

Part

5

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

Precourse

Instructor Tips

Prepare well for your role as a Heartsaver Instructor. Review all course materials and anticipate questions or challenges that may arise from students during the course. The time you invest in this part of your preparation is important to the overall success of every student.

Refer to Part 2: Teaching the Course in the instructor manual for further instruction on using lesson plans.

30 to 60 Days Before the Course

- Determine course specifics, such as
 - Your class audience, including their professions and how the skills taught during this course will translate to their on-the-job performance
 - Number of participating students
 - Any special needs or equipment needed for the course
- Reserve all needed equipment to teach the course. Refer to Part 1: Preparing for the Course in the instructor manual for a complete equipment list.
- Schedule a room that meets the room requirements for the Heartsaver course. Refer to Part 1: Preparing for the Course in the instructor manual for detailed requirements.
- Schedule additional instructors, if needed, depending on the size of the class.

At Least 3 Weeks Before the Course

- Send participating students precourse letters, student materials, and the course agenda.
- Confirm additional scheduled instructors, if needed.
- 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 all required equipment needed is available for the course.
- Set up the room and make sure that all technology and equipment are working properly. This can also be done the day of the course if the room is not accessible the day before.
- Locate the nearest AED in the building and confirm the emergency response number.
- Coordinate the roles and responsibilities with additional instructors, if needed, to fulfill the course agenda and to ensure efficiency and timing of the course, per the course agenda.
- Ensure that all course paperwork is in order.

Day of the Course

Arrive at the course location in plenty of time to complete the following:

- Make sure all equipment is working and has been cleaned according to manufacturer instructions.
- Have the video ready to play before students arrive and make sure it is working properly with sound.
- Distribute supplies to the students or set up supplies for students to collect when they arrive, with clear instructions on what they need.
- Greet students as they arrive to put them at ease, and direct them where to go.
- Make sure the course roster is completed by all students as they arrive for the course.

Child CPR AED Lesson Plans

Lesson 1

Introduction

5 minutes

Instructor Tips

Be familiar with the learning objectives and the Heartsaver course content. It's critical that you know what you want to communicate, why it's important, and what you want to happen as a result.

Think about how you want to manage breaks during the course. Making yourself available allows you to answer questions people might feel too embarrassed to ask in front of everyone. It also gives you time to establish rapport and get feedback.



Discussion

- Introduce yourself and additional instructors, if present.
- Invite students to introduce themselves.
 - It is important to ask students at the beginning of the class to provide information about their occupations so you can tailor the class to best fit their needs.
- Explain that the course is interactive. Please refer to the following points (detailed information for each throughout the Instructor Manual) for discussion with students:
 - Your role
 - Video-based learning
 - Use of scenarios
 - Practice while watching
 - Refer to Part 2: Teaching the Course in the Instructor Manual for detailed information about practice while watching.
 - Use of the student workbook
 - Exam (if required)
 - Skills test
- Ask that any student who anticipates 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. Refer to Part 1: Preparing for the Course in the instructor manual for further explanation about students with special needs.
- 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.
 - Inform students of breaks you have scheduled during the class.
 - Tell the students what time the class will end.
- Remind students what they will learn during the course. At the end of the Heartsaver Child CPR AED Course, students will be able to
 - Describe how high-quality CPR improves survival
 - Explain the concepts of the Chain of Survival

- Recognize when someone needs CPR
- Give effective breaths by using mouth-to-mouth or a mask
- Perform high-quality CPR for a child
- Describe how to perform CPR with help from other bystanders
- Demonstrate how to use an AED on a child
- Describe when and how to help a choking adult or child
- For further detail on the video and scenarios to be shown during the course, refer to the Heartsaver Child CPR AED Instructor-Led Course Outline in Part 4: Additional Resources in the instructor manual.
- Remind students of the course completion requirements:
 - **Skills Test Requirements:** Students must pass the Child CPR Skills Test.
 - **Optional Exam:** To pass the optional exam, students must score at least 84%.



Play Video

The video will show and discuss

- Kurt's Story
- Introduction to the course

Lesson 2

Child CPR

26 minutes

Part 1: Scene Safety and Assessment

Part 2: Child Chest Compressions

Part 3: Giving Breaths Mouth-to-Mouth

Part 4: Using a Face Shield or Pocket Mask to Give Breaths

Learning Objectives

Tell students that at the end of this lesson, they will be able to

- Describe how high-quality CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when someone needs CPR
- Give effective breaths by using mouth-to-mouth or a mask
- Perform high-quality CPR for a child

Instructor Tips

- Practice while watching: Remind students that they will be practicing while watching a video segment, so that they will be prepared and know to get in place for the practice video segment.
- Feedback: When providing feedback to students who are practicing, remember to focus on what you do want rather than what you don't want. Remember to always state feedback in a positive tone.
- Tell students to have their student workbook accessible during the course.
- When concluding a practice-while-watching session, ask all students if they are ready to move forward to the next skill or if they would like to repeat practice while watching.
- Familiarize yourself with all equipment that will be used in the class and how to assemble it so that
 - You know how to help students with the equipment during the course
 - You are able to troubleshoot any problems with the equipment
- Make sure not to interrupt the video if you have any comments to add. Instead, write them down and discuss them at the end of the video. Students do not learn well when they are trying to listen to two things at once.
- Consider asking the students how they would differentiate between a child and an adult. For example
 - Facial, chest, and underarm hair in boys
 - Breast development in girls



Student Workbook

Students can turn to CPR and AED Use for Children in the student workbook to follow along.



Discussion

Have students review the sections on the Pediatric Chain of Survival, and discuss how they will be involved in different links of the chain.

Then, briefly discuss the steps of scene safety and assessment.



Play Video

The video will show and discuss scene safety and assessment:

- Scene safety and checking for responsiveness
- Phoning 9-1-1
- Checking for breathing
- Steps leading up to child CPR



Video Pauses

- 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 they will now practice the scene safety and assessment sequence.



Practice While Watching: Scene Safety and Assessment

- Students will follow along with the video to complete the following actions. These actions can be completed in a different order, but this sequence is followed during the practice while-watching segment.
 - Make sure the scene is safe.
 - Tap and shout (check for responsiveness).
 - Shout for help.
 - Check for breathing.
 - Begin CPR, phone 9-1-1, and get an AED.
- Observe students and provide positive and corrective feedback on their performance.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.



Play Video

The video will show and discuss child chest compressions.



Video Pauses

- Have students position themselves at the side of their manikins per the video instructions.
- Tell students they will practice child chest compressions and will complete 2 sets of 30 compressions. Students need to count out loud while providing compressions.



Practice While Watching: Chest Compressions

Students will follow along with the video to complete the following steps:

- Position yourself at the victim's side.

- Make sure the child is lying on their back on a firm, flat surface.
- Quickly move clothes out of the way.
- Use either 1 hand or 2 hands to give compressions.
 - 1 hand: Put the heel of 1 hand on the center of the chest (over the lower half of the breastbone).
 - 2 hands: Put the heel of 1 hand on the center of the chest (over the lower half of the breastbone). Put your other hand on top of the first hand.
- Push straight down at least one third the depth of the chest, or approximately 2 inches.
- Push at a rate of 100 to 120 compressions per minute. Count the compressions out loud.
- Let the chest come back up to its normal position after each compression.

Observe students and provide positive and corrective feedback on their performance. Emphasize core concepts: correct hand placement; push hard, push fast; allow complete chest recoil.

Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.



Play Video

The video will show and discuss giving breaths mouth-to-mouth and head tilt–chin lift.



Video Pauses

- Have students position themselves at the side of their manikins per the video instructions.
- Explain what chest rise is and how to watch for it on the particular manikins you are using.
- Explain how to clean the manikin after each student practices, and ask students to take off lipstick and remove gum before giving breaths.
- Tell students they will practice giving breaths and will complete 3 sets of 2 breaths.



Practice While Watching: Giving Breaths Mouth-to-Mouth

- Students will follow along with the video to complete the following steps:
 - 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 child’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.
 - Try not to interrupt compressions for more than 10 seconds.
- Observe students and provide positive and corrective feedback on their performance.
 - Emphasize visible chest rise.
 - Have students open and reopen the airway if necessary.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.



Play Video

The video will show and discuss using a face shield or pocket mask to give breaths.



Video Pauses

- Have students position themselves at the side of their manikins per the video instructions.
- During the pause, ensure that students are able to use the proper hand technique for achieving a good seal of the mask on the face. Place the hand in a “C” position to achieve this.
- Tell students they will practice giving breaths and will complete 3 sets of 2 breaths.



Practice While Watching: Using a Face Shield or Pocket Mask to Give Breaths

- Students will follow along with the video to complete the following steps:
 - Put the mask over the child’s mouth and nose.
 - If the mask has a pointed end, put the narrow end of the mask 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 child’s face. It is important to make an airtight seal between the child’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.
- Observe students and provide positive and corrective feedback on their performance.
 - Tell students they need to hold the mask firmly against the face.
 - Instructors ensure that students use the proper hand technique to achieve a good seal of the mask on the face. Placing the hand in a “C” position will achieve this.
 - Emphasize visible chest rise.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.

Lesson 3

Using an AED (Child)

12 minutes

Part 1: AED

Part 2: Putting It All Together

Learning Objective

Tell students that at the end of this lesson, they will be able to

- Demonstrate how to use an AED on a child

Instructor Tips

- When leading a discussion, ask your students open-ended questions that focus on their perspective to engage their minds and increase their participation.
- When answering a question, acknowledge the individual with eye contact, and then answer to the entire room, coming back to the questioner periodically.
- There may be multiple sets of pads (for an adult, child, or infant) supplied with the AED. The focus of this lesson is the use of an AED on a child. The use of the adult and infant AED pads is covered in the adult and infant lesson plans.



Student Workbook

Students can turn to the Use an AED section in CPR and AED Use for Children in the student workbook to follow along.



Play Video

The video will show and discuss using an AED.



Video Pauses: AED Review

During the pause, show students the AED trainer and

- Explain how to use the AED trainer
- Emphasize following the AED prompts
- Remind students that the AED trainer in class will not give a real shock
- Direct students to have the AED trainers accessible
- Tell students they are now going to practice using the AED
- Remind students of AED special considerations:
 - Is the child immersed in water or is water covering the ill or injured person's chest?
 - Does the child have an implanted defibrillator or pacemaker?
 - Does the child have a transdermal medication patch or other object on the surface of the skin where the AED pads are to be placed?
 - How to use an AED for infants and children less than 8 years of age



Students Practice: AED

Lead students by teaching the following steps on how to use an AED. First show the steps while using your AED trainer, and then have students practice.

Instructions for Students

- 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 child pads if the child is an infant to 8 years old. If child pads are not available, use adult pads.
 - Use adult pads if the child is older than 8 years.
 - 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.
 - On a small chest, if this causes the pads to overlap, consider placing one pad on the chest and one pad on the back.
- 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 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.



Play Video

The video will show and discuss putting it all together.



Video Pauses

- Tell students they will practice putting it all together by practicing scene safety and assessment, providing chest compressions, giving breaths (with a mask or mouth-to-mouth), and using an AED. Students will complete 2 cycles of 30 compressions and 2 breaths.
 - On the Child CPR Skills Test, you have the option to test students on giving breaths mouth-to-mouth or giving breaths with a mask. Have students practice the skill for giving breaths that they will be tested on.
- Have students position themselves at the side of their manikins to begin practice. Students need to count out loud while providing compressions.



Students Practice: Putting It All Together

- Lead students by teaching the steps of scene safety and assessment, child compressions, giving breaths (with a mask or mouth-to-mouth), and using an AED. Refer to each skill in this lesson for detailed steps.
- Observe students and provide positive and corrective feedback on their performance.
 - Coach students on strengthening child high-quality CPR.
- Repeat the practice segment as many times as needed for all students to complete the practice session.

Lesson 4

Summary: Child CPR AED

2 minutes

Instructor Tips

- Make sure not to interrupt the video if you have any comments to add; write them down and discuss them at the end of the video. Students do not learn well when they are trying to listen to two things at once.



Student Workbook

Students can turn to Putting It All Together: Child High-Quality CPR AED Summary in the student workbook for further review.



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 assessment?
 - Make sure the scene is safe.
 - Tap and shout.
 - Shout for help.
 - Check for breathing.
- What are the steps for phoning 9-1-1 and getting an AED?
 - Phone 9-1-1 and get an AED.
 - Provide CPR.
 - If you are alone, put your cell phone on speaker mode, phone 9-1-1, get an AED, and continue sets of 30 compressions and 2 breaths.
- What are some characteristics of high-quality CPR?
 - Push down approximately 2 inches.
 - Do not lean on the chest.
 - Push at a rate of 100 to 120 compressions per minute.
 - Let the chest come back up to its normal position.
 - Give breaths quickly and effectively without interrupting compressions for more than 10 seconds.

Allow students enough time for review and skills practice, if needed, before beginning the skills test.

Lesson 5

Child CPR Skills Test

12 minutes

Instructor Tips

- For skills testing, it is important to 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.
- During skills testing, be efficient with the use of multiple instructors in the room, assigning each a different role, especially when there is a high volume of students in the classroom. This will ensure effective remediation, a smooth process, and efficiency for completing the class on time.
- Make sure students are provided a private setting for skills testing.



Discussion

Before the Child CPR Skills Test, 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. For example, if you check the response on the manikin and there is no response, then you should do whatever you would do for a child who is not responding. 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?”



Skills Test

- Refer to the Understanding the Child CPR Skills Testing Checklist section and the critical skills descriptors for specific direction on how to test students on child CPR skills. This is found in Part 4: Additional Resources in the instructor manual.
 - Check off each skill as the student demonstrates competency per the critical skills descriptors.
- After starting, if the student asks any questions about the skills or sequences, you should not give them the answer. Rather, 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, do your best to explain that they will be assessing the manikin and doing whatever is necessary.

Remediation

For students who need remediation, follow these steps and refer to the remediation lesson.

- Determine where the students are having trouble during their Child CPR Skills Test.
- If needed, replay sections of video or practice skills to ensure learning.
- Retest skills as necessary.
- Some students may need additional practice or may need to repeat the course to demonstrate skills competency and to achieve a course completion card.

Lesson 6

Choking in Children

7 minutes

Learning Objective

Tell students that at the end of this lesson, they will be able to

- Describe when and how to help a choking adult or child



Student Workbook

Students can turn to Severe Airway Block in an Adult or Child in the student workbook to follow along.



Play Video

The video will show and discuss choking in children, including relief of choking in a responsive child and relief of choking in an unresponsive child.



Discussion

Review child choking with students by asking the following:

- Where should you give thrusts for a severely choking child?
 - Slightly above the belly button for abdominal thrusts
 - For a large child: Center of chest for chest thrusts
- What is different about 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 the size of the child.
- 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. Do not perform a blind finger sweep.

If students would like to practice their hand placement for abdominal thrusts for the relief of choking in a child, students can place hands on themselves with your review or (optional) you can allow the students to practice hand placement on you.

Lesson 7

Water Safety

2 minutes

Learning Objective

Tell students that at the end of this lesson, they will be able to

- Describe the techniques that help prevent drowning emergencies



Play Video

The video will show and discuss the importance of

- Learning to swim
- Knowing about local hazards and one's own limitations
- Wearing a life jacket
- Being able to recognize and respond to a swimmer in distress, shout for help, and perform a safe rescue and CPR

Lesson 8

Conclusion

2 minutes



Instructor Tips

- When summarizing what the course has covered, allow students to lead this discussion at times by asking 1 or 2 students (maximum, for class time efficiency) what they observed/learned during the course.
- During the summary and closing, provide students with clear direction on how they can further study and seek out additional resources provided by the AHA to help with postclassroom training.



Play Video

The video will show and discuss the conclusion.



Discussion

To conclude the course:

- Thank students for their participation.
- Summarize what students learned during the course. Refer to the Heartsaver course outlines found in Part 4: Additional Resources in the instructor manual.
- Make sure that students complete the evaluation form.



Infant CPR Lesson Plans

Lesson 1

Introduction

2 minutes



Discussion

- Describe the course agenda for Infant CPR.
 - Inform students of breaks you have scheduled during this portion of the class.
- Remind students what they will learn in Infant CPR. At the end of Heartsaver Infant CPR, students will be able to
 - Describe how high-quality CPR improves survival
 - Explain the concepts of the Chain of Survival
 - Recognize when someone needs CPR
 - Give effective breaths by using mouth-to-mouth or a mask
 - Perform high-quality CPR for an infant
 - Demonstrate how to help a choking infant
- For further detail on the video and scenarios to be shown during the course, refer to the Heartsaver Infant CPR Instructor-Led Course Outline in Part 4: Additional Resources in the instructor manual.
- Remind students of the course completion requirements:
 - **Skills Test Requirements:** Students must pass the Infant CPR Skills Test.
 - **Optional Exam:** To pass the optional exam, students must score at least 84%.



Play Video

This video will introduce students to infant CPR.

Lesson 2

Infant CPR

20 minutes

Part 1: Steps Leading Up to Infant CPR

Part 2: Infant Chest Compressions

Part 3: Giving Breaths to an Infant

Part 4: Using a Pocket Mask to Give Breaths to an Infant

Part 5: Putting It All Together

Learning Objectives

Tell students that at the end of this lesson, they will be able to

- Describe how high-quality CPR improves survival
- Recognize when someone needs CPR
- Give effective breaths by using mouth-to-mouth or a mask
- Perform high-quality CPR for an infant

Instructor Tips

- Practice while watching: Remind students that they will be practicing while watching a video segment, so that they will be prepared and know to get in place for the practice video segment.
- Feedback: When providing feedback to students who are practicing, remember to focus on what you do want rather than what you don't want. Remember to always state feedback in a positive tone.
- Tell students to have their student workbook accessible during the course.
- When concluding a practice-while-watching session, ask all students if they are ready to move forward to the next skill or if they would like to repeat practice while watching.
- Familiarize yourself with all equipment that will be used in the class and how to assemble it so that
 - You know how to help students with the equipment during the course
 - You are able to troubleshoot any problems with the equipment
- Make sure not to interrupt the video if you have any comments to add. Instead, write them down and discuss them at the end of the video. Students do not learn well when they are trying to listen to two things at once.



Student Workbook

Students can turn to CPR for Infants in the student workbook to follow along.



Play Videos

The videos will show and discuss the steps leading up to infant CPR and infant chest compressions.



Video Pauses

- Have students position themselves at the side of their manikins per the video instructions.
- Tell students they will practice infant chest compressions and will complete 2 sets of 30 compressions. Students need to count out loud while providing compressions.



Practice While Watching: Chest Compressions

- Students will follow along with the video to complete the following steps:
 - Position yourself at the victim's side.
 - Make sure the infant is lying on their back on a firm, flat surface.
 - Quickly move bulky clothes out of the way. If an infant's clothes are difficult to remove, you can still provide compressions over clothing.
 - If an AED becomes available, remove all clothes that cover the chest. AED pads must not be placed over any clothing.
 - Use 2 fingers of one hand or 2 thumbs to give compressions. Place them on the breastbone, just below the nipple line.
 - Push straight down at least one third the depth of the chest, or approximately 1½ inches. If you are unable to push down this far, you can use the heel of 1 hand to give compressions.
 - Push at a rate of 100 to 120 compressions per minute. Count the compressions out loud.
 - Let the chest come back up to its normal position after each compression.
- Observe students and provide positive and corrective feedback on their performance.
 - Emphasize core concepts: correct hand placement; push hard, push fast; allow complete chest recoil.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.



Play Video

The video will show and discuss giving breaths mouth-to-mouth and head tilt–chin lift.



Video Pauses

- Have students position themselves at the side of their manikins per the video instructions.
- Tell students they will practice giving breaths and will complete 3 sets of 2 breaths.
 - Ask students to take off lipstick and remove gum.



Practice While Watching: Giving Breaths Mouth-to-Mouth

- Students will follow along with the video to complete the following steps:
 - 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, take a normal breath. Cover the infant's mouth and nose with your mouth. If you have difficulty making an effective seal, try either a mouth-to-mouth or a mouth-to-nose breath.

- If you use the mouth-to-mouth technique, pinch the nose closed.
- If you use the mouth-to-nose technique, close the mouth.
- Give 2 breaths (blow for 1 second for each). Watch for the chest to begin to rise as you give each breath.
 - Try not to interrupt compressions for more than 10 seconds.
- Observe students and provide positive and corrective feedback on their performance.
 - Emphasize visible chest rise.
 - Have students open and reopen the airway if necessary.
 - Make sure students are careful not to overinflate the infant's lungs when giving breaths.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.



Play Video

The video will show and discuss using a pocket mask to give breaths to an infant.

- Have students position themselves at the side of their manikins per the video instructions.
- During the pause, ensure that students are able to use the proper hand technique for achieving a good seal of the mask on the face. Place the hand in a "C" position to achieve this.
- Tell students they will practice giving breaths and will complete 3 sets of 2 breaths.



Practice While Watching: Using a Pocket Mask to Give Breaths to an Infant

- Students will follow along with the video to complete the following steps:
 - Put the mask over the infant's mouth and nose.
 - If the mask has a pointed end, put the narrow end of the mask 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 infant's face. It is important to make an airtight seal between the infant'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.
 - Try not to interrupt compressions for more than 10 seconds.
- Observe students and provide positive and corrective feedback on their performance.
 - Tell students they need to hold the mask firmly against the face.
 - Emphasize visible chest rise.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.



Play Video

The video will show and discuss putting it all together.



Video Pauses

- Tell students they will practice putting it all together by practicing the steps leading up to infant CPR, providing chest compressions, giving breaths (with a mask or mouth-to-mouth), and using an AED. Students will complete 2 cycles of 30 compressions and 2 breaths.
 - On the Infant CPR Skills Test, you have the option to test students on giving breaths mouth-to-mouth or giving breaths with a mask. Have students practice the skill for giving breaths that they will be tested on.
- Have students position themselves at the side of their manikins to begin practice. Students need to count out loud while providing compressions.



Students Practice: Putting It All Together

- Lead students by teaching the steps leading up to infant CPR, infant compressions, and giving breaths (with a mask or mouth-to-mouth). Refer to each skill in this lesson for detailed steps.
- Observe students and provide positive and corrective feedback on their performance.
 - Coach students on strengthening infant high-quality CPR.
- Repeat the practice segment as many times as needed for all students to complete the practice session.

Lesson 3

Summary: Infant CPR

2 minutes



Student Workbook

Students can turn to Putting It All Together: Infant High-Quality CPR Summary in the student workbook for further review.



Play Video

The video will show and summarize infant CPR.



Discuss

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.
 - Check for breathing.
- What are some characteristics of high-quality CPR?
 - Use 2 fingers of one hand or 2 thumbs to give compressions.
 - Push down at approximately 1½ inches.
 - Push at a rate of 100 to 120 compressions per minute.
 - Let the chest come back up to its normal position.
 - Give breaths quickly and effectively without interrupting compressions for more than 10 seconds.
 - When giving breaths, be careful not to overinflate an infant's lungs.

Allow students enough time for review and skills practice, if needed, before beginning the skills test.

Lesson 4

Infant CPR Skills Test

12 minutes

Instructor Tips

- For skills testing, it is important to 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.
- During skills testing, be efficient with the use of multiple instructors in the room, assigning each a different role, especially when there is a high volume of students in the classroom. This will ensure effective remediation, a smooth process, and efficiency for completing the class on time.
- Make sure students are provided a private setting for skills testing.



Discussion

Before the Infant CPR Skills Test, 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. For example, if you check the response on the manikin and there is no response, then you should do whatever you would do for an infant who is not responding. 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?"



Skills Test

- Refer to the Understanding the Infant CPR Skills Testing Checklist section and the critical skills descriptors for specific direction on how to test students on infant CPR skills. This is found in Part 4: Additional Resources in the instructor manual.
 - Check off each skill as the student demonstrates competency per the critical skills descriptors.
- After starting, if the student asks any questions about the skills or sequences, you should not give them the answer. Rather, 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, do your best to explain that they will be assessing the manikin and doing whatever is necessary.

Remediation

For students who need remediation, follow these steps and refer to the remediation lesson.

- Determine where the students are having trouble during their Infant CPR Skills Test.
- If needed, replay sections of video or practice skills to ensure learning.
- Retest skills as necessary.
- Some students may need additional practice or may need to repeat the course to demonstrate skills competency and to achieve a course completion card.

Lesson 5

Choking in Infants

11 minutes

Learning Objective

Tell students that at the end of this lesson, they will be able to

- Demonstrate how to help a choking infant



Student Workbook

Students can turn to Severe Airway Block in an Infant in the student workbook to follow along.



Play Video

The video will show and discuss relief of choking in a responsive infant.



Video Pauses

- Have students position themselves per the video instructions.
- Tell students they will practice the relief of choking on a responsive infant and will complete 1 set of 5 back slaps and 5 chest thrusts.



Practice While Watching: Relief of Choking in a Responsive Infant

- Students will follow along with the video to complete the following steps:
 - Kneel or sit with the infant in your lap.
 - Hold the infant facedown on your forearm. Support the infant's head and jaw with your hand.
 - With the heel of your other hand, give up to 5 back slaps between the infant's shoulder blades.
 - If the object does not come out after 5 back slaps, turn the infant onto their back, supporting the head.
 - Give up to 5 chest thrusts by using 2 fingers of your other hand to push on the chest in the same place you push during CPR.
 - Repeat giving 5 back slaps and 5 chest thrusts until the infant can breathe, cough, or cry or until they become unresponsive.
 - If the choking infant who becomes unresponsive, lower the infant 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. Do not perform a blind finger sweep.
- Observe students and provide positive and corrective feedback on their performance.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.



Play Video

The video will show and discuss relief of choking in an unresponsive infant.

Lesson 6

Conclusion

2 minutes

Instructor Tips

- When summarizing what the course has covered, allow students to lead this discussion at times by asking 1 or 2 students (maximum, for class time efficiency) what they observed/learned during the course.
- During the summary and closing, provide students with clear direction on how they can further study and seek out additional resources provided by the AHA to help with postclassroom training.



Play Video

The video will show and discuss the conclusion.



Discussion

To conclude the course:

- Thank students for their participation.
- Summarize what students learned during the course. Refer to the Heartsaver course outlines found in Part 4: Additional Resources in the instructor manual.
- Make sure that students complete the evaluation form.

Adult CPR AED Lesson Plans

Lesson 1

Introduction

5 minutes



Discussion

- Describe the course agenda for Adult CPR AED.
 - Inform students of breaks you have scheduled during this portion of the class.
- Remind students what they will learn in Adult CPR AED. At the end of Adult CPR AED, students will be able to
 - Describe how high-quality CPR improves survival
 - Explain the concepts of the Chain of Survival
 - Recognize when someone needs CPR
 - Give effective breaths by using mouth-to-mouth
 - Perform high-quality CPR for an adult
 - Describe how to perform CPR with help from other bystanders
 - Describe when and how to help a choking adult or child
- For further detail on the video and scenarios to be shown during the course, refer to the Course Outline section in Part 4: Additional Resources in the instructor manual.
- Remind students of the course completion requirements:
 - **Skills Test Requirements:** Students must pass the Adult CPR and AED Skills Test.
 - **Optional Exam:** To pass the optional exam, students must score at least 84%.



Play Video

The video will show and discuss difference between heart attack and cardiac arrest.

Lesson 2

Adult CPR

26 minutes

Part 1: Adult Chest Compressions

Part 2: Giving Breaths Mouth-to-Mouth

Learning Objectives

Tell students that at the end of this lesson, they will be able to

- Describe how high-quality CPR improves survival
- Explain the concepts of the Chain of Survival
- Recognize when someone needs CPR
- Give effective breaths by using mouth-to-mouth
- Perform high-quality CPR for an adult

Instructor Tips

- Practice while watching: Remind students that they will be practicing while watching a video segment, so that they will be prepared and know to get in place for the practice video segment.
- Feedback: When providing feedback to students who are practicing, remember to focus on what you do want rather than what you don't want. Remember to always state feedback in a positive tone.
- Tell students to have their student workbooks accessible during the course.
- When concluding a practice-while-watching session, ask all students if they are ready to move forward to the next skill or if they would like to repeat practice while watching.
- Familiarize yourself with all equipment that will be used in the class and how to assemble it so that
 - You know how to help students with the equipment during the course
 - You are able to troubleshoot any problems with the equipment
- Make sure not to interrupt the video if you have any comments to add. Instead, write them down and discuss them at the end of the video. Students do not learn well when they are trying to listen to two things at once.



Student Workbook

Students can turn to CPR and AED Use for Adults in the student workbook to follow along.



Discussion

Have students review the sections on the Adult Chain of Survival, and discuss how they will be involved in different links of the chain.

Then, briefly discuss the steps of scene safety and assessment.



Play Video

The video will show and discuss chest compressions.



Video Pauses

- Have students position themselves at the side of their manikins per the video instructions.
- Tell students they will practice adult chest compressions and will complete 2 sets of 30 compressions. Students need to count out loud while providing compressions.



Practice While Watching: Adult Chest Compressions

Students will follow along with the video to complete the following steps:

- Position yourself at the ill or injured person's side.
- Make sure the person is lying on their back on a firm, flat surface.
- Quickly move bulky clothes out of the way. If a person's clothes are difficult to remove, you can still provide compressions over clothing.
 - If an AED becomes available, remove all clothes that cover the chest. AED pads must not be placed over any clothing.
- Put the heel of 1 hand on the center of the chest (over the lower half of the breastbone). Put your other hand on top of the first hand.
- Push straight down at least 2 inches.
- Push at a rate of 100 to 120 compressions per minute. Count the compressions out loud.
- Let the chest come back up to its normal position after each compression.
- Try not to interrupt compressions for more than 10 seconds, even when you give breaths.

Compressions for a Pregnant Woman

- Do not delay providing chest compressions for a pregnant woman in cardiac arrest. High-quality CPR can increase the mother's and the infant's chance of survival. If you do not perform CPR on a pregnant woman when needed, the lives of both the mother and the infant are at risk.
- Perform high-quality chest compressions for a pregnant woman in cardiac arrest as you would for any victim of cardiac arrest. If the woman begins to move, speak, blink or otherwise react, roll her onto her left side.
- Observe students and provide positive and corrective feedback on their performance.
 - Emphasize core concepts: correct hand placement; push hard, push fast; allow complete chest recoil.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.



Play Video

The video will show and discuss giving breaths mouth-to-mouth, including head tilt–chin lift.



Video Pauses

- Have students position themselves at the side of their manikins per the video instructions.
- Tell students they will practice giving breaths and will complete 3 sets of 2 breaths.
 - Ask students to take off lipstick and remove gum.



Practice While Watching: Giving Breaths Mouth-to-Mouth

- Students will follow along with the video to complete the following steps:
 - 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 person'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.
 - Try not to interrupt compressions for more than 10 seconds.
- Observe students and provide positive and corrective feedback on their performance.
 - Emphasize visible chest rise.
 - Have students open and reopen the airway if necessary.
- Repeat the practice-while-watching segment as many times as needed for all students to complete the practice session.

Lesson 3

Using an AED on an Adult

15 minutes

Part 1: AED

Part 2: Putting It All Together

Learning Objective

Tell students that at the end of this lesson, they will be able to

- Demonstrate how to use an AED on an adult

Instructor Tips

- When leading a discussion, ask your students open-ended questions that focus on their perspective to engage their minds and increase their participation.
- When answering a question, acknowledge the individual with eye contact, and then answer to the entire room, coming back to the questioner periodically.
- There may be multiple sets of pads (for an adult, child, or infant) supplied with the AED. The focus of this lesson is the use of an AED on an adult. The use of the child and infant AED pads is covered in the child and infant lesson plans.



Student Workbook

Students can turn to the Use an AED section in CPR and AED Use for Adults in the student workbook to follow along.



Play Video

The video will show and discuss how to use an AED, including use of AED for infants and children less than 8 years of age, and AED special considerations, including if the person

- Has a hairy chest
- Is immersed in water or water is covering the ill or injured person's chest
- Has an implanted defibrillator or pacemaker
- Has a transdermal medication patch or other object on the surface of the skin where the AED pads are to be placed
- Is wearing jewelry or a bra/undergarment
- Is pregnant



Video Pauses: AED Review

During the pause, show students the AED trainer and

- Explain how to use the AED trainer
- Emphasize following the AED prompts
- Remind students that the AED trainer in class will not give a real shock
- Direct students to have the AED trainers accessible
- Tell students they are now going to practice using the AED



Students Practice: AED

Lead students by teaching the following steps on how to use an AED. First show the steps while using your AED trainer, and then have students practice.

Instructions for Students

- 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 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 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.



Play Video

The video will show and discuss putting it all together.



Video Pauses

- Tell students they will practice putting it all together by practicing scene safety and assessment, providing chest compressions, giving breaths (with a mask or mouth-to-mouth), and using an AED. Students will complete 2 cycles of 30 compressions and 2 breaths.
 - On the Adult CPR and AED Skills Test, you have the option to test students on giving breaths mouth-to-mouth or giving breaths with a mask. Have students practice the skill for giving breaths that they will be tested on.
- Have students position themselves at the side of their manikins to begin practice. Students need to count out loud while providing compressions.



Students Practice: Putting It All Together

- Lead students by teaching the steps of scene safety and assessment, adult compressions, giving breaths (with a mask or mouth-to-mouth), and using an AED. Refer to each skill in this lesson for detailed steps.
- Observe students and provide positive and corrective feedback on their performance.
 - Coach students on strengthening adult high-quality CPR.
- Repeat the practice segment as many times as needed for all students to complete the practice session.

Lesson 4

Summary: Adult CPR AED

2 minutes



Student Workbook

Students can turn to Putting It All Together: Adult High-Quality CPR AED Summary in the student workbook for further review.



Play Video

The video will show and summarize adult CPR AED.



Discussion

To prepare students for the Adult CPR and AED Skills Test, review the following questions with the class.

Also encourage students to review their Adult CPR and AED Skills Testing Checklist.

- What are the steps for assessment?
 - Make sure the scene is safe.
 - Tap and shout (check for responsiveness).
 - Shout for help.
 - Check for breathing.
- What are the steps for phoning 9-1-1 and getting an AED?
 - Phone 9-1-1 and get an AED.
 - Provide CPR.
 - If you are alone, put your cell phone on speaker mode, phone 9-1-1, get an AED, and continue sets of 30 compressions and 2 breaths.
- What are some characteristics of high-quality CPR?
 - Do not lean on the chest.
 - Push down at least 2 inches.
 - Push at a rate of 100 to 120 compressions per minute.
 - Let the chest come back up to its normal position.
 - Give breaths quickly and effectively without interrupting compressions for more than 10 seconds.

Allow students enough time for review and skills practice, if needed, before beginning the skills test.

Lesson 5

Adult CPR and AED Skills Test

20 minutes

Instructor Tips

- For skills testing, it is important to 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.
- During skills testing, be efficient with the use of multiple instructors in the room, assigning each a different role, especially when there is a high volume of students in the classroom. This will ensure effective remediation, a smooth process, and efficiency for completing the class on time.
- Make sure students are provided a private setting for skills testing.



Discussion

Before the Adult CPR and AED Skills Test, 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 person's life. You will have to determine for yourself what you need to do. For example, if you check the response on the manikin and there is no response, then you should do whatever you would do for a person who is not responding. 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?"



Skills Test

- Refer to the Adult CPR and AED Skills Testing Checklist for specific direction on how to test students on adult CPR and AED skills. This is found in Part 4: Additional Resources in the instructor manual.
 - Check off each skill as the student demonstrates competency per the critical skills descriptors.
- After starting, if the student asks any questions about the skills or sequences, you should not give them the answer. Rather, 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, do your best to explain that they will be assessing the manikin and doing whatever is necessary.

Remediation

For students who need remediation, follow these steps and refer to the remediation lesson.

- Determine what the students are having trouble with during their Adult CPR and AED Skills Test.
- If needed, replay sections of video or practice skills to ensure learning.
- Retest skills as necessary.
- Some students may need additional practice or may need to repeat the course to demonstrate skills competency and to achieve a course completion card.

Lesson 6

Drug Overdose

5 minutes



Student Workbook

Students can turn to How to Help an Adult With an Opioid-Associated Emergency in the student workbook to follow along.



Discussion

Before playing the video, inform students of the following:

- Opioids are prescription drugs used for pain relief but are often abused. A cause of cardiac arrest is opioid overdose.
- There is a safe and effective way to help someone with an opioid overdose. Naloxone is a medication used to reverse the effects of opioids and help the person to survive.
- For the purposes of this course, this information is being provided for public awareness, and it is based on the prevalence of deaths caused by opioid overdose.



Play Video

The video will show and discuss using naloxone for opioid-associated life-threatening emergencies.



Discussion

Review the following questions with the class:

- What are some signs of opioid overdose? The person
 - Has a prescription for medication used for pain relief
 - Is unresponsive
 - Has slow or shallow breathing
- What actions do you take in an adult opioid-associated life-threatening emergency?
 - Shout for help.
 - If someone is nearby, have that person phone 9-1-1 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, phone 9-1-1 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 normally or is only gasping, provide 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. Naloxone is safe and effective; emergency medical professionals have used it for decades. www.drugs.com/pro/naloxone.html
- How do I get naloxone? You can get naloxone from a primary care physician. In addition, substance abuse treatment facilities, Veterans Administration healthcare systems, primary care clinics, and pharmacies have started providing naloxone to laypersons. www.cdc.gov/mmwr/preview/mmwrhtml/mm6423a2.htm
- How do I become trained to use naloxone? A primary care physician or a facility that provides naloxone will be able to provide information on how to become trained to use naloxone.
- How do I administer naloxone? Bystanders can safely and legally spray naloxone into the nose or inject it into a muscle.
 - Into the nose (intranasal spray)
 - Into the muscle via an autoinjector (intramuscular injection)
- Can naloxone hurt me? No. Naloxone affects only people who have used opioids.
- Can I use naloxone for other drug overdoses? No. Naloxone is used only for opioid overdoses.

Lesson 7

Choking in Adults

6 minutes

Learning Objective

Tell students that at the end of this lesson, they will be able to

- Describe when and how to help a choking adult



Student Workbook

Students can turn to How to Help a Choking Adult, Child, or Infant in the student workbook to follow along.



Play Video

The video will show and discuss adult choking, including relief of choking in a responsive adult and relief of choking in an unresponsive adult.



Discussion

Review adult choking with students by asking the following:

- What is the difference between mild and severe airway block?
 - Mild airway block: The person
 - Can talk or make sounds
 - Can cough loudly
 - Severe airway block: The person
 - Cannot breathe, talk, or make sounds or
 - Has a cough that has no sound or
 - Makes the choking sign
- What is the universal sign for choking?
 - Holding the neck with one or both hands
- Where should you give thrusts for a severely choking adult?
 - Slightly above the belly button for abdominal thrusts
 - For a large or pregnant person: On the lower half of the breastbone for chest thrusts
 - For a person in a wheelchair: The thrusts would be performed in the same way as for a large or pregnant person.
- 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 normally or is only gasping. Giving both compressions and breaths is very important for someone with a severe airway block who becomes unresponsive.
- Why is it important not to perform a blind finger sweep in a choking person?
 - The object could become lodged farther back in the airway.

If students would like to practice their hand placement for abdominal thrusts for the relief of choking in an adult, students can place hands on themselves with your review or (optional) you can allow the students to practice hand placement on you.

- 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 normally or is only gasping. Giving both compressions and breaths is very important for someone with a severe airway block who becomes unresponsive.

If teaching additional Heartsaver topics, skip the conclusion at this time and go to the Pediatric First Aid Lesson Plans.

Lesson 8 Conclusion

2 minutes

Instructor Tips

- When summarizing what the course has covered, allow students to lead this discussion at times by asking 1 or 2 students (maximum, for class time efficiency) what they observed/learned during the course.
- During the summary and closing, provide students with clear direction on how they can further study and seek out additional resources provided by the AHA to help with postclassroom training.



Discussion

To conclude the course:

- Thank students for their participation.
- Summarize what students learned during the course. Refer to the Heartsaver course outlines found in Part 4: Additional Resources in the instructor manual.
- Make sure that students complete the evaluation form.