



The NRP® Provider Course: Strategies for Teaching During COVID-19

The American Academy of Pediatrics (AAP) Neonatal Resuscitation Program (NRP) is a simulation-based educational program that introduces concepts and skills of neonatal resuscitation. The NRP advocates that every birth should be attended by at least one attendant who can initiate resuscitation and whose only responsibility is care of the newly born baby, irrespective of COVID-19 status.

Why is interim guidance necessary for NRP trainings?

- The NRP Provider course uses instructor facilitated in-person skills practice and requires members of resuscitation teams to work in close proximity during simulated delivery room resuscitations.
- The coronavirus outbreak has resulted in a broad array of restrictions and precautions including social distancing, use of PPE, and in some regions, a temporary halt to travel and clinical education. This has resulted in many questions about strategies for conducting effective NRP Provider courses.

How do instructors know if they need to modify the current format of the instructor-led portion of the NRP Provider course?

- Stay informed of the restrictions in your geographic region and facility and adjust according to what is recommended in your setting.
- Consider availability of PPE.
 - If supply of PPE is limited, it is reasonable to use only procedural masks and gloves for simulation training.
- Consider each potential course participant's NRP status and clinical duties in the upcoming months.
 - If the healthcare professional's need for a Provider course is based on imminent expiration of their NRP Provider or Instructor status, they can potentially extend their expiration date for up to 120 days.
 - NRP providers must work in close proximity during actual neonatal resuscitation; therefore, realistic simulation is preferable to performing complex resuscitation for the first time ever during a real-life situation. When possible, healthcare professionals doing simulation are encouraged to minimize the time and proximity to each other as much as possible.
 - If the healthcare professional will not be working in the neonatal unit or managing the newborn in the delivery room soon (for example, residents whose newborn or NICU rotations will not occur for some time), they can wait to take an NRP Provider course.

Each hospital should weigh these factors and decide on the most appropriate plan for each group of providers.

If the instructor-led course does need to be modified, how should instructors do this?

The NRP has always allowed instructors flexibility in formatting their NRP Provider course. The format must meet the requirements of the course and the unique learning objectives of the participants.

Consider these options for modifying the NRP Provider course in light of COVID-19 precautions:

- 1 Conduct narrative parts of the course with distance learning
 - If you use certain standardized presentations, consider pre-recording these so that learners can watch them shortly before assembling for a course. Presentations may include a standardized format for welcoming and

introducing your course to learners, or a standardized demonstration of how to set up the warmer in your delivery room setting, or how to prepare positive-pressure ventilation devices.

- Alternatively, conduct a live online meeting (such as Zoom) to present these course components and allow a few minutes for learners' questions prior to meeting as a group.
- Review the NRP Skills Videos. These are now available for everyone to view [here](#). These can also be utilized before the instructor-led event to stress important skills.

2 Remember the basics of infection control to prevent COVID-19 transmission.

- Consider screening instructors and learners for illness or symptoms prior to admitting them to the classroom.
- Assemble in as large a space as is possible. Maintain social distancing when it is not necessary for participants to sit or stand close together; for example, during video skills demonstrations, instructor explanations of hospital-specific procedures, or debriefings.
- Wear PPE as described above. If gowns are used, do not share or reuse. Each person can wear one mask throughout the entire course.
- Use gel or wash hands between scenarios.
- Change gloves (and gown, if using) between rooms if using more than one room for teaching or learning.
- Sanitize the manikin between different groups of learners (follow manufacturer recommendations for cleaning).

3 Use Small Groups of Learners

- If you need to provide NRP Provider courses to those who cannot wait, consider teaching small groups of learners, using the Learning Station format.
- Ideally, you can teach the course using NRP supplies in the actual clinical setting where resuscitation takes place, or in a conference room using a functional radiant warmer.
 - The Learning Station format means that one instructor stays with the same team of learners at a fully equipped warmer (or simulated warmer on a conference room table if necessary) where skills are practiced in NRP algorithm sequence and incorporated into short practice scenarios as each skill is learned (Fig. 1).
 - By building skill upon skill in algorithm sequence, learners are well prepared to pass the Integrated Skills Station (a required course component) and proceed to Simulation and Debriefing – all of which take place at the same radiant warmer.
 - If you have limited resources, you may need to establish a separate airway skills station, for intubation and laryngeal mask placement and a medication skills station, for assisting and placing an umbilical venous catheter and drawing up/administering epinephrine in a central location for everyone to use.
 - Clean equipment between groups of learners.



Figure 1. A fully equipped radiant warmer allows 1 instructor and a small group of learners to practice all resuscitation skills, perform short scenarios as skills are learned, perform the Integrated Skills Station, and practice Simulation and Debriefing.

What strategies can instructors use to help providers maintain NRP Skills?

Practicing newborn resuscitation skills should occur periodically for all NRP providers. Consider implementing the following strategies to help ensure frequent review and practice.

- Conduct Spontaneous Practice Sessions
 - Current NRP providers and those awaiting renewal will benefit from periodic review and practice of basic NRP skills such as preparing for resuscitation, rapid evaluation (Term? Tone? Breathing?), initial steps of newborn care, and most important, performing face-mask positive-pressure ventilation (PPV) with ventilation corrective steps (MR. SOPA).
 - It is easy to load a small cart with a manikin and supplies needed to practice a resuscitation skill (Fig 2). Choose a quiet time on the unit and approach your colleagues with this opportunity to review, for example, the first 2 minutes of resuscitation. The entire practice session may last only 5 minutes, does not require groups of learners, allows providers to stay near patients, and provides valuable review of essential skills.
 - Cleaning and sanitizing the equipment after each practice is critical.
- Practice eSim Cases
 - After successfully completing the NRP Provider course, all providers have access to the eSim cases for the duration of their provider status period. The eSim cases are available by going to your “Completed” tab in your HealthStream account.
 - The eSim cases are not meant to provide hands-on skills nor practice teamwork or communication, but they do validate an NRP provider’s knowledge of the algorithm sequence. The eSim cases are an entertaining way to review the algorithm and receive feedback on critical decision-making.



Figure 2. This cart is easy to take to NRP providers on the unit for short periodic practice sessions of skills such as initial steps or PPV with a face-mask and MR. SOPA skills.

How long will NRP Provider courses need to be modified?

- Innovative methods for delivering NRP Provider courses may be necessary for some time to come.
- However, NRP instructors must ensure that courses include all required components, meet relevant learning objectives of participants, and comply with public health and institutional requirements for personal safety and resource utilization.

Additional Resources:

1. Recommendations on Extensions for NRP Instructor and Provider Renewal Cards: https://downloads.aap.org/DOICH/NRP_Updated_Extension_Recommendation_4_15_20.pdf
2. The American Heart Association, in collaboration with organizations including the American Academy of Pediatrics, has created a new scientific statement on interim guidance for resuscitation of patients with known or suspected COVID-19, including guidelines for delivery room resuscitation of the newborn: doi.org/10.1542/peds.2020-1405
3. NRP instructors can view the NRP Live webinar presentation from June 19, 2020 titled, “NRP Education and Implementation Issues in the Context of COVID-19” on the launch page of the Instructor Toolkit.

This interim guidance will expire 12/31/20. It will be reviewed monthly to ensure its contents remain relevant and aligned with the most recent evidence-based practices. Because information about COVID-19 continues to evolve and change, please check the [AAP NRP website](https://www.aap.org/nrp) for updates on this topic.