requirements include an online exam, skills evaluation, and simulation and debriefing. The NRP 8th edition does not include eSim cases.

The NRP 8th edition suggests the use of two course formats, suitable for Essentials and Advanced learners.

Provider Course Format #1: Sequential Practice and Evaluation

- This format is most appropriate for new NRP learners and those who infrequently use NRP Essentials or Advanced skills.
- In this format, learners will sequentially review and practice the skills from each lesson within the Essentials or Advanced curriculum with the instructor.
- At the end of each lesson, the instructor uses the NRP Practice Scenarios in the textbook to evaluate the learner's ability to lead their team through the resuscitation in the correct sequence and perform the relevant technical skills. Each Practice Scenario builds on the knowledge and skills from previous lessons, giving the instructor an opportunity to observe each learner lead their team through a series of scenarios of increasing complexity.
- When the learner has completed all Practice Scenarios in their course without requiring significant corrections/coaching, they have successfully passed the final component of evaluation in the NRP Provider Course and may proceed to Simulation and Debriefing.

Provider Course Format #2: Comprehensive Skills Test ("test out")

- Provider Course participants who resuscitate newborns frequently and are experts at resuscitation (Essentials or Advanced skills) may "test out" of the sequential practice and evaluation course by leading their team of participants (who are probably also testing out) through at least one NRP algorithm sequence and performing role-relevant skills.
- The Comprehensive Skills Test requires a team resuscitation and is not a one-person "check-off."
- Testing out of complex resuscitation skills is not appropriate for health care professionals who rarely participate in complex resuscitation. In hospitals where complex resuscitation is an uncommon occurrence, it is possible that no one will be eligible to test out of the skills in Lessons 5 through 7.
- Learners who successfully "test out" have passed the final evaluation point of the NRP Provider Course and may proceed to Simulation and Debriefing.
- Learners who make significant errors and require coaching during the scenario(s) should be directed to their hospital NRP remediation plan or to the Provider Course that uses the sequential practice and evaluation format.
- This format is not designed to be a "short course." For expert resuscitators who test out, the simulation and debriefing component is an opportunity to practice challenging scenarios that require critical thinking and effective teamwork and communication. What scenarios do they find most stressful? What NRP Key Behavioral Skills are lacking in clinical practice? Simulation and Debriefing is the safe place to take on these challenges.

NRP Provider Renewal

- Learners will self-study the Textbook and complete the lessons within their designated course (NRP Essentials or NRP Advanced).
- Provider course completion cards are valid for two years, until the end of the course month. For example, anyone who passes a course in April would have a valid card through the last day of April, 2 years later.

Information for Instructors

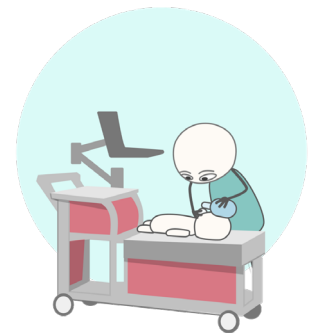
- Current NRP instructors do not need to take the NRP 8th edition instructor course. Review the new NRP Instructor course materials so that you know what is expected of an instructor who teaches NRP 8th edition Provider courses. Read the 8th edition textbook and complete any instructor education materials offered to help instructors transition learners from NRP 7th edition to NRP 8th edition.
- An NRP instructor in good standing remains an NRP instructor as long as the requirements to maintain instructor status are met by their renewal date, which is every 2 years.
- The NRP instructor must teach or co-teach at least 2 courses during the 2-year renewal period, pass the NRP Instructor Exam, and complete the instructor renewal bundle.
- If an instructor's status expires prior to meeting maintenance requirements, they must meet the current edition's instructor eligibility requirements and complete the NRP Instructor course requirements.

Information for Instructor Candidates

- Eligibility criteria for becoming an instructor has not changed from the NRP 7th edition and is as follows:
- Instructor candidates must have a current NRP 7th edition provider card or NRP 8th edition Advanced provider card.
- An NRP instructor candidate must be a physician, registered nurse/nurse practitioner, respiratory care practitioner, or physician assistant with experience in the hospital care of newborns in the delivery room.
- The NRP instructor candidate must have current maternal-child educational or clinical responsibility within a hospital setting.
- It is recommended that NRP instructors and instructor candidates have ongoing delivery room experience.

What is RQI?

- The American Academy of Pediatrics is collaborating with RQI Partners, LLC to improve the efficiency of education and training in US hospitals.
- **RQI for NRP** is a self-directed, simulation-based, mastery learning and quality improvement resuscitation program for health care professionals. The program design is **low-dose, high-frequency** quarterly learning and skill sessions.
- Learn the details about RQI for NRP at the February 18th webinar (see **Save the Date** above).



What Stays the Same for NRP 8th Edition?

- The AAP requires NRP Provider Card renewal every 2 years, but your facility may require more frequent renewal. It is the institution's responsibility to determine the consequence of allowing NRP Provider status to expire.
- Any person who works with newborns is eligible to take an NRP Provider course; however, the course has little relevance for a person who has never seen the birth of a healthy term newborn.
- NRP does not certify or ensure competence to perform resuscitation skills in an actual resuscitation.
- The recommended NRP instructor to learner ratio at a Provider course is 1 instructor to 3-4 learners.

More information about NRP 8th edition, including the Learning Management System (LMS), RQI for NRP, and other administrative information will be available in early 2021.

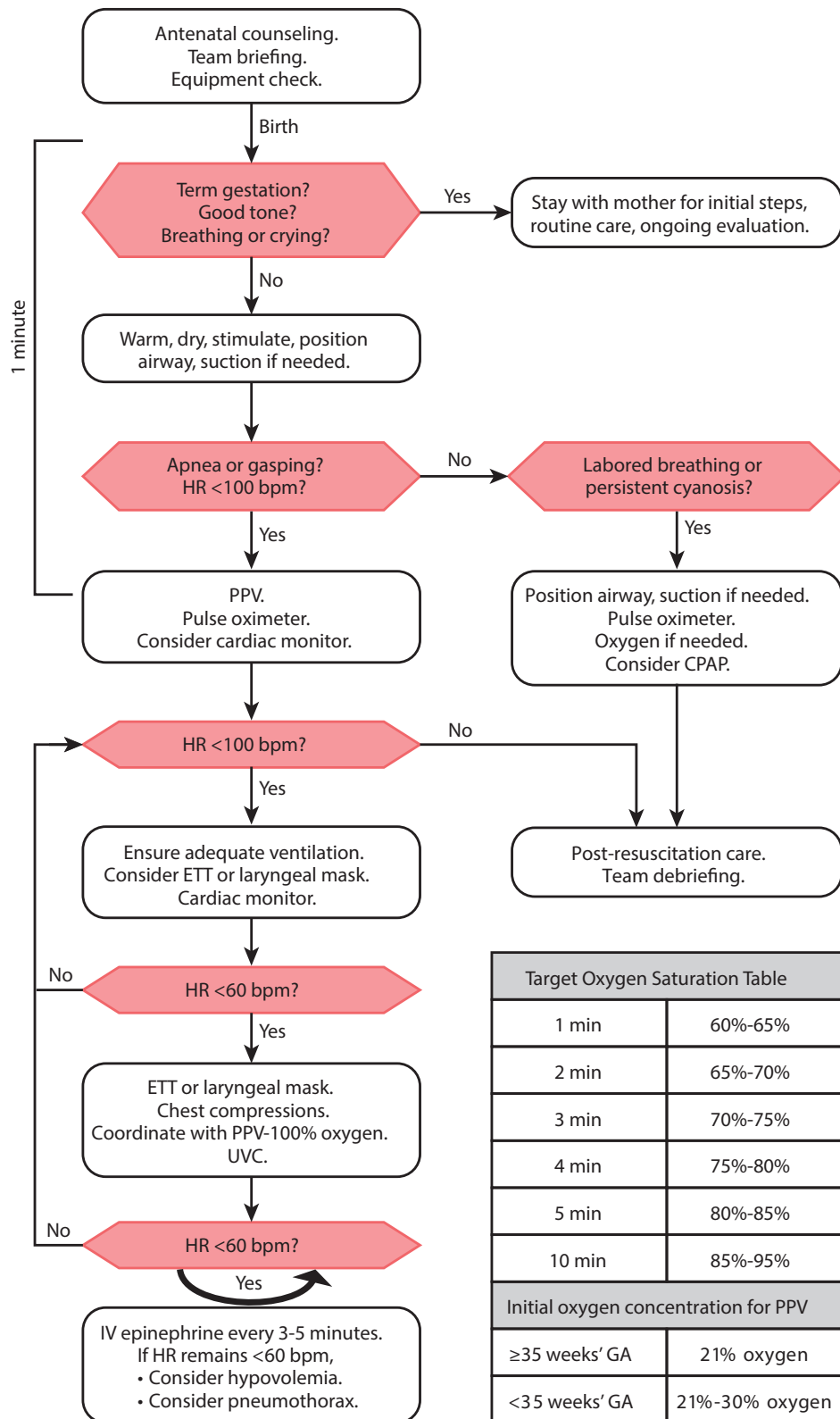
Table 1: Overview of NRP 8th Edition Practice Changes

Change	NRP 7th Edition	NRP 8th Edition
Umbilical cord management plan added to 4 pre-birth questions, replacing "How many babies?"	The 4 pre-birth questions: (1) Gestational age? (2) Amniotic fluid clear? (3) How many babies? (4) Additional risk factors?	The 4 pre-birth questions: (1) Gestational age? (2) Amniotic fluid clear? (3) Additional risk factors? (4) Umbilical cord management plan?
Initial steps reordered to better reflect common practice.	Initial steps: Warm and maintain normal temperature, position airway, clear secretions if needed, dry, stimulate.	Initial steps: Warm, dry, stimulate, position airway, suction if needed.
An electronic cardiac monitor is recommended earlier in the algorithm	An electronic cardiac monitor is the preferred method for assessing heart rate during cardiac compressions.	When an alternative airway becomes necessary, a cardiac monitor is recommended for the most accurate assessment of the baby's heart rate.
Epinephrine intravenous/intraosseous (IV/IO) flush volume increased.	Flush IV/IO epinephrine with 0.5 to 1 mL normal saline	Flush IV/IO epinephrine with 3 mL normal saline (applies to all weights and gestational ages)
Epinephrine IV/IO and endotracheal doses have been simplified for educational efficiency. The dosage range is unchanged. The simplified doses (IV/IO and ET) do not represent an endorsement of any particular dose within the recommended dosing range. Additional research is needed.	Range for IV or IO dose = 0.01 - 0.03 mg/kg (equal to 0.1 - 0.3 mL/kg) Range for endotracheal dose = 0.05 - 0.1 mg/kg (equal to 0.5 - 1 mL/kg)	The suggested initial IV or IO dose = 0.02 mg/kg (equal to 0.2 mL/kg) The suggested endotracheal dose (while establishing vascular access) = 0.1 mg/kg (equal to 1 mL/kg)
Expanded timeframe for cessation of resuscitative efforts	If there is a confirmed absence of heart rate after 10 minutes of resuscitation, it is reasonable to stop resuscitative efforts; however, the decision to continue or discontinue should be individualized.	If confirmed absence of HR after all appropriate steps performed, consider cessation of resuscitation efforts around 20 minutes after birth (decision individualized on patient and contextual factors).

IV = intravenous IO = intraosseous ET = endotracheal HR = heart rate

Figure 1

Neonatal Resuscitation Program® 8th Edition Algorithm



Target Oxygen Saturation Table	
1 min	60%-65%
2 min	65%-70%
3 min	70%-75%
4 min	75%-80%
5 min	80%-85%
10 min	85%-95%
Initial oxygen concentration for PPV	
≥35 weeks' GA	21% oxygen
<35 weeks' GA	21%-30% oxygen