NRP® Instructor Update

VOL 24 NO 2 FALL/WINTER 2015

Summary of the Revised Neonatal Resuscitation Guidelines

Do you know how the 7th edition NRP materials originate? We've come a long way from the late 1980s and 1990s when NRP material was often derived from general consensus, delivery room experience, and best guesses of pediatricians and neonatologists across the country.

Since 1999, revised NRP science has come from the work of the International Liaison Committee on Resuscitation (ILCOR), a multinational group that provides a coordinated forum for researching, reporting, and developing an international consensus supported by scientific data. Every 5 years, ILCOR coordinates an in-depth international review, debates the science, and determines new international resuscitation treatment recommendations for newborns, children, and adults.

Evidence evaluation is conducted in stages and follows a very organized and rigorous process. First, key resuscitation issues are defined and hundreds of volunteer experts from around the world review and evaluate the peer-reviewed literature, and then develop a summary of evidence-based knowledge for each topic. These summaries are reviewed, debated, and their level of evidence is rated and classified. The summary is posted online for public comment. Finally, based upon the consensus of the assembled international experts, treatment recommendations are generated. This document, known as the *International Consensus on Science With Treatment Recommendations* (CoSTR) is the *international* consensus on resuscitation science for newborns, children, and adults.

Each resuscitation council that makes up ILCOR then uses the CoSTR document to develop resuscitation guidelines applicable to their country/region. The American Heart Association (AHA) leads this project in the United States, and members of the NRP Steering Committee who participated in the ILCOR neonatal task force develop the guidelines for neonatal resuscitation. The AHA's Guidelines for Emergency Cardiovascular Care (ECC) were released on October 15 eccguidelines.heart.org and will appear, once again, within the *Textbook of Neonatal Resuscitation*, 7th edition.

The NRP is the education program that translates the guidelines into practice. A summary of the biggest changes in neonatal resuscitation science are listed here.

Changes in the NRP Flow Diagram

The 7th edition NRP Flow Diagram is similar to the 6th edition diagram. Revisions include:

- Begin the resuscitation with antenatal counseling (when appropriate) and a team briefing and equipment check.
- Maintain the newborn's normal body temperature during resuscitation.
- Consider using a cardiac monitor when PPV begins.
- Ensure ventilation that inflates and moves the chest.
- Recommendation to intubate prior to beginning chest compressions.
- Recommendation to use cardiac monitoring to accurately assess heart rate during chest compressions.
- End the resuscitation with team debriefing.

Thermoregulation

It is recommended that the temperature of newly born nonasphyxiated infants be maintained between 36.5°C and 37.5°C after birth through resuscitation or stabilization.

Meconium-Stained Amniotic Fluid and Endotracheal Suctioning

Non-vigorous newborns with meconium-stained fluid do not require routine intubation and tracheal suctioning. Initial steps may be performed at the radiant warmer. Meconium-stained amniotic fluid is a perinatal risk factor that requires the presence of one resuscitation team member with full resuscitation skills, including endotracheal intubation.

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In This Issue

Comments and questions are welcome and should be directed to:

Marya L. Strand, MD, MS, FAAP
Editor, *NRP Instructor Update*
141 Northwest Point Blvd., PO Box 927
Elk Grove Village, IL 60009-0927
www.aap.org/nrp

NRP® Acknowledgements

The Neonatal Resuscitation Program® (NRP®) Steering Committee offers the *NRP Instructor Update* to all AAP/AHA NRP Instructors.

Editors

Eric C. Eichenwald, MD, FAAP
Marya L. Strand, MD, MS, FAAP

Associate Editor

Jeanette Zaichkin, RN, MN, NNP-BC
Tacoma, WA

Managing Editors

Rachel Poulin, MPH
Wendy Marie Simon, MA, CAE
Robyn Wheatley, MPH

Contributor

Jeanette Zaichkin, RN, MN, NNP-BC
Tacoma, WA

NRP Steering Committee

Steven Ringer, MD, PhD, FAAP, Cochair
Brigham & Women's Hospital
Boston, MA

Marilyn Escobedo, MD, FAAP, Cochair
University of Oklahoma
Oklahoma City, OK

Anne Ades, MD, FAAP
The Children's Hospital of Philadelphia
Philadelphia, PA

Eric C. Eichenwald, MD, FAAP
University of Texas-Houston Medical School
Houston, TX

Kimberly D. Ernst, MD, MSMI, FAAP
University of Oklahoma Health Sciences Center
Oklahoma City, OK

Vishal Kapadia, MD, FAAP
University of Texas Southwestern Medical Center
Dallas, TX

Henry C. Lee, MD, FAAP
Stanford University
Palo Alto, CA

Marya L. Strand, MD, MS, FAAP
Saint Louis University
St. Louis, MO

NRP Editors

John Kattwinkel, MD, FAAP
Editor Emeritus
University of Virginia
Charlottesville, VA

Gary M. Weiner, MD, FAAP
University of Michigan
Ann Arbor, MI

Jeanette Zaichkin, RN, MN, NNP-BC
Tacoma, WA

NRP Steering Committee Liaisons

John T. Gallagher, MPH, RRT-NPS
American Association for Respiratory Care
Rainbow Babies & Children's Hospital
Cleveland, OH

Arun Gupta, MD, FAAP
Standford University School of Medicine
Palo Alto, CA

Jessica Illuzzi, MD, MS, FACOG
American College of Obstetricians and Gynecologists
Yale School of Medicine
New Haven, CT

Linda McCarney, MSN, APRN, NNP-BC
National Association of Neonatal Nurses
The Children's Hospital in Denver
Aurora, CO

Patrick McNamara, MB, FRCPC
Canadian Paediatric Society
The Hospital for Sick Children
Toronto, ON, Canada

NRP Steering Committee Consultants

Louis P. Halamek, MD, FAAP
Stanford University
Palo Alto, CA

Jeffrey Perlman, MB, ChB, FAAP
ILCOR Science Director
Liaison AHA Pediatric Subcommittee
Weill Cornell Medical College
New York Presbyterian Hospital
New York, NY

Jerry Short, PhD
University of Virginia
Charlottesville, VA

Myra H. Wyckoff, MD, FAAP
University of Texas Southwestern Medical Center
Dallas, TX

AAP Staff Liaisons

Kristy Crilly
Kirsten Nadler, MS
Gina Pantone
Olyvia Phillips

7th Edition Instructor Course: Modeling an Expert NRP® Provider Course

The last several editions of the *NRP Instructor Update* started preparing instructors for the changes with the American Academy of Pediatrics NRP 7th Edition materials. The NRP 7th Edition is scheduled to launch in spring 2016, and the web-based NRP Instructor Course will be a major component of the new edition.

The course models an NRP Provider Course and includes a compilation of ideas and strategies from many expert instructors. Reviewing the course validates 7th Edition NRP knowledge, reinforces technical skills, and demonstrates how experts use their communication skills to create a high quality program.

The approximately 4-hour web-based course incorporates video, text, and photographs to help instructors better understand classroom preparation, conducting all 6 Performance Skills Checklists, demonstration of hands-on skills and practice scenarios, and communication through simulation and debriefing. Guidance on conducting the Integrated Skills Station and counseling a learner who must repeat the course is also included.

Beginning with the 7th Edition, all new instructor candidates will be required to review the course and complete the Instructor Examination and eSim cases prior to teaching two courses under the guidance of an Instructor Mentor. Current NRP Instructors are also encouraged to review the course to prepare for 7th Edition courses and enhance existing Provider Course facilitation skills.

FAQs About the NRP Instructor Course

Q ***How can I access the Instructor Course?***

A The web-based Instructor Course will be available through HealthStream:

For existing Instructors: It is included with the other materials and resources that are part of the HealthStream catalog offering entitled ***NRP Instructor Renewal Course***, and is **optional.**

For Instructor Candidates: Once your Instructor Application is approved, you will need to enroll in the **NRP Instructor Candidate Course**. The web-based NRP Instructor Course is included, and completion is required.

Q ***When will it be available?***

A The NRP Instructor Course will be available in spring 2016, along with the entire suite of 7th edition materials. The mandatory implementation date for the 7th edition NRP is January 1, 2017.

Q ***I am a current NRP Instructor. Is the course required?***

A For the 7th edition, the web-based NRP Instructor Course will be optional for renewing Instructors. It is, however, recommended that the Instructor Course be reviewed in order to prepare for 7th edition courses and enhance existing facilitation skills.

Q ***Can institutions still have their own in-person course to augment the web-based Instructor Course?***

A Yes, a hospital can set its own requirements for NRP within the institution. However, instructor candidates will need to complete the NRP Instructor Course, online examination, eSimulation and coteach two NRP courses under the guidance of an NRP Instructor Mentor to achieve NRP Instructor status from the AAP. No matter what the institutional policy states, instructor candidates who successfully complete these requirements are entitled to NRP Instructor status by the AAP. Consequences of failing to abide by the institutional policy for required training are determined by the institution.

Premature Anne® Fills the Gap for NRP® Simulation-based Education

Premature Anne makes her debut as a task trainer in October 2015 and as a simulator in spring 2016. NRP instructors will find her realism and clinical features a valuable asset as they conduct simulation-based training that strives to improve team performance and the quality and safety of neonatal resuscitation, including even our smallest patients.

In 2005, the NRP Steering Committee created a list of desired characteristics for development of a realistic human neonatal patient simulator and provided it to the industry. This was the first time that development of a highly realistic patient simulator was driven by the learning objectives put forth by a professional body rather than by the internal marketing goals of industry. The American Academy of Pediatrics endeavored to form a strategic alliance to produce SimNewB®, a simulator designed specifically for NRP training.

Following the integration of simulation-based training into NRP and the success of SimNewB for this purpose, it became clear that another problem was appearing. Even though we can suspend our disbelief during simulation-based training and imagine that some of the less accurate clinical cues are real, imagining that SimNewB is an extremely preterm newborn stretches our suspension-of-disbelief capabilities to the limit. So the AAP and Laerdal Medical worked to develop a solution.

The concept of a preterm manikin began with many discussions about what features were needed. Physicians, nurses, and respiratory care practitioners were asked for input about the size, gestation, and functions that would be most useful. Brainstorming sessions produced lists of desired features and attributes. The first challenge was to decide which of the numerous suggestions for electronic features were most important, so that these mechanics could be designed into a premature-size frame and the second was to keep the manikin affordable. Eventually, the feature sets were sorted into "nice to have" and "must have" lists of functions and capabilities.

Premature Ann began when the engineers at the Laerdal Medical plant in Gatesville, Texas scaled down the CAD models of SImNewB to make a smaller version of that manikin. The engineers then cast the parts to make a mold for solid models that were then sculpted to get the finer details of the premature anatomy. Because a 25-week gestation newborn is not simply a miniature version of a term newborn, the hard work began here. Medical sculptors, Danny Smith and Micah Jalbert, with their unique combination of artistic and engineering talents, literally whittled Premature Anne into existence, changing the term newborn's qualities into features more typical of an extremely premature baby. Then the sculptors took the model to the medical experts for feedback.

Early concept design with internal components.

Models for arms and legs used in iterations of the design of Premature Anne.

Early mold design.

Wireless SimPad LinkBox via Bluetooth adapter.

Danny Smith, Senior Advisor, responsible for medical sculpting of Premature Anne.

Micah Jalbert, Product Designer, working on medical sculpting of Premature Anne.

Ben Tedeschi, Design & Human Factors Engineer.

Airway development.

Sami Langley, Laerdal Nursing Platform Director, says that Premature Anne could not have come to fruition without major collaboration between the Laerdal designers and engineers and the medical content experts of the NRP. "The engineers took what they thought was their best model to the medical experts," said Ms Langley, "and in one look, the physicians noticed things like, 'Her jaw is not quite right. Her ears are too low, her chest is too small, we need to see ribs, and her extremities are too flexed.' This kind of partnership contributed to an amazingly realistic model."

The NRP Steering Committee looked at Premature Anne several times during this year of medical sculpting and design. Many different materials were tried for the body, merging soft materials for pliability and a realistic feel, and hard materials for durability. Laerdal designers have a high regard for understanding the nuance of the final product; therefore, the manikin had to look right, feel realistic, and the airway, lungs, and umbilical reservoir had to work correctly.

The airway, probably the most critical feature of the manikin, required many hours of work. Ultimately the decision was made to pull the airway out of the single mold and create it separately. The medical sculptors worked on multiple versions of the airway.

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Premature Anne...

Testing of early concept design.

Later concept testing of Premature Anne.

As the medical artists listened to feedback from the experts and discussed modifications, they had to keep in mind that future work would include fitting the electronic parts and speakers into the tiny form without displacing the anatomy. This presented the engineers, Lowell Masley, Paul Griffith and Ralph Scott, with another major challenge. The internal system that works in SimNewB and larger simulators was not possible in Premature Anne. The engineers had to find a new solution to this dilemma.

The solution came from Bluetooth® components. The engineers started with devices off-the-shelf and modified them to fit the current SimPad®. When Bluetooth became the brain of the simulator function (appropriately placed in Premature Anne's head), she came to life with a weak cry, heart and lung sounds, grunting respirations, and cyanosis.

"The philosophy of 'getting it right' is part of the Laerdal Medical corporate culture that ensures the best possible products," says Greg Necessary, the engineer that led the team in Premature Anne's development at the Laerdal Medical plant in Texas. "We expect to have many iterations during design – and we did. We have to try and try again, we have to be open to new ways of doing things and figure out how to do them in the best possible way. Premature Anne was interesting to design because her small size made us think differently about what we had done before."

Paul Griffith, Engineer who co-led product design.

Lowell Masley, Engineer who co-led the product design on Premature Anne.

Clockwise, from L to R: Gary Weiner, MD, NRP Steering Committee Member; Greg Necessary, Product Development Manager; Sami Langley, Nursing Platform Director.

Ralph Scott, Electrical Engineer.

Skin tone color selection of Premature Anne.

Premature Anne side-by-side comparison with SimNewB®.

The NRP Steering Committee contributed to one of the final creative design issues: what color to make Premature Anne. A very premature baby in need of resuscitation would not be bright pink; however, a mottled blue baby would not be visually satisfying to learners at the end of a successful resuscitation. After much debate, the steering committee members unanimously agreed on a color they felt was appropriate throughout resuscitation and stabilization.

Once Premature Anne was anatomically and functionally correct, it was time to figure out how to make the best fit between the users and the tool. This was the role of the Laerdal Design and Human Factors Department. How do people hold a SimPad? Where should the start button be placed? Where should the icons be placed and in what order? What should the user guides include? Many solutions were piloted before finalization. Finally, Premature Anne was ready for testing. These handcrafted models were sent to NRP Steering Committee members at five beta sites where they were asked to use Premature Anne as they would normally use a manikin for simulation-based education. The goal was to discover not only her strengths, but also her weaknesses so that revisions could be made.

Additionally, models of Premature Anne went all over the world for review. On her trips to Australia, the United Kingdom, Austria, and Japan, medical providers put her through her paces and gave important feedback about which features met their training objectives and what was lacking. For example, the groups from Australia and Europe requested peripheral IV ports because these are used during neonatal resuscitation and stabilization in those regions of the world.

After many failures that led to success, a validated prototype was complete and handed off to the plant in Stavanger, Norway. That is where Premature Anne was further designed for industrialization and manufacturing.

The industrialization of Premature Anne is the topic of the next article on the development of this useful tool and will appear in the Spring/Summer issue of the *NRP Instructor Update*.

Premature Anne made her debut as a task trainer in October 2015, and will debut as a simulator in spring 2016. NRP instructors will find her realism and clinical features a valuable asset as they conduct simulation-based training that strives to improve team performance and the quality and safety of neonatal resuscitation, including even our smallest patients.

7th Edition NRP® Provider Status Requires All 11 Lessons

At its March 2015 meeting, the NRP Steering Committee voted unanimously to require all learners to take all 11 lessons of the 7th edition course to achieve NRP Provider status. There will no longer be an option for a "minimal course requirement" or for taking selected lessons of the course.

This decision was made after consultation with members of the Instructor Development Task Force and included valuable input from our liaisons from the National Association of Neonatal Nurses, American Association for Respiratory Care, and the American College of Obstetricians and Gynecologists liaisons.

Even though not all newborn health care providers are involved in delivery room resuscitation, any person managing newborn care may be called on to assist with neonatal resuscitation in the hospital. NRP Steering Committee members, liaisons, and consultants agreed that it is in the best interests of newborn safety to require all NRP providers to be familiar with all components of newborn resuscitation.

HealthStream's New Look

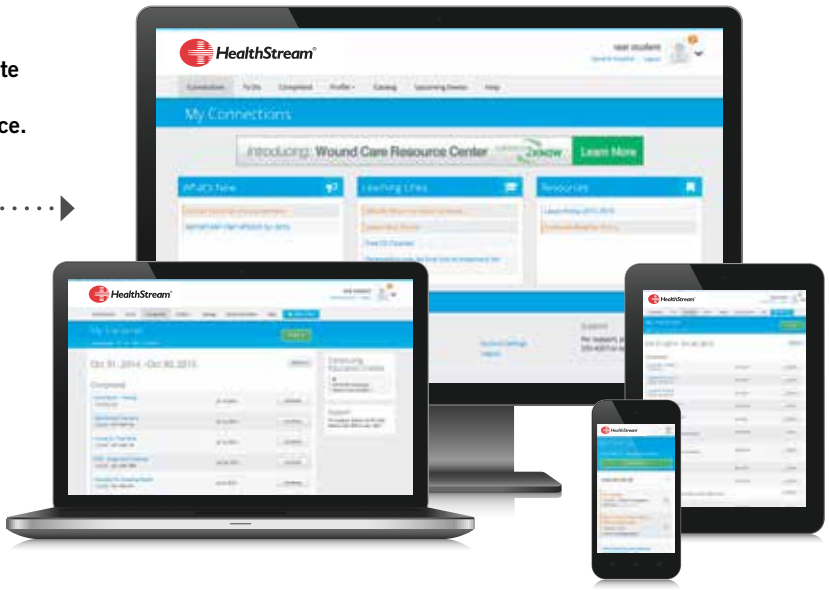
You will notice a fresh new look when you log into your HealthStream account due to a more intuitive user interface. To undertake the user interface redesign, HealthStream conducted usability studies with 200 individuals in 48 organizations over the course of 22 months. The overarching objective was for users to be able to complete their tasks faster, with more efficient functionality. Over 170,000 users piloted the new HealthStream experience from January through June 2015. Use of the new interface will be phased in to all participating healthcare organizations over the course of the next several months.

HealthStream®

Areas of concentration in the user interface redesign included more intuitive, guided workflows to allow for efficiency; one-click access and reduced scrolling; and interactive notifications to inform users as they complete various tasks and actions. NRP users will notice the following functionality as they navigate the new interface.

Mobile-First Responsive Web Design

The interface was built for the smallest screen first, and then built up to larger screen sizes such as a desktop monitor. This forces designers to focus their primary efforts on the most important information for the user on the smallest screen size, e.g. mobile phone.



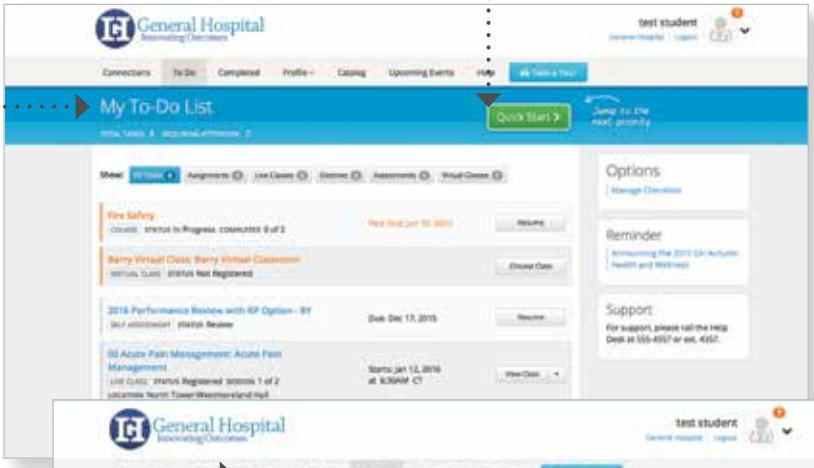
IF YOU WOULD LIKE TO SHARE FEEDBACK, PLEASE SEND AN EMAIL TO CUSTOMER SERVICE AT CUSTOMER.SERVICE@HEALTHSTREAM.COM.

The "Quick Start" Button

Jump to the next actionable item on the To-Do List and get work done faster.

The To-Do List

This is a single list of everything students need to get done, including assignments, electives, live classes and more. It makes task completion more straightforward and efficient.

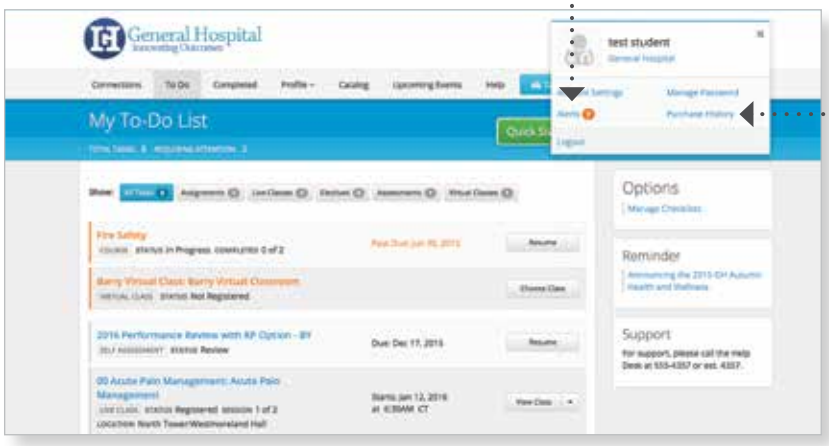


Transcript

Part of the new "Completed" tab, the transcript is easier to read with one-click access to certificates, including CE certificates. Users can sort the transcript alphabetically.

Interactive Notifications

Easy-to-see messages guide users as they complete actions, making the experience clear and informative. This makes the process of accessing and completing NRP requirements easier for both Instructors and Providers.



Retrieve Receipts for Purchased Courses

For courses purchased from the HLC catalog, receipts are now available at any time after the purchase. Previously, the user had only one chance to print the receipt after the purchase and had to contact HealthStream support to obtain proof of purchase.

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Summary of the Revised Neonatal Resuscitation Guidelines

EVERY 5 YEARS, ILCOR COORDINATES AN IN-DEPTH INTERNATIONAL REVIEW, DEBATES THE SCIENCE, AND DETERMINES NEW INTERNATIONAL RESUSCITATION TREATMENT RECOMMENDATIONS FOR NEWBORNS, CHILDREN, AND ADULTS.

Delayed Cord Clamping

Current evidence suggests that cord clamping should be delayed for at least 30 to 60 seconds for most vigorous term and preterm newborns. If the placental circulation is not intact, such as after a placental abruption, bleeding placenta previa, bleeding vasa previa, or cord avulsion, the cord should be clamped immediately after birth. There is insufficient evidence to recommend an approach to cord clamping for newborns who require resuscitation at birth.

Assessment of Heart Rate

Your initial assessment of the heart rate will be made using a stethoscope. Auscultation along the left side of the chest is the most accurate physical examination method of determining a newborn's heart rate. Although pulsations may be felt at the umbilical cord base, palpation is less accurate and may underestimate the true heart rate. If you cannot determine the heart rate by auscultating and the baby is not vigorous, quickly connect a pulse oximetry sensor or ECG leads and use a pulse oximeter or cardiac monitor to assess the heart rate.

- When PPV begins, consider using a cardiac monitor for accurate assessment of the heart rate.
- An electronic cardiac monitor is the preferred method for assessing heart rate during chest compressions.

Oxygen Management

Resuscitation (positive-pressure ventilation) of newborns greater than or equal to 35 weeks' gestation begins with 21% oxygen (room air). Positive-pressure ventilation of newborns less than 35 weeks' gestation begins with 21-30% oxygen.

Free-flow oxygen administration may begin at 30%. Using the blender, adjust the oxygen concentration as needed to achieve the oxygen saturation target by pulse oximetry.

If the newborn has labored breathing or oxygen saturation cannot be maintained with the target range despite 100% free flow oxygen, consider a trial of CPAP.

Positive-Pressure Ventilation

If PPV is required for resuscitation of a preterm newborn, it is preferable to use a device that can provide positive end expiratory pressure (PEEP). Using PEEP (5 cm H_20) helps the baby's lungs to remain inflated between positive pressure breaths.

When PPV begins, the assistant listens for increasing heart rate for the first 15 seconds of PPV.

- If the assistant announces "heart rate is increasing," PPV continues for another 15 seconds, then HR is re-assessed.
- If the assistant announces "heart rate is not increasing, chest is moving," PPV continues for another 15 seconds, then HR is re-assessed.
- If the assistant announces "the heart rate is not increasing and the chest is not moving," ventilation corrective steps (MR. SOPA) are administered until the chest moves with ventilation. The assistant announces, "The chest is moving now. Ventilate for 30 seconds." Reassess the heart rate after 30 seconds of PPV that moves the chest.

The second assessment of HR is performed after 30 seconds of PPV that moves the chest.

- If HR is at least 100 bpm: continue PPV 40-60 breaths/minute until spontaneous effort.
- If HR is 60-99 bpm: reassess ventilation. Perform ventilation corrective steps if necessary.
- If HR is less than 60 bpm: reassess ventilation. Perform ventilation corrective steps if necessary. Insert an alternative airway (ET tube or laryngeal mask). If no improvement in HR but chest is moving with PPV, begin 100% oxygen and chest compressions.

Chest Compressions

Intubation is strongly recommended prior to beginning chest compressions. If intubation is not successful or not feasible, a laryngeal mask may be used. To determine tip-to-lip depth of the endotracheal tube after insertion, use the endotracheal tube initial insertion depth table or measure the nasal-tragus length (NTL).

- Chest compressions are administered with the two-thumb technique.
- Once the endotracheal tube or laryngeal mask is secured, the compressor administers chest compressions from the head of the newborn.
- Chest compressions continue for 60 seconds prior to checking a heart rate.

Medication

The recommended solution for acutely treating hypovolemia is 0.9% NaCl (normal saline) or type-O Rh-negative blood. Ringer's lactate is no longer recommended for treating hypovolemia.

All medications and fluids that can be infused into a UVC can be infused into an intraosseous needle in term and preterm newborns.

Thermoregulation and Stabilization of Preterm Newborns

In preparation for the birth of a preterm newborn, increase the temperature in the room where the baby will receive initial care to approximately 23-25° C (74-77° F).

For newborns less than 32 weeks' gestation, it is recommended that you:

- Cover the newborn in food-grade plastic wrap or bag and use a hat and thermal mattress.
- Use a 3-lead electronic cardiac monitor (ECG) with chest leads or limb leads to provide a rapid and reliable method of continuously displaying the baby's heart rate if the pulse oximeter has difficulty acquiring a stable signal.
- Consider using CPAP immediately after birth as an alternative to routine intubation and prophylactic surfactant administration. Many preterm babies can be treated with early CPAP and avoid the risks of intubation and mechanical ventilation. Criteria for CPAP usage and the administration of prophylactic surfactant should be developed in coordination with local experts.

Ethics and Care at the End of Life

If the responsible physicians believe that there is no chance for survival, initiation of resuscitation is not an ethical treatment option and should not be offered. Examples include birth at a confirmed gestational age of less than 22 weeks' gestation and some congenital malformations and chromosomal anomalies.

In conditions associated with a high risk of mortality or significant burden of morbidity for the baby, caregivers should discuss the risks and benefits of life-sustaining treatment and allow the parents to participate in the decision whether attempting resuscitation is in their baby's best interest. If there is agreement between the parents and the caregivers that intensive medical care will not improve the chances for the newborn's survival or will pose an unacceptable burden on the child, it is ethical to provide compassionate palliative care and not initiate resuscitation.

A summary handout of the AAP/AHA Guidelines for CPR and ECC of the Neonate (available in English and Spanish) can be found at the following URL: www2.aap.org/nrp.

2016 NRP® Research Grant and Young Investigator Award Call for Applications

The American Academy of Pediatrics Neonatal Resuscitation Program (NRP) Steering Committee is pleased to announce the availability of the 2016 NRP Research Grant and Young Investigator Awards. The awards are designed to support basic science, clinical, or epidemiological research pertaining to the broad area of neonatal resuscitation.

Physicians in training or individuals within four years of completing fellowship training are eligible to apply for up to $15,000 through the **NRP Young Investigator Award**. Any health care professional with an interest in neonatal resuscitation can submit a proposal for up to $50,000 through the **NRP Research Grant Program**.

Grants are currently available to fund research projects in the United States and Canada.

The NRP Research Grant and Young Investigator Award Program Guidelines and Intent for Application will be available in January 2016. To obtain a copy of the guidelines, a list of potential research topics, or a list of previously funded studies, please visit the NRP website at www.aap.org/nrp and select the "Science" tab.

Mark Your Calendar With These Important Dates!

- Launch of new NRP Database and Learning Management System
- NRP 7th Edition *Textbook of Neonatal Resuscitation*, reference materials, online examination, instructor application, and online instructor course

SPRING 2016

OCTOBER 21st 2016

- NRP Current Issues Seminar in San Francisco, CA

- 7th Edition mandatory implementation date
- NRP Regional Trainer title retirement

JANUARY 1st 2017

Welcome and Farewell

In July 2015, the NRP Steering Committee welcomed both a new cochair and a new general member. The AAP and NRP Steering Committee also recognized those leaving for their efforts, commitment, and dedication.

Marilyn Escobedo, MD, FAAP is taking over the NRP Steering Committee Cochair reins from Dr Myra Wyckoff. Dr Escobedo previously served on the NRP Steering Committee as the liaison from the AAP's Perinatal Section in the late '90s and then as a general member from 2003-2009. Dr Escobedo has been actively involved in the International Liaison Committee on Resuscitation (ILCOR) Neonatal Task Force participating in evidence review and development of scientific recommendations impacting neonatal resuscitation for the last 15 years. She is the Reba McEntire Endowed Chair in Neonatology and Chief of the Section of Neonatal-Perinatal Medicine at the University of Oklahoma College of Medicine.

Dr Wyckoff will continue to serve as a liaison to the NRP Steering Committee as she transitions into her new role as cochair of the ILCOR Neonatal Delegation.

One of the newest members of the NRP Steering Committee is Vishal Kapadia, MD, FAAP, Assistant Professor of Pediatrics at University of Texas Southwestern Medical Center. He takes over for Chris Colby, MD, FAAP who served on the NRP Steering Committee for the past six years. Dr Kapadia was an evidence reviewer for the 2015 ILCOR Consensus Conference. He has served as the primary investigator for numerous key NRP reference studies and is currently the primary investigator for an NRP Research Grant. He has assisted in beta testing simulators for the AAP and recently served as onscreen talent in the NRP Instructor Course filming.

Thank you, Dr Wyckoff and Dr Colby, for your tremendous contributions, continued dedication, and enthusiasm during your tenure on Steering Committee. Please know that your outstanding efforts and innovations have inspired the Committee, and moved the NRP forward.

Follow @AAPGlobalHealth on Twitter

Did you know that AAP has a new Twitter handle dedicated to highlighting global child health news and activities? Launched in April 2015, this global health twitter handle is targeted at both AAP members, as well as any globally-focused health professional. The handle shares original content about the Academy's work, news from partners and campaigns, and messages spotlighting our members' international efforts. We encourage you to join the conversation by following @AAPGlobalHealth.

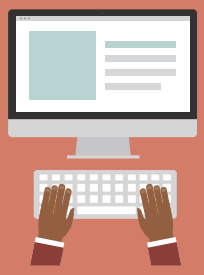
What is Included in the **NRP® Instructor Toolkit?**

Instructional Resources

All resources are in one location and keyword searchable. No need to purchase a separate NRP Instructor Manual or Instructor DVD

Continuing Education Credits

Continuing education credit will be offered for the Instructor Examination



Downloadable Materials

Downloadable PDFs of commonly used documents and checklists

Multimedia

Videos, webinars and podcasts from neonatal resuscitation experts

Frequent Updates

New educational material and resources will be added throughout the entire 7th Edition

◀ Tear off to keep as a handy reference.

IMPORTANT INFORMATION!

7th Edition NRP® eSim® Browser Requirements

NRP eSim is a new online neonatal resuscitation simulation exercise required for achieving NRP provider status with the 7th Edition. This new methodology allows learners to integrate the NRP algorithmic steps in a virtual environment. Outlined below are important details on the eSim internet browser requirements.

Minimum Internet Browser Requirements

- **Chrome, latest version**
- **Internet Explorer 9 (IE9) or newer**

Why Internet Explorer 9 or newer?

- Use on multiple device types
- Highest level of functionality
- Lifelike animations to enhance the user experience
- Avoid unsecured and unsupported browsers
- Microsoft® will no longer support IE7 or IE8 after 1/12/2016

Workarounds

Workarounds

1. Take the NRP 7th Edition Exam on IE7 or IE8
2. Install Chrome, latest version, on 1 or more computers with IE7 or IE8
3. Use NRP 6th Edition until December 31, 2016 (Microsoft® will no longer support IE7 or IE8 beginning January 12, 2016)

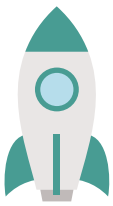
Implementation

- → Have 1 computer or tablet with IE9 for learners to complete eSims
- → Chrome can be installed without needing administrative rights*

  **Follow your institution's policy on installing software*
- → Upgrade to IE9 or newer or install latest version of Chrome, by January 1, 2017

Preparing for the New Requirement

- Contact your IT Department to learn which IE browser is currently utilized at your institution, when they plan to upgrade, or if there are PCs available with an updated browser
- Secure additional device resources and/or add Chrome



New Browser Launch

NRP 7th Edition launches spring 2016 with a required implementation date of January 1, 2017

Log onto aap.org/nrp and click on the "7th Ed Info" tab for additional information and a quick browser check

Tear off to keep as a handy reference. ▶