

Part 6

Heartsaver Pediatric First Aid CPR AED Lesson Plans

Heartsaver Pediatric First Aid CPR AED Lesson Plans, Instructor-Led Course

Precourse

30 to 60 Days Before the Course

- Determine course specifics:
 - Class audience, including their professions and how the skills taught during this course will translate to their on-the-job performance
 - Number of students
 - Special needs or extra equipment needed
- Reserve equipment.
- Schedule a room that meets the room requirements for the Heartsaver course.
- Schedule additional instructors if needed.



Instructor Tip

Review course materials and anticipate questions or challenges that might arise during class. The time you invest in preparing makes it easier for you to focus on your students and their success.

At Least 3 Weeks Before the Course

- Send students precourse letters, student materials, and the course agenda.
- Confirm additional scheduled instructors.
- Research Good Samaritan laws that pertain to your area. This will help when answering student questions during the course.

Day Before the Course

- Confirm room reservations and that required equipment is available for the course.
- Set up the room and make sure that all technology and equipment are working properly (can also be done the day of the course).
- Locate the nearest AED and confirm the emergency response number.
- Coordinate with additional instructors on their roles and responsibilities for the class.
- Ensure that all course paperwork is in order.

Day of the Course

Arrive at the course location early to complete the following:

- Make sure equipment is working and has been cleaned according to manufacturer instructions.
- Check that video is working properly with sound.
- Distribute supplies to the students; you can also set the supplies on a table and tell students as they arrive what they need to collect.
- Greet students as they arrive to put them at ease, and direct them where to go.
- Have students complete the course roster as they arrive.
- If running behind schedule, consider grouping videos, followed by breaks.

Child CPR AED Lesson Plans

Lesson 1

Child CPR AED Introduction

14 minutes (12 min required)

Learning Objective

- Demonstrate how to assess the scene in the event of an emergency



Discussion

- Introduce yourself and additional instructors, if present.
- Invite students to introduce themselves and ask them about their occupations and interest in taking the class so that you can best meet their needs.
- Explain that the course is interactive. Refer to the following points for discussion with students:
 - Your role
 - Video-based learning
 - Use of scenarios
 - Practice while watching
 - Use of the student workbook
 - Exam (if required)
 - Skills test
- Ask that students who anticipate difficulties with the skills test due to personal limitations, such as a medical concern or knee or back problems, speak with one of the instructors.
- Explain the layout of the building, including bathrooms and emergency exits.
- Remind students of where the nearest AED is located and what their emergency response number is.
- Describe the course agenda, and tell students when breaks are scheduled and what time the course will end.

Remind students what they will learn during the course:

- Demonstrate how to assess the scene in the event of an emergency involving a child or an infant
- Describe how CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when a child or an infant needs CPR
- Perform CPR on a child, an infant, and an adult
- Describe how to perform CPR with help from others



Instructor Tips

- Throughout the course lesson plans, the AHA has added Guiding Questions to support your instruction. Present these questions to students before you play each video to help them focus on the most important objectives. The answers are provided for discussion after the video.
- When answering questions, acknowledge the person with eye contact, and then answer to the entire room. Come back to the questioner periodically.
- When leading discussions, ask students open-ended questions that focus on their perspectives. This helps to engage their minds and increase their participation.



Instructor Tips

- Make yourself available during breaks so that students can ask questions they don't want to ask in front of the class. You can also establish rapport and get feedback.
- Don't interrupt a video when you have comments to add. Students do not learn well when they are trying to listen to more than one thing at once.
- Instead, write your comments down and discuss them at the end of the video.

- Demonstrate giving effective breaths by using mouth-to-mouth or a mask
- Describe how to use an AED on a child and an infant
- Demonstrate using an AED on an adult
- Describe when and how to help a choking child, infant, and adult
- Discuss how to help someone experiencing an opioid-associated emergency
- Recognize the techniques that help prevent pediatric drowning emergencies
- Discuss initial actions to take when helping a child or person who has drowned
- Discuss how universal precautions, PPE, and handwashing can protect against germs and disease
- List the priorities, roles, and responsibilities of first aid responders
- Describe the key steps in pediatric first aid
- Describe the steps to remove protective gloves
- Demonstrate the steps to respond to a pediatric first aid emergency
- Describe the assessment and first aid actions for the following life-threatening conditions: difficulty breathing, choking, heat-related injuries (dehydration), severe bleeding, pediatric shock, and diabetes and low blood sugar
- Describe how to use an epinephrine autoinjector
- Demonstrate how to control bleeding and apply direct pressure and a bandage
- Recognize elements of common pediatric illnesses and injuries
- Remind students of what they will practice and be tested on during the classroom portion of the course.
- Remind students of the course completion requirements:
 - Students must pass the skills test(s).
 - To pass the optional exam, students must score at least 84%.



Play Videos

- Play **Survivor Stories: Sabine's Story** (*optional*).
- Play **Pediatric CPR AED Introduction**.
- Play **Pediatric CPR: Responding to a Medical Emergency**.



Practice While Watching: Child Medical Emergency

- Have students position themselves at the side of their manikins per the video instructions.
- Ask students to recall the steps of scene safety and assessment, and tell them that they will now practice the scene safety and assessment sequence as they follow along with the video.
 - Assess the scene for safety.
 - Verbalize that the scene is safe.
 - Check for responsiveness by tapping and shouting.
 - Shout for help (when help arrives, designate someone to call the local emergency response number and someone to get an AED).
 - Check if the child is breathing for at least 5 but no more than 10 seconds.
- Remember, if the child is unresponsive and not breathing or not breathing normally, start CPR immediately.
- Repeat the practice-while-watching segment until all students complete the practice.

Lesson 2

Child CPR

30 minutes

Learning Objectives

- Describe how CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when a child needs CPR
- Perform CPR on a child
- Describe how to perform CPR with help from others
- Demonstrate giving effective breaths by using mouth-to-mouth or a mask



Play Video

- Play **Child CPR: Compressions**.



Practice While Watching: Child Compressions

- Tell students that they will complete 2 sets of 30 compressions.
- Have students count out loud while they provide compressions.
- As you observe students and give feedback, emphasize these core concepts:
 - Hand placement: heel of 1 hand, or 2 hands
 - Rate: 100 to 120/min
 - Depth: at least one third the depth of the chest, or about 5 cm
 - Complete chest recoil
- Repeat the practice-while-watching segment until all students complete the practice.



Instructor Tips

- Don't interrupt a video when you have comments to add. Students do not learn well when they are trying to listen to more than one thing at once.
- Instead, write your comments down and discuss them at the end of the video.



Instructor Tips

- Observe students and provide positive and corrective feedback on their performance. Ask for what you want students to do—not what you don't.
- Repeat the practice until all students complete the practice session.
- If students need informal remediation on a skill, go to the Lessons menu in the video and find the video segment for that skill.



Play Video

- Play **Child CPR: Breaths**.



Practice While Watching: Child Breaths (Mouth-to-Mouth)

- Tell students that they will practice giving mouth-to-mouth breaths. They'll perform 3 sets of 2 breaths.
- Ask students to take off lipstick and remove gum.
- Before beginning practice with mouth-to-mouth:
 - Put one hand on the forehead and the fingers of your other hand on the bony part of the chin.

- Tilt the head back and lift the chin.
- While holding the airway open, pinch the nose closed with your thumb and forefinger.
- Take a normal breath. Cover the manikin's mouth with your mouth.
- Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Child Breaths (Pocket Mask)

- Tell students that they will practice giving breaths with a pocket mask. They'll perform 3 sets of 2 breaths.
- Before beginning practice with the pocket mask:
 - Put the mask over the manikin's mouth and nose. If the mask has a narrow, pointed end, put that end on the bridge of the nose; position the wide end so it covers the mouth.
 - Tilt the head and lift the chin while pressing the mask against the manikin's face. It is important to make an airtight seal between the manikin's face and the mask while you lift the chin to keep the airway open.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise. When giving breaths using a pocket mask, you may also need to reposition the mask.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Child CPR

- Students will practice providing chest compressions and giving breaths (by mouth-to-mouth or with a pocket mask).
- Students will complete 2 cycles of 30 compressions and 2 breaths.
 - Reminder: On the Child CPR Skills Test, you have the option to test students on giving breaths by mouth-to-mouth (with a barrier device) or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.



Discussion

- When should you call the local emergency response number when you perform compressions on a child?
 - If no one comes to help and you have a cell phone, call the local emergency response number and put it on speaker mode so that you can hear the emergency dispatcher's instructions and your hands are free to perform CPR right away.
 - If you're alone and don't have a phone and the child is unresponsive and not breathing, first perform 5 cycles of 30 compressions and 2 breaths before you leave to call the local emergency response number and get an AED if one is nearby.
- What are the steps for assessment?
 - Make sure the scene is safe.
 - Tap and shout (check for responsiveness).
 - Shout for help.
 - Send someone to call the local emergency response number and get an AED.
 - Check for breathing for at least 5 but no more than 10 seconds.
- What are some characteristics of CPR?
 - Use the heel of one hand to give compressions. You can also use 2 hands depending on the size of the child.
 - Perform compressions at a rate of 100 to 120/min.
 - Push down at least one third the depth of the chest, or about 5 cm.
 - Let the chest come back up to its normal position after each compression.
 - Give breaths quickly and effectively without interrupting compressions for more than 10 seconds.
 - When giving breaths, only provide enough of a breath to see chest rise.

Lesson 3

Use an AED on a Child

10 minutes

Learning Objective

- Describe how to use an AED on a child



Play Video

- Play **Child CPR: Using an AED**.
- **Guiding question:**
 - What are some of the differences between using an AED on an adult vs a child?
 - Pad size and placement



Discussion

- Emphasize following the AED prompts.
- Remind students that the AED trainer in class will not give a real shock.
- Remind students of these AED special considerations, such as if a child
 - Is lying in water or water is covering their chest
 - Has an implanted defibrillator or pacemaker
 - Is wearing jewelry



Instructor Tip

The AED may include multiple sets of pads. For this lesson, focus on the use of an AED on a child.



Students Practice: Using an AED

- Turn the AED on and follow the prompts.
- Turn it on by pushing the On button or lifting the lid.
- Follow the prompts, which will tell you everything you need to do.
- Attach the AED pads. Before you place the pads, quickly scan the child to see if there are any special situations that might require additional steps.
 - Use the child pads if the child is younger than 8 years. If child pads are not available, use adult pads.
 - Use adult pads if the child is 8 years or older.
 - Peel away the backing from the pads.
 - Following the pictures on the pads, attach them to the child's bare chest. Make sure the pads do not touch each other. For smaller children and infants, place one pad on the center of the chest and the other pad on the center of the upper back.
 - Plug the pads connector into the AED, if necessary.



Instructor Tips

- When leading discussions, ask students open-ended questions that focus on their perspective. This helps to engage their minds and increase their participation.
- When answering questions, acknowledge the individual with eye contact, and then answer to the entire room. Come back to the questioner periodically.

- Let the AED analyze.
 - Loudly state, “Clear,” and make sure that no one is touching the child.
 - The AED will analyze the heart rhythm.
 - If the AED tells you a shock is not needed, resume CPR.
- Deliver a shock if needed.
 - Loudly state, “Clear,” and make sure that no one is touching the child.
 - Push the Shock button.
 - Immediately resume CPR.



Play Video

- Play **Put It All Together: Child CPR**.



Students Practice: Putting It All Together

- Students will practice putting it all together by practicing scene safety and assessment, providing child chest compressions, giving breaths (by mouth-to-mouth or with a pocket mask), and using an AED.
- On the Child CPR and AED Skills Test, you have the option to test students on giving breaths by mouth-to-mouth or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- When providing feedback on students’ performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.

Summary

Child CPR AED

2 minutes



Discussion

To prepare students for the Child CPR Skills Test, review the following questions with the class. Also encourage students to review their Child CPR Skills Testing Checklist.

- What are the steps for responding to a medical emergency?
 - Make sure the scene is safe.
 - Tap and shout (check for responsiveness).
 - Shout for help.
 - Send someone to call the local emergency response number and get an AED
 - Check for breathing for at least 5 but no more than 10 seconds.
- What are some characteristics of CPR in a child?
 - Perform compressions at a rate of 100 to 120/min.
 - Push down at least one third the depth of the chest, or about 5 cm.
 - Do not lean on the chest.
 - Let the chest come back up to its normal position.
 - Give breaths quickly and effectively without interrupting compressions for more than 10 seconds.



Instructor Tip

Allow enough time for students to review, practice, and ask questions before beginning the skills test.

Lesson 4

Child CPR Skills Test

15 minutes



Discussion

Read the following testing script aloud to the student (may be read to all students at once):

"This test is like a realistic emergency situation. You should do whatever you think is necessary to save the child's life. You will have to determine for yourself what you need to do. I will read a short scenario to you, but I won't be able to answer any questions. You can treat me like another rescuer who has arrived with you and tell me to do something to help you. If you make a mistake or forget to do something important, you should not stop. Just do your best to correct the error. Continue doing what you would do in an actual emergency until I tell you to stop. Do you have any questions before we start?"



Instructor Tips

- Be prepared and organized with student skills testing checklists. Review these before class and have all materials ready to properly test students on every step.
- When using multiple instructors for a class, especially when there are many students, assign each instructor a different role (eg, testing, monitoring the exam, remediation) to stay on schedule.
- Provide students a private setting for skills testing, if needed.



Skills Test

- Follow the Child CPR Skills Testing Checklist and check off each skill the student performs correctly. Leave steps they miss blank.
- After starting, if the student asks questions about the skills or sequences, tell the student, "Do what you think is best right now." If the student asks questions about what to do with the manikin, tell the student, "Check the manikin yourself and do what you think is needed to save a life." If the student seems unsure, explain that they will be assessing the manikin as if it were a real child and doing whatever is necessary.

Remediation

- For students who need remediation, refer to the remediation lesson plan.

Lesson 5

Child Choking

3 minutes

Learning Objective

- Describe when and how to help a choking child



Play Video

- Play **Child Choking Relief**.
- **Guiding question:**
 - What is the difference with your body position when you give thrusts to a child vs when you give thrusts to an adult?
 - You may need to kneel to perform thrusts because of a child's size.



Discussion

Ask students the following questions:

- What is the difference with your body position when you give thrusts to a child vs when you give thrusts to an adult?
 - You may need to kneel to perform thrusts because of a child's size
- Where should you give thrusts for a severely choking child?
 - Slightly above the belly button for abdominal thrusts
 - For a large child: center of the chest for chest thrusts
- How should you give back blows for a child who is severely choking?
 - Put one foot in front of the other to give yourself a steady base. You may need to kneel behind the child.
 - Place one hand on the child's shoulder
 - Use the heel of your other hand to give them 5 forceful back blows between the shoulder blades.
 - If the object does not come out after 5 back blows, give 5 chest thrusts.
- What should you do for a choking child who becomes unresponsive?
 - Lower the child gently to the ground and start CPR. Every time you open the airway to give breaths, look for the object in the back of the throat. If you see an object, take it out.

Lesson 6

Water Competency and Drowning

5 minutes

Learning Objectives

- Recognize the techniques that help prevent drowning emergencies
- Discuss initial actions to take when helping someone who has drowned



Play Video

- Play **Water Competency and Drowning**.



Discussion

Ask students the following questions and discuss:

- What are some ways you can be water smart?
 - Have a fence that is at least 1.2 meters tall and includes a self-closing and self-latching gate surrounding your pool. This prevents more than 50% of swimming pool drownings of young children.
 - Take swimming lessons.
 - Wear an approved life jacket around open water, even if you're a strong swimmer.
 - Closely watch small children around water.
- What's the safest way to help a drowning person?
 - Stay out of the water, and give them something to grab onto, like a pole or flotation device.
- Why would giving breaths before chest compressions be recommended for a person who has drowned?
 - The most likely cause of cardiac arrest for someone who has drowned is lack of oxygen.

Infant CPR AED Lesson Plans

Lesson 1

Infant CPR AED Introduction

5 minutes (3 min required)

Learning Objective

- Demonstrate how to assess the scene in the event of an emergency involving an infant



Play Video

- Play **Pediatric CPR: Responding to a Medical Emergency** (*skip this video if you've already shown it during Child CPR AED*).
- **Guiding question:**
 - What's different about checking for responsiveness when responding to an infant emergency?
 - With infants, you will tap their feet (rather than their shoulders as in an emergency involving an adult or child).



Practice While Watching: Infant Medical Emergency

- Have students position themselves at the side of their manikins per the video instructions.
 - Ask students to recall the steps of scene safety and assessment, and tell students that they will now practice as they follow along with the video.
 - Assess the scene for safety.
 - Verbalize that the scene is safe.
 - Check for responsiveness by tapping and shouting.
 - Shout for help (when help arrives, designate someone to call the local emergency response number and someone to get an AED).
 - Check if the infant is breathing for at least 5 but no more than 10 seconds.
 - Remember, if the infant is unresponsive and not breathing or not breathing normally, start CPR immediately.
- Repeat the practice-while-watching segment until all students complete the practice.

Lesson 2

Infant CPR

25 minutes

Learning Objectives

- Describe how CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when an infant needs CPR
- Perform CPR on an infant
- Describe how to perform CPR with help from others
- Demonstrate giving effective breaths by using mouth-to-mouth-and-nose or a mask



Play Video

- Play **Infant CPR: Compressions**.
- **Guiding question:**
 - In what ways are compressions for infants different from adults and children?
 - You can use 2 thumbs side by side on an infant's chest while you encircle the infant's chest with the fingers of both hands, or you can use the heel of one hand. Only use the heel of one hand if you can't reach the appropriate depth with the other option.



Practice While Watching: Infant Compressions

- Have students practice infant chest compressions and complete 2 sets of 30 compressions. Ask students to count out loud while they provide compressions.
- Observe students and provide feedback, emphasizing the core concepts:
 - Hand placement: 2 thumb–encircling hands technique or the heel of one hand
 - Rate: 100 to 120/min
 - Depth: at least one third the depth of the chest, or about 4 cm
 - Complete chest recoil
- Repeat the practice-while-watching segment until all students complete the practice.
 - Remind students that they can use the 2 thumb–encircling hands technique or the heel of one hand to practice giving compressions.



Instructor Tip

Always give positive and corrective feedback when observing students practicing the skills. Focus on what you want students to do rather than on what you don't.



Play Video

- Play **Infant CPR: Breaths**.
- **Guiding question:**
 - Why is it so important to provide compressions and breaths for an infant?
 - Infants and children usually have healthy hearts. When their heart stops, it's often because they can't breathe or are having trouble breathing.



Practice While Watching: Infant Breaths (Mouth-to-Mouth-and-Nose)

- Tell students that they will practice giving mouth-to-mouth-and-nose breaths. They'll perform 3 sets of 2 breaths.
- Ask students to take off lipstick and remove gum.
- Before beginning practice with mouth-to-mouth-and-nose:
 - Put one hand on the forehead and the fingers of your other hand on the bony part of the chin.
 - Tilt the head back and lift the chin.
 - Take a normal breath. Cover the manikin's mouth and nose with your mouth.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Infant Breaths (Pocket Mask)

- Tell students that they will practice giving breaths with a pocket mask. They'll perform 3 sets of 2 breaths.
- Before beginning practice with the pocket mask:
 - Put the mask over the manikin's mouth and nose. If the mask has a narrow, pointed end, put that end on the bridge of the nose; position the wide end so it covers the mouth.
 - Tilt the head and lift the chin while pressing the mask against the manikin's face. It is important to make an airtight seal between the manikin's face and the mask while you lift the chin to keep the airway open.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise. When giving breaths using a pocket mask, you may also need to reposition the mask.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Infant CPR

- Students will practice providing compressions and giving breaths (by mouth-to-mouth-and-nose or with a pocket mask).
- Students will complete 2 sets of 30 compressions and 2 breaths.
 - *Reminder:* On the Infant CPR Skills Test, you have the option to test students on giving breaths by mouth-to-mouth-and-nose (with a barrier device) or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.

Lesson 3

Use an AED on an Infant

10 minutes

Learning Objective

- Describe how to use an AED on an infant



Play Video

- Play **Infant CPR: Using an AED**.



Students Practice: Using an AED

- First, show the steps as you use your AED trainer, and then have students practice.
- Emphasize these steps:
 - Turn the AED on and follow the prompts.
 - Turn it on by pushing the On button or lifting the lid.
 - Follow the prompts, which will tell you everything you need to do.
 - Attach the pads.
 - Select the correct pad size for infants.
 - Use child pads if the person is younger than 8 years. If child pads are not available, use adult pads.
 - Use adult pads if the person is 8 years or older.
 - Peel away the backing from the pads.
 - Following the pictures on the pads, attach them to the infant's bare chest and center of the upper back.
 - Plug the pads connector into the AED, if necessary.
 - Let the AED analyze.
 - Loudly state, "Clear," and make sure that no one is touching the infant.
 - The AED will analyze the heart rhythm.
 - If the AED tells you a shock is not needed, resume CPR.
 - Deliver a shock if needed.
 - Loudly state, "Clear," and make sure that no one is touching the infant.
 - Push the Shock button.
 - Immediately resume CPR.



Play Video

- Play **Put It All Together: Infant CPR**.



Students Practice: Putting It All Together

- Students will practice putting it all together by checking scene safety, assessing an infant's responsiveness and breathing, providing chest compressions, giving breaths, and using an AED.
- On the Infant CPR Skills Test, you can choose how students will give breaths (by mouth-to-mouth-and-nose or with a pocket mask), so have them practice the one that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.

Summary

Infant CPR AED

2 minutes



Discussion

To prepare students for the Infant CPR Skills Test, review the following questions with the class. Also encourage students to review their Infant CPR Skills Testing Checklist.

- What are the steps for assessment?
 - Make sure the scene is safe.
 - Tap and shout (check for responsiveness).
 - Shout for help.
 - Send someone to call the local emergency response number and get an AED.
 - Check for breathing for at least 5 but no more than 10 seconds.
- When should you call the local emergency response number when performing compressions on an infant?
 - If no one comes to help and you have a cell phone, call the local emergency response number and put it on speaker mode so that you can hear the emergency dispatcher's instructions and your hands are free to perform CPR.
 - If you're alone and don't have a phone and the infant is unresponsive and not breathing, first provide 5 cycles of 30 compressions and 2 breaths before you leave to call the local emergency response number and get an AED if one is nearby.
- What are some characteristics of infant CPR?
 - Use 2 thumbs or the heel of one hand to give compressions.
 - Perform compressions at a rate of 100 to 120/min.
 - Push down at least one third the depth of the chest, or about 4 cm.
 - Let the chest come back up to its normal position after each compression.
 - Give breaths quickly and effectively without interrupting compressions for more than 10 seconds.
 - When giving breaths, only provide enough of a breath to see chest rise.



Instructor Tip

Allow enough time for students to review, practice, and ask questions before beginning the skills test.

Lesson 4

Infant CPR Skills Test

15 minutes



Discussion

Read the following testing script aloud to the student (may be read to all students at once):

"This test is like a realistic emergency situation. You should do whatever you think is necessary to save the infant's life. You will have to determine for yourself what you need to do. I will read a short scenario to you, but I won't be able to answer any questions. You can treat me like another rescuer who has arrived with you and tell me to do something to help you. If you make a mistake or forget to do something important, you should not stop. Just do your best to correct the error. Continue doing what you would do in an actual emergency until I tell you to stop. Do you have any questions before we start?"



Instructor Tips

- Be prepared and organized with student skills testing checklists. Review these before class and have all materials ready to properly test students on every step.
- When using multiple instructors for a class, especially when there are many students, assign each instructor a different role (eg, testing, monitoring the exam, remediation) to stay on schedule.
- Provide students a private setting for skills testing, if needed.



Skills Test

- Follow the Infant CPR Skills Testing Checklist and check off each step as the student performs it correctly. Leave steps they miss blank.
- After starting, if the student asks questions about the skills or sequences, tell the student, "Do what you think is best right now." If the student asks what to do with the manikin, tell them, "Check the manikin yourself and do what you think is needed to save a life." If the student seems unsure, explain that they will be assessing the manikin as if it were a real infant and doing whatever is necessary.

Remediation

- For students who need remediation, refer to the remediation lesson plan.

Lesson 5

Infant Choking

10 minutes (8 min required)

Learning Objective

- Demonstrate how to help a choking infant



Play Videos

- Play **Survivor Stories: Tammy's Story** (*optional*).
- Play **Infant Choking Relief**.
- **Guiding question:**
 - What is one of the most important components to infant choking relief?
 - Always support an infant's head as you alternate between back blows and chest thrusts.



Practice While Watching: Infant Choking Relief

- Tell students that they will complete 1 cycle of 5 back blows and 5 chest thrusts, following along with the video.
- Observe students and provide feedback.
- Repeat the practice-while-watching segment until all students complete the practice.

Summary

Infant Choking

2 minutes



Discussion

Ask students the following questions:

- How should you give back blows for an infant who is severely choking?
 - Place the infant facedown on your forearm.
 - Support their head and jaw with your hand and rest your forearm on your lap or thigh to support their body.
 - Make sure their head is lower than the rest of their body.
 - With the heel of your free hand, give 5 firm back blows between the infant's shoulder blades
 - If the object does not come out after 5 back blows, give 5 chest thrusts.
- What should you do for a choking infant who becomes unresponsive?
 - Place the infant on a firm, flat surface, and start CPR. Every time you open the airway to give breaths, look for the object in the back of the throat. If you see an object, take it out.

If you are not teaching Adult CPR AED, go to the Pediatric First Aid section.

Adult CPR AED Lesson Plans

Lesson 1

Adult CPR AED Introduction

6 minutes



Play Video

- Play **Survivor Stories: Andy and Sydney's Story**.

Lesson 2

Adult CPR

30 minutes

Learning Objectives

- Demonstrate how to assess the scene in the event of an emergency
- Describe how CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when someone needs CPR
- Perform CPR on an adult
- Describe how to perform CPR with help from others
- Demonstrate giving effective breaths by using mouth-to-mouth or a mask



Play Video

- Play **Adult CPR: Responding to a Medical Emergency**.

- **Guiding questions:**

- What should you say out loud when helping someone experiencing a medical emergency?
 - The scene is safe.
- What 2 conditions determine the need to perform CPR?
 - Not responding *and* not breathing or not breathing normally



Instructor Tip

Encourage students to use their workbook during class.



Practice While Watching: Adult Medical Emergency

- Have students position themselves at the side of their manikins per the video instructions.
- Ask students to recall the steps of scene safety and assessment, and tell students that they will now practice as they follow along with the video.
 - Assess the scene for safety
 - Verbalizes that the “scene is safe”
 - Checks for responsiveness by tapping and shouting
 - Shouts for help
 - When help arrives, designate someone to call the local emergency response number and someone to get an AED.
 - Checks if the person is breathing for at least 5 but no more than 10 seconds.
- Remember, if the person is unresponsive and not breathing or not breathing normally, start CPR immediately.
- Repeat the practice-while-watching segment until all students complete the practice and perform the skill correctly.



Play Video

- Play **Adult CPR: Compressions**.
- **Guiding question:**
 - Does anyone know the correct depth for adult chest compressions?
 - At least 5 cm deep



Instructor Tips

- Observe students and provide positive and corrective feedback on their performance. Ask for what you want students to do—not what you don't.
- Repeat the practice until all students complete the practice session.



Practice While Watching: Adult Compressions

- Tell students that they will complete 2 sets of 30 compressions.
- Have students count out loud while they provide compressions.
- As you observe students and give feedback, emphasize these core concepts:
 - Hand placement: 2 hands
 - Rate: 100 to 120/min
 - Depth: at least 5 cm deep
 - Complete chest recoil
- Repeat the practice-while-watching segment until all students complete the practice.



Discussion: Compressions for a Pregnant Woman

Perform chest compressions for someone who is pregnant and in cardiac arrest just as you would for any adult in cardiac arrest. Delaying CPR in this situation puts multiple lives at risk.



Play Video

- Play **Adult CPR: Breaths**.
- **Guiding question:**
 - When is it especially important to give breaths during CPR?
 - Giving breaths with compressions is always best if the rescuer is willing and capable. But they are especially important when the cardiac arrest was likely the result of a breathing problem, such as choking, drowning, asthma, opioid overdose, or when the person is a child or an infant.



Practice While Watching: Adult Breaths (Mouth-to-Mouth)

- Tell students that they will practice giving mouth-to-mouth breaths. They'll perform 3 sets of 2 breaths.
- Ask students to take off lipstick and remove gum.
- Before beginning practice with mouth-to-mouth:
 - Put one hand on the forehead and the fingers of your other hand on the bony part of the chin.
 - Tilt the head back and lift the chin.
 - While holding the airway open, pinch the nose closed with your thumb and forefinger.
 - Take a normal breath. Cover the manikin's mouth with your mouth.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.

- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Adult Breaths (Pocket Mask)

- Tell students that they will practice giving breaths with a pocket mask. They'll perform 3 sets of 2 breaths.
- Before beginning practice with the pocket mask:
 - Put the mask over the manikin's mouth and nose. If the mask has a narrow, pointed end, put that end on the bridge of the nose; position the wide end so it covers the mouth.
 - Tilt the head and lift the chin while pressing the mask against the manikin's face. It is important to make an airtight seal between the manikin's face and the mask while you lift the chin to keep the airway open.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise. When giving breaths using a pocket mask, you may also need to reposition the mask.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Adult CPR

- Students will practice providing chest compressions and giving breaths (by mouth-to-mouth or with a pocket mask).
- Students will complete 2 cycles of 30 compressions and 2 breaths.
 - Reminder: On the Adult CPR and AED Skills Test, you have the option to test students on giving breaths by mouth-to-mouth (with a barrier device) or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.

Lesson 3

Use an AED on an Adult

15 minutes

Learning Objective

- Demonstrate using an AED on an adult



Play Video

- Play **Adult CPR: Using an AED**.



Discussion

- Emphasize following the AED prompts.
- Remind students that the AED trainer in class will not give a real shock.
- Remind students of these special AED considerations, such as if the person
 - Is lying in water or water is covering their chest
 - Has an implanted defibrillator or pacemaker
 - Is wearing medical information jewelry



Instructor Tip

The AED may include multiple sets of pads. For this lesson, focus on the use of an AED on an adult.



Practice While Watching: Using an AED on an Adult

- Emphasize these steps:
 - Turn the AED on and follow the prompts.
 - Turn it on by pushing the On button or lifting the lid.
 - Follow the prompts, which will tell you everything you need to do.
 - Attach the adult pads.
 - Use the adult pads for anyone 8 years of age and older.
 - Peel away the backing from the pads.
 - Following the pictures on the pads, attach them to the person's bare chest.
 - Plug the pads connector into the AED, if necessary.
 - Let the AED analyze.
 - Loudly shout, "Clear," and make sure that no one is touching the person.
 - The AED will analyze the heart rhythm.
 - If the AED tells you a shock is not needed, resume CPR.
 - Deliver a shock if needed.
 - Loudly shout, "Clear," and make sure that no one is touching the person.
 - Push the Shock button.
 - Immediately resume CPR.



Instructor Tip

For the Practice While Watching: Using an AED on an Adult video, play the video first and then demonstrate how to apply pads. Play the video again so that students can follow along.



Play Video

- Play **Put It All Together: Adult CPR**.



Students Practice: Putting It All Together

- Students will practice putting it all together by practicing scene safety and assessment, providing chest compressions, giving breaths (by mouth-to-mouth or with a pocket mask), and using an AED.
- On the Adult CPR and AED Skills Test, you have the option to test students on giving breaths by mouth-to-mouth (with a barrier device) or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.

Summary

Adult CPR AED

2 minutes



Discussion

Review the following questions with the class, and encourage students to review their Adult CPR and AED Skills Testing Checklist.

- What are the steps for responding to a medical emergency?
 - Make sure the scene is safe.
 - Tap and shout (check for responsiveness).
 - Shout for help.
 - Send someone to call the local emergency response number and get an AED.
 - Check for breathing for at least 5 but no more than 10 seconds.
- What are the steps for calling the local emergency response number and getting an AED?
 - Tell someone to call the local emergency response number and get an AED.
 - If the person is not breathing, is not breathing normally, or is only gasping, begin CPR and use the AED as soon as it is available.
 - If you are alone, call the local emergency response number, put your phone on speaker mode, get an AED, and start CPR by performing cycles of 30 compressions and 2 breaths.
- What are some characteristics of CPR in an adult?
 - Perform compressions at a rate of 100 to 120/min.
 - Push down at least 5 cm
 - Let the chest come back up to its normal position after each compression.
 - Do not lean on the chest. Allow the chest to return to its normal position (recoil).
 - Do not interrupt compressions for more than 10 seconds to give breaths.



Instructor Tip

Allow enough time for students to review, practice, and ask questions before beginning the skills test.

Lesson 4

Adult CPR and AED Skills Test

20 minutes



Discussion

Read the following testing script aloud to each student (may be read to all students at once):

"This test is like a realistic emergency situation. You should do whatever you think is necessary to save the person's life. You will have to determine for yourself what you need to do. I will read a short scenario to you, but I won't be able to answer any questions. You can treat me like another rescuer who has arrived with you and tell me to do something to help you. If you make a mistake or forget to do something important, you should not stop. Just do your best to correct the error. Continue doing what you would do in an actual emergency until I tell you to stop. Do you have any questions before we start?"



Instructor Tips

- Be prepared and organized with student skills testing checklists. Review these before class and have all materials ready to properly test students on every step.
- When using multiple instructors for a class, especially when there are many students, assign each instructor a different role (eg, testing, monitoring the exam, remediation) to stay on schedule.
- Provide students a private setting for skills testing, if needed.



Skills Test

- Follow the Adult CPR and AED Skills Testing Checklist and check off each step the student performs correctly.
- After starting, if the student asks questions about the skills or sequences, tell the student, "Do what you think is best right now." If the student asks questions about what to do with the manikin, tell the student, "Check the manikin yourself and do what you think is needed to save a life." If the student seems unsure, explain that they will be assessing the manikin as if it were a real person and doing whatever is necessary.

Remediation

- For students who need remediation, refer to the remediation lesson plan.

Lesson 5

Adult Choking

5 minutes

Learning Objective

- Describe when and how to help a choking adult



Play Video

- Play **Adult Choking Relief**.
- **Guiding question:**
 - If you can't remove the object from blocking the airway, the person will become unresponsive. What are the steps to take if that happens?
 - Lay the person down and start CPR. Look in the mouth for the object each time before you give breaths.



Discussion

Ask students the following questions and discuss:

- What is the difference between mild and severe airway block?
 - Mild airway block: The person can breathe, speak, and cough
 - Severe airway block: The person
 - Can't breathe, speak, or cough
 - Makes the choking sign
- What is the universal sign for choking?
 - Holding the neck with one or both hands
- How should you give back blows for an adult who is severely choking?
 - Put one foot in front of the other to give yourself a steady base.
 - Place one hand on the person's shoulder.
 - Bend them slightly forward and use the heel of your other hand to give them 5 forceful back blows between the shoulder blades.
- Where should you give thrusts for a severely choking adult?
 - Slightly above the belly button for abdominal thrusts
 - For a large or pregnant woman: On the lower half of the breastbone for chest thrusts
 - For a person in a wheelchair: On the lower half of the breastbone for chest thrusts
- What if you can't remove the object blocking the airway?
 - The person will become unresponsive. Always give CPR to anyone who is unresponsive and is not breathing, is not breathing normally, or is only gasping. Giving both compressions and breaths is very important for someone with a severe airway block who becomes unresponsive.



Instructor Tip

Abdominal thrusts and back blows can save the life of a choking adult, but they can also cause injury. This is why students should not practice on each other. If students want to practice their hand placement, have them place their hands on their own abdomen, or (optional) you can allow them to practice hand placement on you.

Continue to the Pediatric First Aid Lesson Plans.

Heartsaver Pediatric First Aid Lesson Plans

Lesson 1

Pediatric First Aid Introduction

6 minutes (4 min required)



Play Videos

- Play **Introduction to First Aid**.
- Play **Survivor Stories: Fin and Karen's Story** (*optional*).

Lesson 2

First Aid Basics

15 minutes

Learning Objectives

- Discuss how universal precautions, PPE, and handwashing can protect against germs and disease
- List the priorities, roles, and responsibilities of first aid responders
- Describe the key steps in pediatric first aid
- Describe the steps to remove protective gloves
- Demonstrate the steps to respond to a pediatric first aid emergency



Play Video

- Play **Responding to a Pediatric First Aid Emergency**.

- **Guiding question:**

- Part of responding to an emergency includes checking for breathing. How long should you watch for breathing?
 - For at least 5 but no more than 10 seconds



Play Video

- Play **Personal Protective Equipment**.

- **Guiding question:**

- Take note of the steps to properly remove gloves. How many seconds should you wash your hands for?
 - Rub your hands together and scrub all surfaces of your hands for 20 seconds.



Students Practice: Removing Gloves

- Have students put on their gloves.
- Remind students that they will not be tested on the skills of removing protective gloves or handwashing.
- Observe students and provide feedback on their performance, emphasizing the core concept of not touching the outside of gloves with their bare hands.
 - Grip one glove on the outside, near the cuff, and peel it down until it comes off inside out.
 - Cup the used glove with their other, gloved hand.
 - Place 2 fingers of their bare hand inside the cuff of the glove that's still on their other hand.
 - Peel that glove off so that it comes off inside out, with the first glove inside of it.
 - Dispose of the gloves in a hazardous waste container or trash can, per their company's policies.
- Thoroughly wash their hands immediately after removing gloves.
- Repeat the practice session until all students practice.



Students Practice: Responding to a First Aid Emergency

- Have students pair up, with one student playing the role of the person who is not breathing normally and the other playing the rescuer.
- After providing the student with a scenario, evaluate them with the following steps:
 - Verbalizes that the scene is safe
 - Taps and shouts
 - Shouts for help
 - Sends someone to call the local emergency response number and get the first aid kit and AED
 - Checks breathing
 - Looks for injury and medical information jewelry
 - Places the person in the recovery position
 - Verbalizes that they will stay with the person until EMS arrives
- Observe students and provide feedback.
- Have students switch roles and repeat the practice until all students complete the practice session or for additional practice to prepare for testing.



Skills Test: Responding to a Pediatric First Aid Emergency

- Use the First Aid Skills Testing Checklist and check off each step the student performs correctly.
- Do not demonstrate skills or coach during the skills test.
- After starting, if the student asks questions about the skills or sequences, say, "Do what you think is best right now."
- Refer to the remediation lesson plan for students who do not complete all the steps on the checklist.

Summary

First Aid Basics

2 minutes



Discussion

Review the following questions with the class:

- What should you wear every time you are providing first aid?
 - Personal protective equipment
- How long should you stay on the line with the emergency dispatcher?
 - Until the dispatcher tells you to hang up
- How long should you wash your hands?
 - At least 20 seconds
- Which side should we put someone on during the recovery position?
 - Left
 - Remember the steps to the recovery position are as follows:
 - Gently turn their head to the left.
 - Place their left arm at a right angle to their body.
 - Put their right hand under their left cheek.
 - Bend their right knee and roll them onto their left side.
 - Once they're in the recovery position, gently open their airway by tilting the head back and lifting the chin. This is known as the head tilt–chin lift maneuver.
- What are the key steps in responding to a first aid emergency?
 - Assess scene safety, check for responsiveness (tap and shout), shout for help, call the local emergency response number, and check for breathing and medical information jewelry

Lesson 3

Medical Emergencies

30 minutes (25 min required)

Learning Objective

- Recognize elements of common illnesses and injuries and first aid actions for them



Play Videos

- Play **Survivor Stories: Ben's Story** (*optional*).
- Play **Breathing Problems and Asthma**.
- Play **Allergic Reactions**.



Students Practice: Using an Epinephrine Autoinjector

- Explain the epinephrine autoinjector trainer to students.
- Have the students work in pairs, during which one student plays the person who is having a severe allergic reaction and the other plays the rescuer.
- Observe students and provide feedback.
- Ensure that the students are following the proper steps:
 - Hold the autoinjector in a fist without touching the tip, where there's a needle.
 - Remind students that epinephrine dosages are different for children and adults, so be sure that they are using the person's prescribed device.
 - Take off the safety cap. Have the person sit down while they hold their leg firmly in place.
 - Press the tip of the autoinjector hard against the side of the person's outer thigh, about halfway between the hip and the knee.
 - Give the injection through the person's clothes or on their bare skin.
 - Hold the leg still while the needle is in place. Follow the instructions on the device for how long to hold the needle in place.
 - Pull the autoinjector straight out. Don't touch the needle. Follow the manufacturers' recommendations for proper disposal.
 - Note the time.
 - Rub the spot where the injection was given for about 10 seconds.
- Have students switch roles and repeat the practice until all students complete the practice session.
- Remind students that there are multiple types of epinephrine autoinjectors. Students should familiarize themselves with the types they may encounter the most.



Play Videos

- Play **Heart Attack**.
- **Guiding question:**
 - What are some signs and symptoms of a heart attack?
 - Discomfort in the chest as well as pain that may also appear in one or both arms or in the upper back, neck, jaw, shoulder, or stomach
 - After students watch the video, encourage them to look for the differences between heart attacks and cardiac arrest in their student workbook.
- Play **Fainting**.
- Play **Diabetes and Low Blood Sugar**.
- **Guiding question:**
 - If someone has low blood sugar, what should you ask them to eat or drink? Take note of the list in the video.
 - If they are responding to you and can sit up and swallow, have them eat or drink something with sugar. This can be glucose tablets, 175 to 240 mL of fruit juice or regular soda, a spoonful of honey or table sugar, or 15 to 25 jellybeans or gummy bear-type candies.



Discussion

- Ask students if they have questions or observations about topics just discussed in the video.
- Remind students that the Fainting and Diabetes and Low Blood Sugar videos both refer to the recovery position. Remind students of the steps, if needed.



Play Videos

- Play **Survivor Stories: Courtney's Story** (*optional*).
- Play **Opioid Overdose** (*optional*).
- **Guiding question:**
 - How do you administer naloxone?
 - Hold the canister with your thumb on the bottom of the plunger and your pointer and middle fingers on either side of the nozzle. Insert the tip of the nozzle into the person's nostril and press the plunger.
 - After the video, remind students that access to naloxone varies depending on their location, as do the laws regulating its use by the public. Advise that they consult the local regulations applicable to their place of residence to confirm if naloxone is available and accessible.
- Play **Stroke**.
- **Guiding question:**
 - We use the F.A.S.T. acronym to detect a stroke. What does each letter stand for?
 - F, for face drooping; A, for arm weakness; S, for speech; T, for time to call the local emergency response number

- Instructors should review the F.A.S.T. (Face, Arm, Speech, Time) acronym with students after the video to ensure that they understand. Remind students that, unfortunately, there is not a lot of first aid care that they can provide for someone experiencing a stroke, but the emotional components are key. Keep the person calm and stay with them until help arrives. Remind students that people do not have to have all the symptoms associated with stroke; just one can mean they are having a medical emergency. Finally, remind students that calling the local emergency response number immediately is a top priority for the best outcome.
- Play **Seizure**.
- **Guiding question:**
 - What are some causes of a seizure?
 - A seizure is caused by a medical condition called epilepsy. Seizures can also be caused by other conditions, such as a head injury, low blood sugar, prolonged heat exposure, poisoning, or cardiac arrest.
 - Remind students to never place anything in the mouth of someone having a seizure because this could cause more damage. If students need a reminder, review the recovery steps with them.

Summary

Medical Emergencies

2 minutes



Discussion

Review the following questions with the class:

- What are some signs of low blood sugar?
 - Irritable or confused, hungry, weak, sleepy, or sweaty
- What are the differences between heart attack and cardiac arrest?
 - During a heart attack, a portion of the heart is not receiving enough blood and oxygen, often causing chest pain.
 - During cardiac arrest, the heart no longer beats normally and is unable to circulate oxygen to the rest of the body.
- How can you tell if a child has fainted or if they are in cardiac arrest?
 - A child who has fainted will be breathing normally, while a child in cardiac arrest will not be breathing or have only gasping breaths.
- What are some signs of an opioid-associated life-threatening emergency?
 - Unresponsive
 - Small pupils
 - Slow or shallow breathing
- What actions do you take in an opioid-associated life-threatening emergency?
 - Shout for help. If someone is nearby, have that person call the local emergency response number and get the naloxone and an AED. Use the naloxone as soon as it arrives, but don't stop providing help while you wait for the naloxone.
 - If no one is nearby, call the local emergency response number and get the naloxone and AED.
 - Check for breathing.
 - If the person is breathing normally, give naloxone if available, and stay with the person until advanced help arrives.
 - If the person is not breathing, is not breathing normally, or is only gasping, start CPR and use the AED as soon as it is available. Give the naloxone as soon as you can, but do not delay CPR to give naloxone.
 - Continue giving CPR and using the AED until
 - Someone else arrives who can take turns providing CPR with you
 - The person begins to move, speak, blink, or otherwise react
 - Someone with more advanced training arrives



Additional Discussion (Optional)

This information can be shared with students if questions arise or if further discussion is needed about naloxone.

- What is naloxone?
 - Naloxone is a synthetic drug that blocks the effects of opioids and reverses an overdose.
- How do I get naloxone?
 - Access to naloxone varies depending on where you are in the world, as do the laws regulating its use by the public. Consult the local regulations applicable to your place of residence to confirm if naloxone is available and accessible to you.
- How do I administer naloxone?
 - Lay rescuers can safely give naloxone by
 - Spraying into the nose (via intranasal spray)
 - Injecting into the muscle with an autoinjector (via intramuscular injection)
- Can naloxone hurt me?
 - No. Naloxone can be safely administered. When given, it affects only people who have used opioids.
- Can I use naloxone for other drug overdoses?
 - No. Naloxone affects only people who have used opioids.

Lesson 4

Environmental Emergencies

22 minutes

Learning Objective

- Recognize elements of common injuries and illnesses



Play Video

- Play **Bites and Stings**.



Discussion

- Ask students if they have questions or observations about topics in the video.



Play Video

- Play **Heat-Related Emergencies**.

- **Guiding question:**

- Can you list the 4 types of heat-related emergencies and the order in which they can occur?
 - (1) Dehydration, (2) heat cramps, (3) heat exhaustion, and (4) heat stroke
- Review common symptoms of heat-related emergencies:

Type of heat-related emergency	Sweating	Pain	Tiredness	Confusion	Altered mental status
Dehydration	Yes	No	Yes	Maybe	No
Heat cramps	Yes	Yes	Yes	Maybe	No
Heat exhaustion	Yes	No	Yes	Maybe	No
Heat stroke	Maybe	No	Yes	Maybe	Yes



Discussion

- Ask students if they have questions or observations about topics in the video.



Play Videos

- Play **Cold-Related Emergencies**.

- **Guiding question:**

- What things should you never do to frostbitten skin?
 - Do not use scalding hot water or rub the skin.

- Play **Poison Emergencies**.



Discussion

- Ask students if they have questions or observations about topics in these videos.



Instructor Tip

Talk about real-world scenarios and situations that could involve cold- and heat-related emergencies to ensure that students see relevance to their own lives.



Instructor Tip

Remind students that poisons can be found in the workplace, as shown in the Poison Emergencies video, but they should also consider various scenarios in which poisons may be present at home, work, school, or other places.

Summary

Environmental Emergencies

2 minutes



Discussion

Review the following questions with the class:

- What are the steps to follow for a tick bite?
 - Never use heat to remove a tick. Instead, use tweezers to grab the tick as close to the skin as you can.
 - Then, pull the tick straight out until the skin lifts and it lets go.
 - Avoid leaving any parts of the tick's head or mouth under the skin because this could lead to an infection.
 - Follow up with a health care professional if the site of the tick bite does not heal, it gets redder and more swollen, the person develops flu-like symptoms, or you live in an area known for having tick-borne illnesses.
- What are some signs of dehydration?
 - Weakness, thirst, dry mouth, dizziness, confusion, and less urination than usual
- What are the signs of hypothermia (or *low body temperature*)?
 - Skin that is cool to the touch
 - Shivering (which will stop as hypothermia worsens)
 - Confusion
 - Personality change
 - Sleepiness
 - Stiff, rigid muscles

Lesson 5

Injury Emergencies

38 minutes (36 min required)

Learning Objectives

- Control bleeding and apply bandaging (skills students will demonstrate)
- Recognize elements of common illnesses and injuries

Before starting this section, instructors should read the following:

"These videos contain realistic recreations of first aid emergencies—including images of blood and open wounds—that some may find upsetting."



Play Videos

- Play **Survivor Stories: Alandra's Story** (*optional*).
- Play **External Bleeding**.



Practice While Watching: Bleeding Control

- Have students work in pairs, during which they will take turns playing the injured person (with a cut on the forearm) and the rescuer.
- Encourage students to refer to their First Aid Skills Testing Checklist during practice.
- Have students switch roles and repeat the practice until everyone practices and feels ready for the test.



Instructor Tip

You may find it helpful to play the Practice While Watching: Bleeding Control video in its entirety first, and then rewatch it with students so that they can follow along.



Skills Test: Controlling Bleeding and Bandaging

- Use the First Aid Skills Testing Checklist and check off each step the student performs correctly.
- Do not demonstrate skills or coach students during the skills test.
- After starting, if the student asks questions about the skills or sequences, say, "Do what you think is best right now."
- Refer to the remediation lesson plan for students who do not complete all the steps on the checklist.



Play Videos

- Play **Wounds: Eyes and Nose**.
- **Guiding question:**
 - Can you remember whether you're supposed to hold your head up or down when you have a bloody nose? Let's watch to find out.
 - For a nose injury, control the bleeding by having the injured child sit down and lean forward.
- Play **Wounds: Mouth and Teeth**.

- **Guiding question:**

- If a permanent tooth has been knocked out, where should you hold it when you're handling it?
 - Placing the tooth back in the socket is preferred. Other options for storing the tooth are: putting it in an oral rehydration salt solution, cow's milk, or the injured child's own saliva, or you can wrap it tightly in plastic wrap.

- Play **Penetrating and Puncturing Injuries.**

- **Guiding question:**

- In the case of one of these injuries, how should you control the bleeding?
 - The first step to control bleeding is direct pressure on the injury.

- Play **Amputation.**

- **Guiding question:**

- Why don't you want to put the amputated part directly on ice?
 - Placing the injured body part directly on ice may cause it to freeze.

- Play **Internal Bleeding and Shock.**

- **Guiding question:**

- Be sure to note the causes of shock. In addition to checking for signs of shock, what other actions should you take if you suspect internal bleeding?
 - If the injured child is responding and is breathing normally, help them lie down, and keep them still to prevent further injury. Keep the child warm, and if they have no back or other injuries that would cause pain, help them place their feet on something that's about 15 to 30 cm off the floor.

- Play **Head, Neck, and Spine Injuries.**

- **Guiding question:**

- If you suspect a child has a concussion, what must take place before they resume regular activity?
 - The child should be evaluated by a health care professional.

- Play **Broken Bones and Sprains.**

- **Guiding question:**

- How can you tell the difference between a break and a sprain? Are the actions to take the same?
 - Without a physical exam or x-ray, it's hard to tell the difference between a broken bone and a sprain. The good news is, they are treated the same way.



Instructor Tips

- Pause to ask students if they have questions or observations about the topics just shown.
- If no one responds, ask how they would feel about treating these injuries. For example: "Do any of these intimidate you or make you feel queasy? Does knowing the proper actions to take make you feel differently?"
- If a student expresses uneasiness, resist the urge to boost their confidence or minimize their concerns. Instead, listen, allow other students to respond, and acknowledge their courage in sharing with the class.



Discussion

- Ask students if they have questions or observations about these topics.
- Determine whether your students need splinting practice for their jobs.



Students Practice: Splinting (Optional)

- Have students work in pairs, during which one student will play the injured person while the other plays the rescuer.
- Have students switch roles and repeat the practice.



Play Video

- Play **Burns and Electrical Injuries**.
- **Guiding question:**
 - This video reviews 3 different kinds of burns. Take note of all 3. What's the first action you should take if you witness an electrical injury?
 - Ensure that the scene is safe.



Instructor Tips

- Splinting practice is optional unless a student needs it for their job. This is why introductions and learning your students' occupations at the beginning of class are important.
- Use rolled-up towels, magazines, and pieces of wood to show how everyday objects can be used as splints. Be sure to also have tape, gauze, or cloth for this practice.
- Remind students that the important part of splinting is to ensure that the splint is secure above and below the site of injury.

Summary

Injury Emergencies

2 minutes



Discussion

Review the following questions with the class:

- What are some signs of shock?
 - Feeling weak, faint, or dizzy
 - Feeling nauseated or thirsty
 - Discoloration of the skin
 - Being restless, agitated, or confused
 - Being cold and clammy to the touch
- What are some signs of a concussion?
 - Feeling stunned or dazed, headache, nausea or vomiting, dizziness, unsteadiness (trouble with balance), double vision or flashing lights, or confusion or loss of memory of events that happened before or after the injury
- What are the only things you should put on a burn?
 - Cool water and clean dressings
 - Petroleum jelly or over-the-counter antibiotic ointment
- What are the steps to control a nosebleed?
 - Control the bleeding by having the injured person sit down and lean forward. Using a clean dressing, pinch both sides of the lower part of the nose and apply pressure for at least 10 minutes. If the bleeding continues, increase the pressure.
- What are the steps to control bleeding?
 - It's important to stay calm but act quickly. To help you remember what to do, use your ABCs:
 - A for *alert* (call the local emergency response number and get a first aid kit)
 - B for *bleeding source*
 - C for *control bleeding* (apply direct pressure)



Instructor Tips

- Remind students to take a moment to locate bleeding control kits in their workplace, office, or public buildings.
- Improvised tourniquets are not recommended unless you have specific training in their proper use. When in doubt, use a commercially designed tourniquet for effective bleeding control.

Lesson 6

Conclusion

2 minutes



Play Video

- Play **Conclusion**.



Discussion

- Tell students how to find additional resources provided by the AHA to help with postclassroom training.
- Thank students for their participation.
- Summarize what students learned during the course.
- Make sure that students complete the evaluation form.



Instructor Tip

When summarizing the course, ask one or two students what they observed or learned.

Exam (Optional)

Time varies



Discussion

- Tell students not to write on the exam.
- Students may not cooperate or talk to each other during the exam.
- Because the exam is open resource, students may use the student workbook and any other accessible resources while taking the exam.



Exam

- Distribute answer sheets and exams.
- Collect student exams and grade them after students finish.
- Regardless of their score, all students should be given their exam results and be allowed the opportunity to review and ask questions.
- Students who scored less than 84% need immediate remediation.



Instructor Tips

- The Heartsaver exam is not required unless students need to take it for workplace requirements. Before class, find out which students need to take the exam. Make sure to use the version of the Heartsaver exam that covers all sections taught during the course.
- During testing and remediation, be efficient with the use of multiple instructors in the room. Assign each a different role, especially when there are many students in the class. This will ensure effective remediation, a smooth process, and staying on schedule.
- For the exam, make sure that students are provided an environment conducive to testing: quiet with minimal distractions and plenty of time to complete the exam.

Remediation

- For students who need remediation, refer to the remediation lesson plan.



Play Videos

- Replay scenarios, instruction, and practice-while-watching segments of the video as needed to give the student additional practice.
- Repeat practice until the student feels comfortable and is ready to move forward with the exam or skills test.
- Some students may need additional practice or may need to repeat the course to demonstrate skills competency and to achieve a course completion card.



Instructor Tips

- Use the remediation lesson when a student does not pass the exam or skills test. To pass the exam, students must score 84%; to pass the skills test, students must complete all the steps on their skills testing checklist.
- Review the student's exam or skills testing sheet to identify where the student needs additional instruction or practice.
- The course videos are a good resource for reviewing specific topics and skills practice, and the menus make it easy to navigate to the correct video quickly.



Skills Test

- Retest Heartsaver skills as necessary by using the skills testing checklist.



Exam

- Provide remediation by giving a second exam or by talking with the student about each item that they answered incorrectly until the student shows understanding of incorrect items.
- After remediation, students should show an improvement in answering correctly and understand why the answer is correct.
- Give students their failed exam to study and enough time to review before retaking the exam.
- Make sure to collect all exams and answer keys from all students at the end of either the remediation or the course.

Postcourse

Immediately After the Class

- Collect and arrange all course paperwork.
- Rearrange the room.
- Clean and store equipment.
- Fill out International Training Center course report forms.
- Read and consider comments from course evaluations.
- Send students their course completion cards if not already distributed.



Instructor Tip

Student course completion cards must be issued to students within 20 business days after they complete their course, so submit course paperwork to your International Training Center as soon as possible.

Heartsaver Pediatric First Aid CPR AED Lesson Plans, Blended Learning (In-Person)

Precourse

30 to 60 Days Before the Course

- Determine course specifics:
 - Class audience, including their professions and how the skills taught during this course will translate to their on-the-job performance
 - Number of students
 - Special needs or extra equipment needed
- Reserve equipment.
- For the in-person course, schedule a room that meets the room requirements for the Heartsaver course.
- Schedule additional instructors if needed.



Instructor Tip

Review course materials and anticipate questions or challenges that might arise during class. The time you invest in preparing makes it easier for you to focus on your students and their success.

At Least 3 Weeks Before the Course

- Send your students precourse emails, student materials, and the course agenda.
- Confirm additional scheduled instructors.
- Research Good Samaritan laws that pertain to your area. This will help when answering student questions during the course.

Day Before the Course

- For the in-person course:
 - Confirm room reservations and make sure that all required equipment is available for the class.
 - Set up the room and make sure that all technology and equipment are working properly (can also be done the day of the class).
 - Locate the nearest AED and confirm the emergency response number.
- Coordinate with additional instructors on their roles and responsibilities for the class.
- Ensure that all course paperwork is in order.

Day of the Course

For the in-person course, arrive at the class location early to complete the following:

- Make sure equipment is working and has been cleaned according to manufacturer instructions.
- Check that the video is working properly with sound.
- Distribute supplies to the students (if applicable).
- Greet students as they arrive to put them at ease, and direct them where to go.
- Add students' names to the course roster as they arrive.

Lesson 1

Introduction

6 minutes



Discussion

- Introduce yourself and additional instructors, if present.
- Invite students to introduce themselves and ask them about their occupations and interest in taking the class so that you can best meet their needs.
- Explain that the course is interactive. Refer to the following points for discussion with students:
 - Your role
 - Video-based learning
 - Use of scenarios
 - Practice while watching
 - Use of the student workbook
 - Exam (if required)
 - Skills test
- Ask that students who anticipate difficulties with the skills test due to personal limitations, such as a medical concern or knee or back problems, speak with one of the instructors.
- For the in-person course:
 - Explain the layout of the building, including bathrooms and emergency exits.
 - Remind students of the location of the nearest AED and their emergency response number.

Remind students of the course completion requirements:

- Students must pass the skills test(s).
- For the optional exam, students must score at least 84% to pass.



Instructor Tip

Before they attend the classroom portion of the course, students must complete every applicable module online that will be practiced and tested in this session.



Instructor Tips

- Throughout the course lesson plans, the AHA has added Guiding Questions to support your instruction. Present these questions to students before you play each video to help them focus on the most important objectives. The answers are provided for discussion after the video.
- When answering questions, acknowledge the person with eye contact, and then answer to the entire room. Come back to the questioner periodically.
- When leading discussions, ask students open-ended questions that focus on their perspectives. This helps to engage their minds and increase their participation.

Learning Objectives

- Demonstrate how to assess the scene in the event of an emergency
- Describe how CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when a child needs CPR
- Perform CPR on a child
- Describe how to perform CPR with help from others
- Demonstrate giving effective breaths by using mouth-to-mouth or a mask



Practice While Watching: Child Medical Emergency

- Have students position themselves at the side of their manikins per the video instructions.
- Ask students to recall the steps of scene safety and assessment, and tell them that they will now practice the scene safety and assessment sequence as they follow along with the video.
 - Assess the scene for safety.
 - Verbalize that the scene is safe.
 - Check for responsiveness by tapping and shouting.
 - Shout for help (when help arrives, designate someone to call the local emergency response number and someone to get an AED).
 - Check if the child is breathing for at least 5 but no more than 10 seconds.
- Remember, if the child is unresponsive and not breathing or not breathing normally, start CPR immediately.
- Repeat the practice-while-watching segment until all students complete the practice.



Instructor Tips

- The Practice While Watching menu in the video contains all the practice-while-watching segments for easier access in blended-learning classes.
- Observe students and provide positive and corrective feedback on their performance. Ask for what you want students to do—not what you don't.
- Repeat the practice until all students complete the practice session.
- If students need informal remediation on a skill, go to the Lessons menu in the video and find the video segment for that skill.



Practice While Watching: Child Compressions

- Students will follow along with the video as they practice.
- Students can use either the heel of one hand or 2 hands to give compressions to a child.
- As you observe students and give feedback, emphasize these core concepts:
 - Hand placement: heel of 1 hand, or 2 hands
 - Rate: 100 to 120/min
 - Depth: at least one third the depth of the chest, or about 5 cm
 - Complete chest recoil
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Child Breaths (Mouth-to-Mouth)

- Tell students that they will practice giving mouth-to-mouth breaths. They'll perform 3 sets of 2 breaths.
- Ask students to take off lipstick and remove gum.
- Before beginning practice with mouth-to-mouth:
 - Put one hand on the forehead and the fingers of your other hand on the bony part of the chin.
 - Tilt the head back and lift the chin.
 - While holding the airway open, pinch the nose closed with your thumb and forefinger.
 - Take a normal breath. Cover the manikin's mouth with your mouth.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Child Breaths (Pocket Mask)

- Tell students that they will practice giving breaths with a pocket mask. They'll perform 3 sets of 2 breaths.
- Before beginning practice with the pocket mask:
 - Put the mask over the manikin's mouth and nose. If the mask has a narrow, pointed end, put that end on the bridge of the nose; position the wide end so it covers the mouth.
 - Tilt the head and lift the chin while pressing the mask against the manikin's face. It is important to make an airtight seal between the manikin's face and the mask while you lift the chin to keep the airway open.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise. When giving breaths using a pocket mask, you may also need to reposition the mask.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Child CPR

- Students will practice responding to a medical emergency, providing chest compressions, and giving breaths (by mouth-to-mouth or with a pocket mask).
- Students will complete 2 cycles of 30 compressions and 2 breaths.
 - Reminder: On the Child CPR Skills Test, you have the option to test students on giving breaths by mouth-to-mouth (with a barrier device) or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.

- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.



Students Practice: Using an AED

- First, show the steps while using your AED trainer, and then have students practice.
- Emphasize these steps:
 - Turn the AED on and follow the prompts.
 - Turn it on by pushing the On button or lifting the lid.
 - Follow the prompts, which will tell you everything you need to do.
 - Attach the pads.
 - Use the child pads if the child is an infant to 8 years of age. If child pads are not available, use adult pads.
 - Use adult pads if the child is 8 years of age or older.
 - Peel away the backing from the pads.
 - Following the pictures on the pads, attach them to the child's bare chest. Make sure the pads do not touch each other. For smaller children and infants, place one pad on the center of the chest and the other pad on the center of the upper back.
 - Plug the pads connector into the AED, if necessary.
 - Let the AED analyze.
 - Loudly state, "Clear," and make sure that no one is touching the child.
 - The AED will analyze the heart rhythm.
 - If the AED tells you a shock is not needed, resume CPR.
 - Deliver a shock if needed.
 - Loudly state, "Clear," and make sure that no one is touching the child.
 - Push the Shock button.
 - Immediately resume CPR.



Students Practice: Putting It All Together

- Students will practice putting it all together by practicing scene safety and assessment, providing child chest compressions, giving breaths (by mouth-to-mouth or with a pocket mask), and using an AED.
- On the Child CPR Skills Test, you have the option to test students on giving breaths by mouth-to-mouth or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.

Lesson 3

Child CPR Skills Test

15 minutes



Discussion

Read the following testing script aloud to the student (may be read to all students at once):

"This test is like a realistic emergency situation. You should do whatever you think is necessary to save the child's life. You will have to determine for yourself what you need to do. I will read a short scenario to you, but I won't be able to answer any questions. You can treat me like another rescuer who has arrived with you and tell me to do something to help you. If you make a mistake or forget to do something important, you should not stop. Just do your best to correct the error. Continue doing what you would do in an actual emergency until I tell you to stop. Do you have any questions before we start?"



Instructor Tips

- Be prepared and organized with student skills testing checklists. Review these before class and have all materials ready to properly test students on every step.
- When using multiple instructors for a class, especially when there are many students, assign each instructor a different role (eg, testing, monitoring the exam, remediation) to stay on schedule.
- Provide students a private setting for skills testing, if needed.



Skills Test

- Follow the Child CPR Skills Testing Checklist and check off each skill the student performs correctly. Leave steps they miss blank.
- After starting, if the student asks questions about the skills or sequences, tell the student, "Do what you think is best right now." If the student asks questions about what to do with the manikin, tell the student, "Check the manikin yourself and do what you think is needed to save a life." If the student seems unsure, explain that they will be assessing the manikin as if it were a real child and doing whatever is necessary.

Remediation

- For students who need remediation, refer to the remediation lesson plan.

Lesson 4

Infant CPR

20 minutes

Learning Objectives

- Demonstrate how to assess the scene in the event of an emergency involving an infant
- Describe how CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when an infant needs CPR
- Perform CPR on an infant
- Describe how to perform CPR with help from others
- Demonstrate giving effective breaths by using mouth-to-mouth-and-nose or a mask



Practice While Watching: Infant Medical Emergency

- Students will follow along with the video.
- Provide feedback, emphasizing these core concepts:
 - Assess the scene for safety.
 - Verbalize that the scene is safe.
 - Check for responsiveness by tapping and shouting.
 - Shout for help (when help arrives, designate someone to call the local emergency response number and someone to get an AED).
 - Check if the infant is breathing for at least 5 but no more than 10 seconds.



Instructor Tips

- The Practice While Watching menu in the video contains all the practice-while-watching segments for easier access in blended-learning classes.
- Observe students and provide positive and corrective feedback on their performance. Ask for what you want students to do—not what you don't.
- Repeat the practice until all students complete the practice session.
- If students need informal remediation on a skill, go to the Lessons menu in the video and find the video segment for that skill.



Practice While Watching: Infant Compressions

- Have students practice infant chest compressions and complete 2 sets of 30 compressions. Ask students to count out loud while they provide compressions.
- Observe students and provide feedback, emphasizing the core concepts:
 - Hand placement: 2 thumb-encircling hands technique or the heel of one hand
 - Rate: 100 to 120/min
 - Depth: at least one third the depth of the chest, or about 4 cm
 - Complete chest recoil
- Repeat the practice-while-watching segment until all students complete the practice.
- Remind students that they can use the 2 thumb-encircling hands technique or the heel of one hand to practice giving compressions.

- Tell students that they will practice giving mouth-to-mouth-and-nose breaths as well as breaths with a pocket mask. They'll perform 3 sets of 2 breaths.
- Ask students to take off lipstick and remove gum.
- Before beginning practice with mouth-to-mouth-and-nose:
 - Put one hand on the forehead and the fingers of your other hand on the bony part of the chin.
 - Tilt the head back and lift the chin.
 - Take a normal breath. Cover the manikin's mouth and nose with your mouth.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Infant Breaths (Mouth-to-Mouth-and-Nose)

- Tell students that they will practice giving mouth-to-mouth-and-nose breaths. They'll perform 3 sets of 2 breaths.
- Ask students to take off lipstick and remove gum.
- Before beginning practice with mouth-to-mouth-and-nose:
 - Put one hand on the forehead and the fingers of your other hand on the bony part of the chin.
 - Tilt the head back and lift the chin.
 - Take a normal breath. Cover the manikin's mouth and nose with your mouth.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Infant Breaths (Pocket Mask)

- Tell students that they will practice giving breaths with a pocket mask. They'll perform 3 sets of 2 breaths.
- Before beginning practice with the pocket mask:
 - Put the mask over the manikin's mouth and nose. If the mask has a narrow, pointed end, put that end on the bridge of the nose; position the wide end so it covers the mouth.
 - Tilt the head and lift the chin while pressing the mask against the manikin's face. It is important to make an airtight seal between the manikin's face and the mask while you lift the chin to keep the airway open.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise. When giving breaths using a pocket mask, you may also need to reposition the mask.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Infant CPR

- Students will practice providing compressions and giving breaths (by mouth-to-mouth-and-nose or with a pocket mask).
- Students will complete 2 sets of 30 compressions and 2 breaths.
 - *Reminder:* On the Infant CPR Skills Test, you have the option to test students on giving breaths by mouth-to-mouth-and-nose (with a barrier device) or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.



Students Practice: Using an AED

- First, show the steps while using your AED trainer, and then have students practice.
- Emphasize these steps:
 - Turn the AED on and follow the prompts.
 - Turn it on by pushing the On button or lifting the lid.
 - Follow the prompts, which will tell you everything you need to do.
 - Attach the pads.
 - Use the child pads if the child is an infant to 8 years of age. If child pads are not available, use adult pads.
 - Use adult pads if the child is 8 years of age or older.
 - Peel away the backing from the pads.
 - Following the pictures on the pads, attach them to the infant's bare chest and center of the upper back.
 - Plug the pads connector into the AED, if necessary.
 - Let the AED analyze.
 - Loudly state, "Clear," and make sure that no one is touching the infant.
 - The AED will analyze the heart rhythm.
 - If the AED tells you a shock is not needed, resume CPR.
 - Deliver a shock if needed.
 - Loudly state, "Clear," and make sure that no one is touching the infant.
 - Push the Shock button.
 - Immediately resume CPR.



Students Practice: Putting It All Together

- Students will practice putting it all together by checking scene safety, assessing an infant's responsiveness and breathing, providing chest compressions, giving breaths, and using an AED.
- On the Infant CPR Skills Test, you can choose how students will give breaths (by mouth-to-mouth-and-nose or with a pocket mask), so have them practice the one that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.

Lesson 5

Infant CPR Skills Test

15 minutes



Discussion

Read the following testing script aloud to the student (may be read to all students at once):

"This test is like a realistic emergency situation. You should do whatever you think is necessary to save the infant's life. You will have to determine for yourself what you need to do. I will read a short scenario to you, but I won't be able to answer any questions. You can treat me like another rescuer who has arrived with you and tell me to do something to help you. If you make a mistake or forget to do something important, you should not stop. Just do your best to correct the error. Continue doing what you would do in an actual emergency until I tell you to stop. Do you have any questions before we start?"



Instructor Tips

- Be prepared and organized with student skills testing checklists. Review these before class and have all materials ready to properly test students on every step.
- When using multiple instructors for a class, especially when there are many students, assign each instructor a different role (eg, testing, monitoring the exam, remediation) to stay on schedule.
- Provide students a private setting for skills testing, if needed.



Skills Test

- Follow the Infant CPR Skills Testing Checklist and check off each step as the student performs it correctly. Leave steps they miss blank.
- After starting, if the student asks questions about the skills or sequences, tell the student, "Do what you think is best right now." If the student asks what to do with the manikin, tell them, "Check the manikin yourself and do what you think is needed to save a life." If the student seems unsure, explain that they will be assessing the manikin as if it were a real infant and doing whatever is necessary.

Remediation

- For students who need remediation, refer to the remediation lesson plan.

Lesson 6

Infant Choking

4 minutes

Learning Objective

- Demonstrate how to help a choking infant



Practice While Watching: Infant Choking Relief

- Tell students that they will complete 1 cycle of 5 back blows and 5 chest thrusts, following along with the video.
- Observe students and provide feedback.
- Repeat the practice-while-watching segment until all students complete the practice.

Lesson 7

Pediatric First Aid

30 minutes

Learning Objectives

- Discuss how universal precautions, PPE, and handwashing can protect against germs and disease
- List the priorities, roles, and responsibilities of first aid responders
- Describe the key steps in first aid
- Describe the steps to remove protective gloves
- Demonstrate the steps to respond to a first aid emergency



Students Practice: Responding to a Pediatric First Aid Emergency

- Have students pair up, with one student playing the role of the person who is not breathing normally and the other playing the rescuer.
- After providing the student with a scenario, evaluate them with the following steps:
 - Verbalizes that the scene is safe
 - Taps and shouts
 - Shouts for help
 - Sends someone to call the local emergency response number and get the first aid kit and AED
 - Checks breathing
 - Looks for injury and medical information jewelry
 - Places the person in the recovery position
 - Verbalizes that they will stay with the person until EMS arrives
- Observe students and provide feedback.
- Have students switch roles and repeat the practice until all students complete the practice session or for additional practice to prepare for testing.



Skills Test: Responding to a First Aid Emergency

- Use the First Aid Skills Testing Checklist and check off each step the student performs correctly.
- Do not demonstrate skills or coach during the skills test.
- After starting, if the student asks questions about the skills or sequences, say, "Do what you think is best right now."
- Refer to the remediation lesson plan for students who do not complete all the steps on the checklist.



Students Practice: Removing Gloves

- Have students put on their gloves.

- Remind students that they will not be tested on the skills of removing protective gloves or handwashing.
- Observe students and provide feedback on their performance, emphasizing the core concept of not touching the outside of gloves with their bare hands.
 - Grip one glove on the outside, near the cuff, and peel it down until it comes off inside out.
 - Cup the used glove with their other, gloved hand.
 - Place 2 fingers of their bare hand inside the cuff of the glove that's still on their other hand.
 - Peel that glove off so that it comes off inside out, with the first glove inside of it.
 - Dispose of the gloves in a hazardous waste container or trash can, per their company's policies.
- Thoroughly wash their hands immediately after removing gloves.
- Repeat the practice session until all students practice.



Practice While Watching: Bleeding Control

- Observe and coach students as they practice along with the video.
- Repeat the practice until all students complete the practice session and feel ready for the test.



Skills Test: Controlling Bleeding and Bandaging

- Follow the steps in the Controlling Bleeding and Bandaging section of the First Aid Skills Testing Checklist and check off each step the student performs correctly. Leave missed steps blank.



Students Practice: Using an Epinephrine Autoinjector

- Explain the epinephrine autoinjector trainer to students.
- Have the students work in pairs, during which one student plays the person who is having a severe allergic reaction and the other plays the rescuer.
- Observe students and provide feedback.
- Ensure that the students are following the proper steps:
 - Hold the autoinjector in a fist without touching the tip, where there's a needle.
 - Remind students that epinephrine dosages are different for children and adults, so be sure that they are using the person's prescribed device.
 - Take off the safety cap. Have the person sit down while they hold their leg firmly in place.
 - Press the tip of the injector hard against the side of the person's outer thigh, about halfway between the hip and the knee.
 - Give the injection through the person's clothes or on their bare skin.



Instructor Tips

- The First Aid Skills Testing Checklist tests 2 first aid skills.
- Before each skills test, play the practice-while-watching segment and observe and coach students. Focus on what you want students to do rather than on what you don't.
- Do not demonstrate skills or coach during the skills test. After starting, if the student asks questions about the skills or sequences, tell the student, "Do what you think is best right now."
- If a student needs informal remediation for a skill, go to the Skills Review menu in the video and replay that video for the student.

- Hold the leg still while the needle is in place. Follow the instructions on the device for how long to hold the needle in place.
- Pull the autoinjector straight out. Don't touch the needle. Follow the manufacturers' recommendations for proper disposal.
- Note the time.
- Rub the spot where the injection was given for about 10 seconds.
- Have students switch roles and repeat the practice until all students complete the practice session.
- Remind students that there are multiple types of epinephrine autoinjectors. Students should familiarize themselves with the types they may encounter the most.



Students Practice: Splinting (Optional)

- Have students work in pairs, during which one student will play the injured person while the other plays the rescuer.
- Have students switch roles and repeat the practice.



Instructor Tips

- Splinting practice is optional unless a student needs it for their job. This is why introductions and learning your students' occupations at the beginning of class are important.
- Use rolled-up towels, magazines, and pieces of wood to show how everyday objects can be used as splints. Be sure to also have tape, gauze, or cloth for this practice.
- Remind students that the important part of splinting is to ensure that the splint is secure above and below the site of injury.

If you are not teaching Adult CPR AED, go to Lesson 10: Conclusion.

Learning Objectives

- Demonstrate how to assess the scene in the event of an emergency
- Describe how CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when someone needs CPR
- Perform CPR on an adult
- Describe how to perform CPR with help from others
- Demonstrate giving effective breaths by using mouth-to-mouth or a mask



Practice While Watching: Adult Medical Emergency

- Have students position themselves at the side of their manikins per the video instructions.
 - Ask students to recall the steps of scene safety and assessment, and tell students that they will now practice as they follow along with the video.
 - Assess the scene for safety.
 - Verbalize that the “scene is safe.”
 - Check for responsiveness by tapping and shouting.
 - Shout for help (when help arrives, designate someone to call the local emergency response number and someone to get an AED).
 - Check if the person is breathing for at least 5 but no more than 10 seconds.
- Remember, if the person is unresponsive and not breathing or not breathing normally, start CPR immediately.
- Repeat the practice-while-watching segment until all students complete the practice and perform the skill correctly.



Instructor Tips

- The Practice While Watching menu in the video contains all the practice-while-watching segments for easier access in blended-learning classes.
- Observe students and provide positive and corrective feedback on their performance. Ask for what you want students to do—not what you don’t.
- Repeat the practice until all students complete the practice session.
- If students need informal remediation on a skill, go to the Lessons menu in the video and find the video segment for that skill.



Practice While Watching: Adult Compressions

- Tell students that they will complete 2 sets of 30 compressions.
- Have students count out loud while they provide compressions.
- As you observe students and give feedback, emphasize these core concepts:
 - Hand placement: 2 hands
 - Rate: 100 to 120/min
 - Depth: at least 5 cm deep
 - Complete chest recoil
- Repeat the practice-while-watching segment until all students complete the practice.



Discussion: Compressions for a Pregnant Woman

Perform chest compressions for someone who is pregnant and in cardiac arrest just as you would for any adult in cardiac arrest. Delaying CPR in this situation puts multiple lives at risk.



Practice While Watching: Adult Breaths (Mouth-to-Mouth)

- Tell students that they will practice giving mouth-to-mouth breaths. They'll perform 3 sets of 2 breaths.
- Ask students to take off lipstick and remove gum.
- Before beginning practice with mouth-to-mouth:
 - Put one hand on the forehead and the fingers of your other hand on the bony part of the chin.
 - Tilt the head back and lift the chin.
 - While holding the airway open, pinch the nose closed with your thumb and forefinger.
 - Take a normal breath. Cover the manikin's mouth with your mouth.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Adult Breaths (Pocket Mask)

- Tell students that they will practice giving breaths with a pocket mask. They'll perform 3 sets of 2 breaths.
- Before beginning practice with the pocket mask:
 - Put the mask over the manikin's mouth and nose. If the mask has a narrow, pointed end, put that end on the bridge of the nose; position the wide end so it covers the mouth.
 - Tilt the head and lift the chin while pressing the mask against the manikin's face. It is important to make an airtight seal between the manikin's face and the mask while you lift the chin to keep the airway open.
 - Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
- When giving feedback, emphasize these core concepts:
 - Do not interrupt chest compressions for more than 10 seconds, even when you give breaths.
 - Look for visible chest rise. That's the best way to tell that breaths are effective.
 - Reopen the airway if the first breath does not cause visible chest rise. When giving breaths using a pocket mask, you may also need to reposition the mask.
- Repeat the practice-while-watching segment until all students complete the practice.



Practice While Watching: Adult CPR

- Students will practice providing chest compressions and giving breaths (by mouth-to-mouth or with a pocket mask).
- Students will complete 2 cycles of 30 compressions and 2 breaths.
 - Reminder: On the Adult CPR and AED Skills Test, you have the option to test students on giving breaths by mouth-to-mouth (with a barrier device) or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.



Practice While Watching: Using an AED on an Adult

- First, show the steps while using your AED trainer, and then have students practice.
- Emphasize these steps:
 - Turn the AED on and follow the prompts.
 - Turn it on by pushing the On button or lifting the lid.
 - Follow the prompts, which will tell you everything you need to do.
 - Attach the adult pads.
 - Use the adult pads for anyone 8 years of age and older.
 - Peel away the backing from the pads.
 - Following the pictures on the pads, attach them to the person's bare chest.
 - Plug the pads connector into the AED, if necessary.
 - Let the AED analyze.
 - Loudly state, "Clear," and make sure that no one is touching the person.
 - The AED will analyze the heart rhythm.
 - If the AED tells you a shock is not needed, resume CPR.
 - Deliver a shock if needed.
 - Loudly state, "Clear," and make sure that no one is touching the person.
 - Push the Shock button.
 - Immediately resume CPR.



Instructor Tip

For the Practice While Watching: Using an AED on an Adult video, play the video first and then demonstrate how to apply pads. Play the video again so that students can follow along.



Students Practice: Putting It All Together

- Students will practice putting it all together by practicing scene safety and assessment, providing chest compressions, giving breaths (by mouth-to-mouth or with a pocket mask), and using an AED.
- On the Adult CPR and AED Skills Test, you have the option to test students on giving breaths by mouth-to-mouth (with a barrier device) or giving breaths with a pocket mask. Have students practice the method for giving breaths that they will be tested on.
- Have students count out loud while they provide compressions.
- When providing feedback on students' performance, emphasize correct hand position, rate, depth, and recoil.
- Repeat the practice segment until all students complete the practice session.

Lesson 9

Adult CPR and AED Skills Test

20 minutes



Discussion

Read the following testing script aloud to each student (may be read to all students at once):

"This test is like a realistic emergency situation. You should do whatever you think is necessary to save the person's life. You will have to determine for yourself what you need to do. I will read a short scenario to you, but I won't be able to answer any questions. You can treat me like another rescuer who has arrived with you and tell me to do something to help you. If you make a mistake or forget to do something important, you should not stop. Just do your best to correct the error. Continue doing what you would do in an actual emergency until I tell you to stop. Do you have any questions before we start?"



Instructor Tips

- Be prepared and organized with student skills testing checklists. Review these before class and have all materials ready to properly test students on every step.
- When using multiple instructors for a class, especially when there are many students, assign each instructor a different role (eg, testing, monitoring the exam, remediation) to stay on schedule.
- Provide students a private setting for skills testing, if needed.



Skills Test

- Follow the Adult CPR and AED Skills Testing Checklist and check off each step the student performs correctly.
- After starting, if the student asks questions about the skills or sequences, tell the student, "Do what you think is best right now." If the student asks questions about what to do with the manikin, tell the student, "Check the manikin yourself and do what you think is needed to save a life." If the student seems unsure, explain that they will be assessing the manikin as if it were a real person and doing whatever is necessary.

Remediation

- For students who need remediation, refer to the remediation lesson plan.

Lesson 10

Conclusion

2 minutes



Play Video

- Play **Conclusion**.



Discussion

- Tell students how to find additional resources provided by the AHA to help with postclassroom training.
- Thank students for their participation.
- Summarize what students learned during the course.
- Make sure that students complete the evaluation form.



Instructor Tip

When summarizing the course, ask one or two students what they observed or learned.

Exam (Optional)

Time varies



Discussion

- Tell students not to write on the exam.
- Students may not cooperate or talk to each other during the exam.
- Because the exam is open resource, students may use the student workbook and any other accessible resources while taking the exam.



Exam

- Distribute answer sheets and exams.
- Collect student exams and grade them after students finish.
- Regardless of their score, all students should be given their exam results and be allowed the opportunity to review and ask questions.
- Students who scored less than 84% need immediate remediation.



Instructor Tips

- The Heartsaver exam is not required unless students need to take it for workplace requirements. Before class, find out which students need to take the exam. Make sure to use the version of the Heartsaver exam that covers all sections taught during the course.
- During testing and remediation, be efficient with the use of multiple instructors in the room. Assign each a different role, especially when there are many students in the class. This will ensure effective remediation, a smooth process, and staying on schedule.
- For the exam, make sure that students are provided an environment conducive to testing: quiet with minimal distractions and plenty of time to complete the exam.

Remediation

- For students who need remediation, refer to the remediation lesson plan.



Play Videos

- Replay scenarios, instruction, and practice-while-watching segments of the videos as needed to give the student additional practice.
- Repeat practice until the student feels comfortable and is ready to move forward with the exam or skills test.
- Some students may need additional practice or may need to repeat the course to demonstrate skills competency and to achieve a course completion card.



Instructor Tips

- Use the remediation lesson when a student does not pass the exam or skills test. To pass the exam, students must score 84%; to pass the skills test, students must complete all the steps on their skills testing checklist.
- Review the student's exam or skills testing sheet to identify where the student needs additional instruction or practice.
- The course videos are a good resource for reviewing specific topics and skills practice, and the menus make it easy to navigate to the correct video quickly.



Skills Test

- Retest Heartsaver skills as necessary by using the skills testing checklist.



Exam

- Provide remediation by giving a second exam or by talking with the student about each item that they answered incorrectly until the student shows understanding of incorrect items.
- After remediation, students should show an improvement in answering correctly and understand why the answer is correct.
- Give students their failed exam to study and enough time to review before retaking the exam.
- Make sure to collect all exams and answer keys from all students at the end of either the remediation or the course.

Postcourse

Immediately After the Class

- For the in-person course:
 - Collect and arrange all course paperwork.
 - Rearrange the room.
 - Clean and store equipment.
- Fill out International Training Center course report forms.
- Read and consider comments from course evaluations.
- Send students their course completion cards if not already distributed.



Instructor Tip

Student course completion cards must be issued to students within 20 business days after they complete their course, so submit course paperwork to your International Training Center as soon as possible.