This CPR/AED for Professional Rescuers and Health Care Providers Instructor’s Manual is part of the American Red Cross CPR/AED for Professional Rescuers and Health Care Providers program. Visit redcross.org to learn more about this program.

The emergency care procedures outlined in this book reflect the standard of knowledge and accepted emergency practices in the United States at the time this book was published. It is the reader’s responsibility to stay informed of changes in emergency care procedures.

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This manual is dedicated to the thousands of employees and volunteers of the American Red Cross who contribute their time and talent to supporting and teaching lifesaving skills worldwide and to the thousands of course participants who have decided to be prepared to take action when an emergency strikes.

The care steps outlined within this product are consistent with the Guidelines 2010 for First Aid and the 2010 Consensus on Science for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. These treatment recommendations and related training guidelines have been reviewed by the American Red Cross Scientific Advisory Council, a panel of nationally recognized experts in fields that include emergency medicine, occupational health, sports medicine, school and public health, emergency medical services (EMS), aquatics, emergency preparedness and disaster mobilization.

Many individuals shared in the development and revision process in various supportive, technical and creative ways. The American Red Cross CPR/AED for Professional Rescuers and Health Care Providers Instructor’s Manual was developed through the dedication of employees and volunteers both. Their commitment to excellence made this manual possible.

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Course Purpose

The purpose of the American Red Cross CPR/AED for Professional Rescuers and Health Care Providers course is to teach those with a duty to act (professional rescuers and health care providers) the knowledge and skills needed to respond appropriately to breathing and cardiac emergencies. This includes the use of an automated external defibrillator (AED) to care for a victim experiencing cardiac arrest.

Course Prerequisites

None

Course Participants

Participants in this course may represent a broad range of backgrounds and differ in levels of education and experience. Participants may include:

- Public safety personnel, such as law enforcement agents and firefighters.
- Medical personnel, such as athletic trainers, emergency medical technicians, pharmacists, nurses and physicians.
- Members of emergency response teams, such as ski patrollers and lifeguards.
- Employees with a duty to respond.

Course Length

CPR/AED for Professional Rescuers and Health Care Providers is designed to be taught in approximately 5 hours, 35 minutes. These estimates are based on:

- Six participants per instructor.
- The experience and abilities of participants.
- The experience and abilities of the instructor.
- The recommended amount of equipment needed at each class session.

You must carefully consider the issue of time when planning each course session. The lessons in this instructor’s manual should be followed as closely as possible; however, facility constraints, specific instructor-to-participant ratios and equipment-to-participant ratios, and participant needs, such as breaks, may increase course length.

Other factors that may influence lesson planning include:

- Classroom availability and layout.
- Equipment availability.
- Number of participants.
- Skill level of participants.
- Instructor experience.
- Number of instructors.

Classroom Space

The lessons described in this instructor’s manual require classroom space suitable for lectures, class discussions, activities, video presentations and skill sessions. The classroom should provide a safe,
comfortable and appropriate learning environment. The room should be well lit, well ventilated and comfortable in temperature. If the practice area is not carpeted, provide some knee protection, such as folded blankets or mats, for use by participants or allow them to bring their own padding materials.

The following diagrams provide examples of appropriate classroom setups to facilitate classroom discussions and video presentations.
Class Size

The outlines and lessons have been developed for a class of approximately six participants. If your class is larger, you will probably need to allow more time or have co-instructors, assisting instructors or instructor aides help you. The amount of available equipment and assistance from additional instructors may limit course size. Personal supervision is necessary to ensure effective practice and the safety of participants. If the course size is too large, you may not be able to provide proper supervision or complete course activities in the allotted time. It is strongly recommended that you have additional instructors help during skill sessions.

Class Safety

As a Red Cross instructor, it is important for you to make the teaching environment as safe as possible. Participants who believe they are at risk for injury or illness may become distracted. These same feelings may also affect your ability to conduct the courses. There are several steps you can take to help increase class safety:

- **Instructor preparation.** Consider possible hazards and manage safety concerns before a course starts. Often, you can foresee hazards and take steps to eliminate or control them long before participants arrive.

- **Assisting instructors and co-instructors.** Having assisting instructors and co-instructors can help decrease risks by adding supervision and reducing the instructor-to-participant ratio. They also increase participation and learning by providing additional one-on-one attention to participants. When using assisting instructors or co-instructors, clearly define their roles and responsibilities. Doing so will help eliminate confusion and lapses in supervision. Remember you are ultimately responsible for your participants’ safety. To determine your staffing needs, consider the different ages and the individual abilities of participants. If your course has a large number of participants, you will need additional help.

- **Instructor aides.** Individuals who express an interest in becoming an instructor but do not meet the instructor requirements—for example, the minimum age—can participate as instructor aides. Clearly define their roles and responsibilities. Instructor aides must always be under the direct supervision of an instructor and should never be left alone to supervise course participants. Instructor aides may not evaluate or certify a participant’s skill performance. Instructor aides must possess a basic-level certificate in the applicable program or course for which they wish to assist. CPR/AED for Professional Rescuers and Health Care Providers instructors can train instructor aide candidates. Contact the local Red Cross chapter to obtain further information about instructor aide training. In general, duties and responsibilities of instructor aides include:
  - Handling registration and record keeping.
  - Setting up classrooms and handing out supplies.
  - Assisting with equipment (e.g., setup, cleaning and distribution of materials).
  - Helping participants with skill sessions or small-group activities.

Health Precautions for Course Participants

As a Red Cross instructor, one of your responsibilities is to protect participants from health risks. The materials and procedures for teaching these courses are designed to:

- Limit the risk of disease transmission.
- Limit the risk of one participant injuring another when practicing with a partner.
- Limit the risk that the activity involved in the skill session could cause injury or sudden illness.

When possible, prospective participants should be provided information about health requirements and safety before enrolling in the course. The Sample Letter to CPR/AED for Professional Rescuers and Health Care Providers Course Participants, available on Instructor’s Corner (redcross.org/instructorscorner), is one way to communicate that information. Ask participants to talk with you before any skill session if they doubt they can participate.
People with certain health conditions may be hesitant to take part in the skill sessions. These conditions could include a history of heart attacks or other heart conditions or respiratory problems. Suggest that these participants check with their health care providers before participating in skill sessions involving physical activity. Inform participants who take the course but are not able to demonstrate the skills taught in the skill sessions that they cannot receive a Red Cross course completion certificate. Encourage them, however, to participate to whatever extent possible because they can still learn valuable, lifesaving information. The Red Cross advocates that, whenever possible, the instructor adjust the activity level required by the course as necessary to facilitate learning and help participants meet course and skill objectives.

**Participants with Disabilities and Special Health Considerations**

People with disabilities and other conditions may be able to perform CPR and AED skills. Some skills may need modification, but the result is the same. Instructors should focus on the critical components of a skill that are necessary to successfully meet the objective. Detailed guidance on these topics is included in the *Americans with Disabilities Act (ADA) Accommodation Resource Guide for Conducting and Administering Health and Safety Services Courses*, which is available on Instructor’s Corner.

**Modifications for Different Settings**

CPR/AED for Professional Rescuers and Health Care Providers can be customized to meet participants’ specific needs. It can be offered, for example, as a certification program to meet a regulatory requirement or as an employee benefit program. Schools may integrate training into the curriculum.

**Training in the Workplace**

**Training to Meet a Workplace Certification Requirement**

Courses are designed to meet the training requirements of various occupational, office or industrial settings. When offering the course to meet certification requirements, adapting the training does not mean you can add to, delete or change the content. To modify the course for a workplace with certification needs, a Red Cross chapter representative should meet with the workplace safety representative to discuss the needs before scheduling a course. A chapter representative should convey this information to you so you can adequately prepare to deliver the course material. As an instructor, you should ask these questions:

- Why is the workplace customer offering this training?
- What is the background of participants? This includes:
  - Previous CPR/AED training.
  - Job responsibilities.
  - Educational background.
  - English as a second language.

- What site-specific information is known? This includes:
  - The type and frequency of past incidents of injury or sudden illness in the workplace.
  - Established emergency procedures.
  - (Is there a written emergency action plan?)
  - The type and location of first aid supplies at the site.

**Training as an Employee Benefit**

In some cases, first aid training is offered as an employee benefit rather than for certification or to meet other regulations. Under such circumstances, if the employer does not require or want certification, it is possible to present only those lessons or topics that meet the employer’s specific needs. These can be taught as stand-alone lessons, for example, during a lunch hour.

Before training begins, the local Red Cross chapter must ensure the employer understands that, although the information to be conveyed is relevant and important, this type of training is not comprehensive and will not result in Red Cross certification for employees.
Participant Materials

All CPR/AED for Professional Rescuers and Health Care Providers participants have access to free electronic versions of the handbook that can be downloaded and printed. Free electronic versions are available on redcross.org.

For skill sessions, participants may use the handbook or refer to the course presentation and/or skill posters in the classroom as a visual aid.

Handbook

The CPR/AED for Professional Rescuers and Health Care Providers Handbook is designed specifically for American Red Cross CPR/AED for Professional Rescuers and Health Care Providers course. The handbook reinforces key points from the lecture portions of the course and contains skill sheets. It also serves as a reference after the course. The handbook is available for purchase (Stock No. 652168) or as a free download that can be printed.

Instructor Materials

Instructor’s Manual

The CPR/AED for Professional Rescuers and Health Care Providers Instructor’s Manual contains the information needed for planning, preparing and conducting the course. The lesson plans must be followed to ensure consistency in delivery. Useful information is included in the instructor’s manual for planning and preparation in the administration and appendices sections. The instructor’s manual is available in two formats: a full print version, which is available for purchase (Stock No. 652169), or a free electronic version, which can be downloaded from Instructor’s Corner and printed. For those who wish to use the free electronic version, Section 2 (the lessons) should be printed and used during delivery of the courses within the program, while Sections 1 and 3 can be viewed online at any time. The lessons have been streamlined and formatted to be as printer-friendly as possible.

The instructor’s manual provides the tools necessary to evaluate the performance of participants. It includes the following sections:

- Section 1: Administration. This section provides administrative information on conducting the training, helps prepare instructors to teach and contains information on instructor responsibilities.
- Section 2: CPR/AED for Professional Rescuers and Health Care Providers Course. This section contains the course outline and lessons that make up the course.
- Section 3: Appendices. This section includes Teaching Strategies, Criteria for Assessing Participants and final written exams.

Video Segments

The CPR/AED for Professional Rescuers and Health Care Providers DVD (Stock No. 652170) is designed specifically for use during the courses in the CPR/AED for Professional Rescuers and Health Care Providers program. The video segments can also be viewed on Instructor’s Corner. Instructors are required to use the video segments because they contain model demonstrations that combine real-life scenarios with studio-based skill segments to help ensure lesson objectives are met. The course cannot be conducted if the video segments are not available.

Instructors can also use the CPR/AED for Professional Rescuers and Health Care Providers DVD to teach the Administering Emergency Oxygen and Bloodborne Pathogens Training: Preventing Disease Transmission courses and the asthma and epinephrine auto-injector in-service trainings.

Posters

Four posters are available that can be used during skill sessions: Primary Assessment—Adult (Stock No. 652172), Primary Assessment—Child and Infant (Stock No. 652173), Conscious Choking (Stock No. 652175) and CPR (Stock No. 652174). The posters can be situated so that participants can refer to them while learning the skill steps.
**Instructor’s Corner**

As an instructor, you should register on Instructor’s Corner (redcross.org/instructorscorner) and visit the site regularly for information and updates. Once you have completed the brief registration process, you will have free access to many important resources for instructors.

The following CPR/AED for Professional Rescuers and Health Care Providers instructor resources are available on Instructor’s Corner:

- Administrative Terms and Procedures
- Guidelines for Conducting American Red Cross CPR/AED for Professional Rescuers and Health Care Providers Review Courses and Challenges
- Manikin Decontamination and Use
- Participant Progress Log
- Sample Course Record and Course Record Addendum
- Americans with Disabilities Act (ADA) Resource Guide for Conducting and Administering Health and Safety Services Courses
- CPR/AED for Professional Rescuers and Health Care Providers Course Presentation
- AED Resource Information
- Sample Letter to CPR/AED for Professional Rescuers and Health Care Providers Course Participants

Additional materials on Instructor’s Corner include:

- Information about other Red Cross training and education programs.
- Frequently asked questions (FAQs) and expert answers to your technical questions.
- An Instructor’s Corner forum that enables you to communicate with instructors and instructor trainers around the country.
- The Instructor News Center featuring upcoming webcasts, conference dates, program announcements and Red Cross news.
- Link to the Learning Management System (LMS) website.
- Links to redcrosstore.org and shopstaywell.com for training supplies and Red Cross retail products.

**Course Presentation**

Another resource for instructors is the CPR/AED for Professional Rescuers and Health Care Providers course presentation. Similar to a PowerPoint presentation, the course presentation is an in-class visual aid that is projected onto a screen or viewing area. Instructors click through the presentation slides as they progress through the lessons.

The course presentation is designed to include all the visual information necessary to conduct the CPR/AED for Professional Rescuers and Health Care Providers courses. The course presentation includes lecture points, video segments, activity directions and skill sheets. When using the course presentation, it is not necessary to use any print products (other than the lessons).

Before conducting the course, become familiar with the presentation software and test the display of the system to be used. Although printed reference materials are not necessary when using the course presentation, it is recommended you have backup copies of the presentation in case technical difficulties occur.

**Course Presentation System Requirements:**

- Adobe Reader 9
- Flash Player 8, 9 for Windows and Mac
- Flash Player 9 for Linux and Solaris

**Equipment Requirements:**

- Laptop/desktop computer
- Power source
- Projector
- Projection screen/area
- Computer speakers

The presentation is available to download on Instructor’s Corner. The presentation is saved in PDF format. To view the presentation, save the file to your computer and double click on the PDF icon to open it. Additional directions for using the course presentation are available on Instructor’s Corner.
Course Content

The technical content within the CPR/AED for Professional Rescuers and Health Care Providers program reflects the most current consensus on scientific recommendations. The program content includes the knowledge and skills necessary for participants to safely identify and provide appropriate care, regardless of the type of emergency.

Instructional Design Elements

To make the courses more engaging for the instructor and participants, a variety of interactive exercises are integrated into the lessons, along with video-based skill demonstrations, skill sessions and traditional lectures. For detailed explanations of each lesson component and additional instructional tools, refer to Appendix C: Teaching Strategies.

Criteria for Course Completion and Certification

Red Cross certification means that on a particular date an instructor verified that a participant demonstrated competency in all required skills taught in the course. Competency is defined as being able to demonstrate correct decision-making processes, to sequence care steps properly and to demonstrate proficiency in completing all required skills without any coaching or assistance. To complete the course successfully, the participant must:

- Attend the entire course.
- Participate in all skill sessions and scenarios.
- Demonstrate competency in all required skills and scenarios.
- Pass the final written exam with a minimum grade of 80 percent (20 correct answers out of 25 questions).

Procedures for assessing participant progress are included in Appendix D: Criteria for Assessing Participants.

Reporting Procedures

You must submit a completed Course Record and Course Record Addendum to the local Red Cross chapter within 10 working days of course completion. The Course Record can be submitted in hard copy, by fax, e-mail or electronically through the American Red Cross Learning Center. Check with the local Red Cross chapter for procedures to submit course records.

Awarding Certificates

Discuss with the local Red Cross chapter the procedures for awarding American Red Cross course completion certificates. Inform participants of how they will get course completion certificates.

Instructor Responsibilities

Your responsibilities as a certified Red Cross instructor are to:

- Be familiar with program materials and know how to use them to teach effectively.
- Plan, coordinate and manage courses in conjunction with the local Red Cross chapter.
- Advise the local Red Cross chapter in advance of any teaching activity.
- Inform participants of evaluation procedures and course completion requirements.
- Create a nonthreatening environment that fosters learning.
- Demonstrate healthy behaviors while conducting courses or presentations.
- Adapt your teaching approaches to the experiences and abilities of participants to enable them to meet the course objectives.
- Prepare participants to meet the course objectives.
- Be prepared to answer participants’ questions or know how to find the answers.
- Provide for the health and safety of participants by ensuring manikins have been properly cleaned according to the recommendations in Manikin Decontamination and Use (Instructor’s Corner).
- Ensure the classroom and practice area are free of hazards.
- Ensure participants are aware of health precautions and guidelines concerning the transmission of infectious diseases during training.
- Ensure participants know they should consult you if they have special needs for any skill practice.
- Supervise participants while they are practicing course skills.
- Provide participants with timely, positive and corrective feedback as they learn.
- Evaluate participants as they perform skills, with a focus on the critical performance steps as described in the skill assessment charts and as shown in the video.
- Identify participants who are having difficulty and develop effective strategies to help them meet course objectives.
- Conduct courses in a manner consistent with design.
- Submit completed course records and reports to the Red Cross within 10 working days from the course completion.
- Be familiar with and inform participants of other Red Cross courses and programs.
- Identify potential instructor candidates and refer them to the appropriate Red Cross representatives.
- Abide by the obligations in the Instructor Agreement and Code of Conduct and, if applicable, the Authorized Provider Agreement.
- Represent the Red Cross in a positive manner.
- Promote volunteer opportunities available through the Red Cross.

American Red Cross Resources

Keep updated on the latest instructor information by visiting Instructor’s Corner (redcross.org/instructorscorner). This site features program materials, FAQs, instructor and program updates, and program-related forms. Your local Red Cross chapter may have additional information and resources provided by national headquarters, as well as additional equipment, marketing materials and instructional aids you can use. Before you start the CPR/AED for Professional Rescuers and Health Care Providers program, find out how your local Red Cross chapter can support you.

Additional Resources for Instructors and Participants

Training Equipment and Red Cross Retail Products

Equipment used during the courses, such as CPR breathing barriers and first aid kits, and a wide range of Red Cross retail products are available through the local Red Cross chapter or the Red Cross store (redcrossstore.org).

Additional Red Cross Courses

A wide range of additional training opportunities in health and safety and preparedness are offered through the Red Cross. Additional Red Cross programs include:

- Lifeguarding.
- Swimming and Water Safety.
■ Babysitter’s Training.
■ Family Caregiving.
■ Nurse Assistant Training.
■ Wilderness and Remote First Aid.
■ Emergency Medical Response.

Refer participants to the local Red Cross chapter for more information about scheduled courses in their community.

**Refresher Program**

CPR and AED knowledge and skills begin to decline within as little as 3 months after training. That is why refreshers—a series of short, online learning exercises and quizzes—are included in the CPR/AED for Professional Rescuers and Health Care Providers program. Refreshers help skills retention by giving participants opportunities to test and reaffirm CPR and AED knowledge and practice skills learned in class. The goal of the refresher program is to keep the knowledge and skills learned in class fresh in participants' minds. Participants will receive an e-mail with the link to their first refresher about 3 months after class. From then, they will receive additional refreshers throughout the certification period. While participation in the refresher program is voluntary, all participants are strongly encouraged to complete the refreshers on schedule.

**Continuing Education Units for Professionals**

Many course takers are professionals who need continuing education units (CEUs) to maintain a license and/or certification. Examples include nurses, social workers, recreation professionals, teachers and day care providers.

The American Red Cross is approved as an authorized provider by the International Association for Continuing Education and Training (IACET) (www.iacet.org). IACET’s Criteria and Guidelines for Quality Continuing Education and Training Programs are the standards by which hundreds of organizations measure their educational offerings. For additional information, contact the local Red Cross chapter.
# COURSE OUTLINE

## LESSON 1—Professional Rescuers and Standard Precautions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to the Course</td>
<td>7 minutes</td>
</tr>
<tr>
<td>The Emergency Medical Services System</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Legal Considerations</td>
<td>6 minutes</td>
</tr>
<tr>
<td>Standard Precautions</td>
<td>7 minutes</td>
</tr>
<tr>
<td>Lesson Wrap-Up</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Lesson 1 Total Time</strong></td>
<td><strong>30 minutes</strong></td>
</tr>
</tbody>
</table>

## LESSON 2—Taking Action

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scene Size-Up</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Primary Assessment</td>
<td>25 minutes</td>
</tr>
<tr>
<td>Moving a Victim</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Lesson Wrap-Up</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Lesson 2 Total Time</strong></td>
<td><strong>40 minutes</strong></td>
</tr>
</tbody>
</table>

## LESSON 3—Caring for Breathing Emergencies

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breathing Emergencies</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Giving Ventilations</td>
<td>25 minutes</td>
</tr>
<tr>
<td>Bag-Valve-Mask Resuscitator</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Airway Obstruction</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Lesson Wrap-Up</td>
<td>10 minutes</td>
</tr>
<tr>
<td><strong>Lesson 3 Total Time</strong></td>
<td><strong>1 hour, 20 minutes</strong></td>
</tr>
</tbody>
</table>
### Lesson 4—Caring for Cardiac Emergencies

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs and Symptoms of a Heart Attack</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Cardiac Chain of Survival</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Cardiac Arrest</td>
<td>5 minutes</td>
</tr>
<tr>
<td>CPR</td>
<td>40 minutes</td>
</tr>
<tr>
<td>Two-Rescuer CPR</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Lesson Wrap-Up</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Lesson 4 Total Time</strong></td>
<td><strong>1 hour, 15 minutes</strong></td>
</tr>
</tbody>
</table>

### Lesson 5—Using an Automated External Defibrillator

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>When the Heart Stops</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Automated External Defibrillation</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Using an AED</td>
<td>15 minutes</td>
</tr>
<tr>
<td>AED Precautions</td>
<td>10 minutes</td>
</tr>
<tr>
<td>AED Maintenance</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Lesson Wrap-Up</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Lesson 5 Total Time</strong></td>
<td><strong>40 minutes</strong></td>
</tr>
</tbody>
</table>

### Lesson 6—Course Wrap-Up

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPR/AED Skill Scenarios</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Review of Course Content</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Final Written Exam</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Closing</td>
<td>5 minutes</td>
</tr>
<tr>
<td><strong>Lesson 6 Total Time</strong></td>
<td><strong>1 hour, 10 minutes</strong></td>
</tr>
<tr>
<td><strong>Total Course Time</strong></td>
<td><strong>5 hours, 35 minutes</strong></td>
</tr>
</tbody>
</table>

**Instructor’s Note:** This outline provides you with an overview of the knowledge and skills to be taught in the American Red Cross CPR/AED for Professional Rescuers and Health Care Providers course. It is divided into six lessons for a total time of 5 hours, 35 minutes.

The course length includes the minimum time needed for practicing skills, conducting class activities and viewing video segments. Because the times allotted in the lessons do not include breaks, you may have to build additional time into the course.
PROFESSIONAL RESCUERS AND STANDARD PRECAUTIONS

LESSON OBJECTIVES

After completing this lesson, participants should be able to:

- Identify the responsibilities and characteristics of professional rescuers.
- List the series of events that occur when the emergency medical services (EMS) system is activated.
- Understand how legal considerations affect professional rescuers.

GUIDANCE FOR THE INSTRUCTOR

To complete this lesson and meet the lesson objectives, you must:

- Discuss all points in the Introduction to the Course.
- Show the video segment, “Professional Rescuers.”
- Conduct the lecture on the EMS system.
- Conduct the lecture on legal considerations.
- Conduct the activity and show the video segment, “Standard Precautions.”
- Conduct the Lesson Wrap-Up.

MATERIALS, EQUIPMENT AND SUPPLIES

- Non-latex disposable gloves (one pair per participant)
- Resuscitation masks (one adult and one pediatric mask per participant)

TOPIC: INTRODUCTION TO THE COURSE

Time: 7 minutes

Discussion

- Welcome participants and briefly introduce yourself and co-instructors, if applicable. Give your background and identify yourself as an American Red Cross instructor.
- Have participants briefly introduce themselves and write their names on name tags or name tents and display them.
- Review facility policies and procedures, and give locations of restrooms, water fountains and break areas. Also point out where exits are located as well as where automated external defibrillators (AEDs) are located.
- Review the course outline, including skill sessions, activities and the exam.
- Point out and/or distribute the CPR/AED for Professional Rescuers and Health Care Providers Handbook, which participants may use during the course.
- Ask participants to inform you privately if they have any medical condition or disability that prevents them from taking part in skill sessions.
The purpose of the CPR/AED for Professional Rescuers and Health Care Providers course is to teach those with a duty to act (professional rescuers) the skills needed to respond appropriately to breathing and cardiac emergencies, including the use of AEDs.

The term professional rescuer refers to those with a duty to act. These professions range from health care to public safety to athletic training and recreation, among others.

To receive the course completion certificate for CPR/AED for Professional Rescuers and Health Care Providers, you must:
- Attend all class sessions.
- Participate in all skill sessions and scenarios.
- Demonstrate competency in all required skills.
- Pass the final written exam with a minimum grade of 80 percent.

Show the video segment, “Professional Rescuers” (0:51). Answer participants’ questions about the segment.

The EMS system is a network of community resources and medical personnel with the purpose of providing emergency care to victims of injury or sudden illness.

The survival and recovery of critically injured or ill victims depends on:
- Early recognition and response.
- Early activation of the EMS system.
- Care being provided until more advanced medical personnel take over.

The EMS system depends on all persons involved performing their roles promptly and correctly, which, in turn, increases the chances for survival and recovery.

Professional rescuers must keep their training current and stay abreast of new issues and developments in emergency care.

Individuals have a basic right to accept or refuse care. Consent is obtained verbally or through a gesture. If the victim is a minor, consent must be obtained from a parent or guardian, if available. To obtain consent, you must do the following:
- Identify yourself to the victim.
- State your level of training.
- Ask the victim if you may help.
- Explain what you observe.
- Explain what you plan to do.
Implied consent is given when the victim is unconscious, confused, mentally impaired, seriously injured or seriously ill and is unable to give consent.

Once you have begun providing care, you must continue until someone with equal or more advanced training takes over. Otherwise, you can be charged with abandonment.

While providing care to a victim, you may learn details about the victim that are private and confidential. Do not share this information with anyone except EMS personnel directly associated with the victim’s medical care.

Always document care provided. By documenting injuries and incidents, you establish a written record of the events that took place, the care you provided and the facts you discovered after the incident occurred.

Instructor’s Note: Recommend that participants contact their legal representative for specific information on legal considerations.

TOPIC: **STANDARD PRECAUTIONS**

**PREVENTING THE SPREAD OF BLOODBORNE PATHOGENS**

**Activity**

- Tell participants: “Throughout this course, we will be using personal protective equipment (PPE)—just like you should always do when providing care—to prevent the spread of bloodborne pathogens that can cause disease and that may be present in blood and other body fluids.”
- Provide the PPE—disposable gloves and resuscitation masks—that will be used in class to participants. As you distribute each item, remind participants that this equipment prevents contact of any body fluids between the rescuer and the victim.
- Remind participants that PPE also includes all specialized clothing, equipment and supplies, such as CPR breathing barriers, gowns, face shields, protective eyewear and biohazard bags.

Instructor’s Note: Refer participants to other resources, such as their employer, or training, such as Bloodborne Pathogens Training, if they need additional information.

**Video**

- Show the video segment, “Standard Precautions” (2:26). Answer participants’ questions about the segment.

TOPIC: **LESSON WRAP-UP**

- In review, ask participants the following questions and answer any participants’ questions:
  - **When providing care to any victim, what do you need to do first?**
    - **Answer:** You should always obtain the victim’s consent, either verbally or through a gesture. If the victim is unconscious, confused or seriously ill, then consent is implied.
  - **A victim has collapsed in the lobby of an office building. You see that the man is bleeding from the mouth and face. Vomit and blood are on the floor around him. A bystander tells you that the victim hit his face on the floor when he fell. What PPE would you use?**
    - **Answers:** Responses should include the following:
      - **Disposable gloves**
      - **Other PPE, such as a gown (to prevent contact with clothing) and biohazard bags**
TAKING ACTION

Lesson Length: 40 minutes

LESSON OBJECTIVES

After completing this lesson, participants should be able to:
- Recognize a life-threatening injury or illness.
- Demonstrate how to perform a primary assessment.
- Determine when it is appropriate to call for more advanced medical personnel.
- Describe instances in which a victim should be moved.

GUIDANCE FOR THE INSTRUCTOR

To complete this lesson and meet the lesson objectives, you must:
- Lead a guided discussion on how to size-up the scene.
- Conduct a lecture on the components of a primary assessment.
- Show the video segment, “Using a Resuscitation Mask.”
- Show the video segment, “Performing a Primary Assessment,” and conduct the skill session.
- Conduct a lecture on when to summon more advanced medical personnel.
- Conduct a lecture and lead a guided discussion on when and how to move a victim safely.
- Conduct the Lesson Wrap-Up.

MATERIALS, EQUIPMENT AND SUPPLIES

- Non-latex disposable gloves (one pair per participant)
- Resuscitation masks (one adult and one pediatric mask per participant)

TOPIC: SCENE SIZE-UP

Time: 5 minutes

Guided Discussion
- Tell participants that a scene size-up is the careful and systematic approach of a scene and includes using all of your senses to get a complete view of the emergency situation.
- Ask participants: “Why else is a scene size-up necessary?”

Answers: Responses should include the following:
- To ensure scene safety for the rescuers, the victims and any bystanders
- To identify necessary personal protective equipment (PPE)
- To determine the mechanism of injury or nature of the illness
- To determine the number of victims
- To identify what additional help may be required
**TOPIC: PRIMARY ASSESSMENT**

**Lecture Points**

- A primary assessment is done to identify any life-threatening conditions.

- The steps for a primary assessment include the following:
  - Check for responsiveness by tapping, shouting and using an alertness scale, referred to by the acronym AVPU (alert, verbal, painful, unresponsive); if conscious, obtain the victim’s consent. If no response, summon more advanced medical personnel.
  - Open the victim’s airway and check for breathing and a pulse.
    - If the victim is alert and speaking, the airway is open.
    - If the victim is unconscious and you do not suspect a head, neck or spinal injury, use the head-tilt/chin-lift technique to open the airway. If you suspect a head, neck or spinal injury, use the jaw-thrust (without head extension) maneuver to open the airway.
    - Isolated or infrequent gasping in the absence of other breathing in an unconscious person may be agonal gasps, which can occur after the heart has stopped beating. Agonal gasps are not breathing. Care for the victim as though he or she is not breathing at all.
  - Check for a carotid pulse for an adult and a child. Check for a brachial pulse for an infant.
  - For drowning and other victims of hypoxia and for children and infants who are more likely to experience respiratory emergencies, give 2 ventilations.
  - Check for severe bleeding.

**Guided Discussion**

- Ask participants: “If a person is unconscious but breathing, what are the different recovery positions that could be used?”

  **Answers:** Responses should include the following:
  - Face-up position
  - Modified high arm in endangered spine (H.A.I.N.E.S.) recovery position
  - Infant recovery position

- Ask participants: “If you are alone and must leave the person (e.g., to call for help), or you cannot maintain an open and clear airway because of fluids or vomit, which recovery position should you use?”

  **Answer:** Place the person in a modified H.A.I.N.E.S. recovery position.

**Video**

- Show the video segments, “Using a Resuscitation Mask” (2:29) and “Performing a Primary Assessment” (2:03). Answer participants’ questions about the segments.
### PERFORMING A PRIMARY ASSESSMENT

**Skill Session**

**WATCH-THEN-PRACTICE**

- Ask participants to find a partner. One person will be the rescuer while the other person will be the injured or ill person, then they will switch roles.
- Guide participants through the steps of the skill and evaluate completion of the skill using the skill assessment tool.

**Instructor’s Note:** It is not necessary to practice the primary assessment for an adult, a child and an infant. Have participants practice the primary assessment for an adult. Then, have participants as a group explain the elements that are unique when performing the primary assessment for a drowning victim, including when to give breaths, and when performing the primary assessment on a child and an infant, including the techniques for assessing responsiveness, opening the airway, giving ventilations and checking for a pulse.

- Be sure to point out any common errors, such as failing to size-up the scene, failing to determine responsiveness, failing to follow standard precautions, improperly opening the airway, checking an inappropriate pulse site or pressing the pulse site too hard.
- Have participants demonstrate the modified H.A.I.N.E.S. recovery position and demonstrate removal of disposable gloves at the end of the skill session.
- Check off each participant’s progress on the Participant Progress Log.

### SPECIAL SITUATIONS

**Small-Group Activity**

- Divide participants into several small groups. Assign each group one of the following special situations:
  - Suspected head, neck or spinal injury
  - Drowning incident
  - Mask-to-stoma ventilations
  - Vomiting

- Have each group use the handbook to describe how they would address their assigned situation. Allow about 2 to 3 minutes.
- Ask each group how they would address their special situation.

### SUMMONING MORE ADVANCED MEDICAL PERSONNEL

**Lecture Points**

- Summon more advanced medical personnel for:
  - Unconsciousness or altered level of consciousness (LOC).
  - Breathing problems.
  - Chest pain, discomfort or pressure lasting more than a few minutes, that goes away and comes back or that radiates to the shoulder, arm, neck, jaw, stomach or back.
  - Persistent abdominal pain or pressure.
  - Severe external bleeding.
  - Vomiting blood or passing blood.
  - Severe (critical) burns.
  - Suspected poisoning.
  - Seizures.
  - Stroke.
  - Suspected or obvious injuries to the head, neck or spine.
  - Painful, swollen, deformed areas or an open fracture.
  - The victim’s condition is not clear or is worsening.
TOPIC: MOVING A VICTIM

ASSESSMENT/CONSIDERATIONS

Lecture Points

- Moving a victim needlessly can lead to further pain and injury.
- Move a victim only if:
  - The scene is unsafe or becoming unsafe.
  - You must get to other victims with more serious injuries or illnesses.
  - It is necessary to provide proper care, such as providing a firm, flat surface for CPR.
- Consider the following when moving a victim:
  - Victim’s height and weight
  - Your own physical strength
  - Obstacles (such as stairs or narrow passages)
  - Distance to be moved
  - Whether others are available to assist
  - Victim’s condition
  - Whether equipment to move the victim is readily available

TOPIC: LESSON WRAP-UP

In review, ask participants the following questions and answer any participants’ questions:

- What would be your first step in an emergency situation?
  
  *Answer:* Sizing up the scene is done first in an emergency situation.

- You are performing a primary assessment on a woman who has collapsed. A bystander tells you that the woman lost consciousness for several minutes. Currently, the woman is talking and responds to your questions, but her speech is slurred. Describe how you would complete your primary assessment and what your findings would most likely be.

  *Answers:* Responses should include the following:
  - Obtaining the victim’s consent
  - Assessing the victim’s LOC: Because she is talking, she is conscious and alert.
  - Summoning more advanced medical personnel: Because her speech is slurred, she is showing signs of stroke, in which time is critical. More advanced medical personnel should be summoned immediately.
  - Checking for breathing and a pulse: The victim’s airway is open because she is talking and breathing. Monitor the victim’s breathing closely because it could change suddenly. Because the victim is conscious and talking, her pulse is present.
  - Checking for severe bleeding: No signs of bleeding are noted or described.
SKILL CHART: PERFORMING A PRIMARY ASSESSMENT—ADULT

*Note:* Always follow standard precautions when providing care. Get an automated external defibrillator (AED) on the scene as soon as possible.

Size-up the scene for safety and then:
1. Check for responsiveness.
   - Tap the shoulder and shout, “Are you okay?”
2. If no response, summon more advanced medical personnel.
   - If the victim is face-down, roll the victim onto his or her back while supporting the head, neck and back.
3. Open the victim’s airway and check for breathing and a pulse for no more than 10 seconds.
   - Look, listen and feel for breathing.
   - Feel for a carotid pulse by placing two fingers in the middle of the victim’s throat and then sliding them into the groove at the side of the neck closest to you. Press lightly.

*Note:* For a breathing emergency (e.g., drowning, hypoxia), give 2 ventilations prior to Step 4. If the chest does not clearly rise when giving ventilations, the airway might be blocked. Provide care for an unconscious choking victim.

4. Quickly scan for severe bleeding.
5. Provide care as needed.
   - If the victim is not breathing and does not have a pulse, perform CPR.
   - If the victim is not breathing but there is a pulse, give 1 ventilation about every 5 seconds.
   - If the victim is severely bleeding but is breathing, provide first aid care for the bleeding.
   - If the victim is unconscious but breathing, leave him or her in a face-up position and maintain an open airway. Place the victim in a modified H.A.IN.E.S. recovery position only if you:
     - Are alone and must leave the victim (e.g., to call for help).
     - Cannot maintain an open and clear airway because of fluids or vomit.

SKILL CHART: PERFORMING A PRIMARY ASSESSMENT—CHILD OR INFANT

*Note:* Always follow standard precautions when providing care. Get an AED on the scene as soon as possible.

Size-up the scene for safety and then:
1. Check for responsiveness.
   - For a child, tap the shoulder and shout, “Are you okay?”
   - For an infant, tap the shoulder or flick the underside of the foot and shout, “Are you okay?”
2. If no response, summon more advanced medical personnel.
   - If the victim is face-down, roll the victim onto his or her back while supporting the head, neck and back.
3. Open the victim’s airway and check for breathing and a pulse for no more than 10 seconds.
   - Look, listen and feel for breathing.
   - Check for a pulse.
     - For a child, feel for a carotid pulse by placing two fingers in the middle of the victim’s throat and then sliding them into the groove at the side of the neck closest to you. Press lightly.
     - For an infant, feel for the brachial pulse on the inside of the upper arm between the infant’s elbow and shoulder. Press lightly.

*Note:* For a witnessed sudden collapse, skip Step 4.

4. If the victim is not breathing, position the pediatric resuscitation mask and give 2 ventilations that make the chest clearly rise.
   - The chest should fall before the next ventilation is given.

*Note:* If the chest does not clearly rise during Step 4, the airway might be blocked. Provide care for an unconscious choking victim.
5. Quickly scan for severe bleeding.
6. Provide care as needed.
   - If the victim is not breathing and does not have a pulse, perform CPR.
   - If the victim is not breathing but there is a pulse, give 1 ventilation about every 3 seconds.
   - If the victim is severely bleeding but is breathing, provide first aid care for the bleeding.
   - If the victim is unconscious but is breathing, leave him or her in a face-up position and maintain an open airway. Place the victim in a modified H.A.IN.E.S. recovery position or infant recovery position only if you:
     - Are alone and must leave the victim (e.g., to call for help).
     - Cannot maintain an open and clear airway because of fluids or vomit.

### SKILL ASSESSMENT TOOL: PERFORMING A PRIMARY ASSESSMENT

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Proficient</th>
<th>Not Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open the airway</td>
<td>Tilts head back so that jaw line is at an angle of 80° to 100° to the floor</td>
<td>Tilts head back so that jaw line is at an angle less than 80° or greater than 100° to the floor</td>
</tr>
<tr>
<td>Feels for a pulse</td>
<td>Feels for a pulse for more than 5, but no more than 10 seconds</td>
<td>Feels for a pulse for less than 5 or more than 10 seconds</td>
</tr>
<tr>
<td>Give ventilations (child or infant, or in cases of a breathing emergency</td>
<td>Gives 2 ventilations that make the chest clearly rise and last about 1 second each; allows the chest to fall between ventilations</td>
<td>Gives 2 ventilations that do not make the chest clearly rise and last 2 or more seconds each; does not allow chest to fall between ventilations</td>
</tr>
</tbody>
</table>
**SKILL CHART: RECOVERY POSITIONS**

*Note: If the victim is unconscious but is breathing, leave him or her in a face-up position and maintain an open airway. Place the victim in a modified H.A.IN.E.S. recovery position only if you:

- Are alone and must leave the victim (e.g., to call for help).
- Cannot maintain an open and clear airway because of fluids or vomit.*

**Modified H.A.IN.E.S. Recovery Position—Adult, Child or Infant**

1. Kneel at the victim’s side.
2. Roll the victim away from you.
   - Lift the arm farthest from you up next to the head, with the victim’s palm facing up.
   - Take the victim’s arm closest to you and place it next to his or her side.
   - Bend the leg farthest from you up.
   - Using your hand closest to the victim’s head, cup the base of the skull in the palm of your hand and carefully slide your forearm under the victim’s shoulder closest to you.
     - Do not lift or push the head or neck.
   - Place your other hand under the arm and hip closest to you.
   - Using a smooth motion, roll the victim away from you by lifting with your hand and forearm until the victim is on his or her side.
   - Keep the victim’s head in contact with his or her extended arm and support the head and neck.
3. Place the top leg on the other with both knees in a bent position.
4. Make sure the arm on top is in line with the upper body.
   - If you must leave the victim to get help, place the hand of the victim’s upper arm palm side down with the fingers under the armpit of his or her extended lower arm.

**Additional Recovery Position—Infant**

1. Support the infant’s head and neck with your other hand while keeping the infant’s mouth and nose clear.
2. Carefully position the infant face-down along your forearm.
CARING FOR BREATHING EMERGENCIES

Lesson Length: 1 hour, 20 minutes

LESSON OBJECTIVES

After completing this lesson, participants should be able to:

- Recognize and care for a breathing emergency.
- Demonstrate how to give ventilations using a resuscitation mask (adult, child and infant).
- Demonstrate how to use a bag-valve-mask resuscitator (BVM) with two rescuers.
- Demonstrate how to care for an obstructed airway (adult, child and infant).

GUIDANCE FOR THE INSTRUCTOR

To complete this lesson and meet the lesson objectives, you must:

- Lead a discussion on the causes of breathing emergencies.
- Conduct a lecture on the signs and symptoms of respiratory distress and respiratory arrest.
- Lead a guided discussion on when and why to give ventilations.
- Show the video segment, “Giving Ventilations—Adult, Child and Infant,” and conduct the skill sessions.
- Lead a small-group activity about how to deal with special situations involving giving ventilations.
- Lead a brief discussion on BVMs.
- Show the video segment, “Using a Bag-Valve-Mask Resuscitator—Two Rescuers,” and conduct the skill session.
- Conduct a lecture on airway obstruction.
- Show the video segments, “Conscious Choking—Adult and Child” and “Conscious Choking Infant,” and conduct the skill sessions.
- Show the video segment, “Unconscious Choking—Adult, Child and Infant.”
- Conduct the Lesson Wrap-Up.

MATERIALS, EQUIPMENT AND SUPPLIES

- Non-latex disposable gloves (one pair per participant)
- Manikins (one adult and one infant manikin per two participants, child manikins optional)
- Resuscitation masks (one adult and one pediatric mask per participant)
- BVMs (one per three participants)
- Decontamination supplies
GUIDED DISCUSSION

Tell participants that breathing, or respiratory, emergencies can be life threatening.

Ask participants: “What are possible causes of breathing emergencies?”

**Answers:** Responses should include the following:
- A partially obstructed airway
- Illness
- Chronic conditions, such as asthma and emphysema
- Electrocution, including lightning strikes
- Heart attack
- Injury to the head, chest, lungs or abdomen
- Allergic reactions
- Drugs
- Poisoning
- Emotional distress
- Anaphylactic shock

RESPIRATORY DISTRESS AND RESPIRATORY ARREST

**Lecture Points**

Two types of respiratory emergencies are respiratory distress and respiratory arrest.

**Respiratory distress** involves difficulty breathing.

**Signs and symptoms of respiratory distress include:**
- Slow or rapid breathing.
- Unusually deep or shallow breathing.
- Shortness of breath or noisy breathing.
- Gasping for breath.
- Wheezing, gurgling or high-pitched noises.
- Dizziness, drowsiness or light-headedness.
- Changes in level of consciousness (LOC).
- Increased heart rate.
- Chest pain or discomfort.
- Skin that is flushed, pale, ashen or bluish.
- Unusually moist or cool skin.
- Inability to speak in full sentences.
- Tingling in the hands, feet or lips.
- Feelings of apprehension or fear.

**Caring for a victim in respiratory distress includes:**
- Maintaining an open airway.
- Summoning more advanced medical personnel.
- Assisting the victim to a comfortable position.
- Reassuring and comforting the victim.
- Assisting the victim with any prescribed medication.
- Keeping the victim from getting chilled or overheated.
- Administering emergency oxygen, if it is available and you are trained to do so.

**Respiratory arrest** is when the person stops breathing.

Respiratory arrest may result from respiratory distress or occur suddenly from another condition, such as a heart attack or airway obstruction.
### Lecture Points
- If a victim has a pulse, but is not breathing, give ventilations.
- The rates for giving ventilations between an adult and a child or an infant are different. For an adult, give 1 ventilation about every 5 seconds; for a child or an infant, give 1 ventilation about every 3 seconds.

### GIVING VENTILATIONS—ADULT

#### Skill Session
- You may choose either the Practice-While-You-Watch or Watch-Then-Practice methods, depending on the experience of the participants and whether your training facility can accommodate the Practice-While-You-Watch method, which works best when there is adequate practice space and a monitor large enough for everyone to see clearly.
  - **PRACTICE-WHILE-YOU-WATCH**
    - Explain to the participants that, for this skill, they will follow along with and practice the steps for giving ventilations as they are guided by the segment.
    - Show the video segment, “Giving Ventilations—Adult, Child and Infant” (4:07).
    - Do not interrupt this skill session to lecture or communicate anything other than guidance related to skill practice. In general, answering questions should occur after the video segment (and skill session) has ended.
  - **WATCH-THEN-PRACTICE**
    - Tell participants that, for this skill, they will watch the video segment without practicing until you pause it, even though the narration may say to follow along.
    - Show the video segment, “Giving Ventilations—Adult, Child and Infant” (4:07).
    - After the video segment, guide participants through the steps of the skill.
  - Observe participants performing the technique and evaluate completion of the skill using the skill assessment tool.
  - Be sure to point out any common errors, such as tilting the head too far back, failing to recheck for breathing and a pulse, giving ventilations that are too hard or too fast, not properly sealing the resuscitation mask or using an improperly sized mask for the victim.
  - Check off each participant’s progress on the Participant Progress Log.

### GIVING VENTILATIONS—CHILD OR INFANT

#### Skill Session
- Instructor’s Note: Participants need only demonstrate giving ventilations to either a child or an infant and be able to point out the differences for the other, such as how far to tilt the head.
  - Follow the same steps as in the previous skill session:
    - Have participants practice the skill.
    - Observe and evaluate each participant’s performance using the skill assessment tool.
    - Point out any common errors for giving ventilations.
    - Check off each participant’s progress on the Participant’s Progress Log.
TOPIC: AIRWAY OBSTRUCTION

Lecture Points

- The most common cause of respiratory emergencies is airway obstruction.
- The two types of airway obstruction are mechanical and anatomical.
- Mechanical obstructions are due to a foreign body obstructing the airway.
  - In adults, the obstruction is most commonly due to food.
  - In children under age 4, the obstruction most often involves large chunks of food and small objects, such as toys and balloons.
- Anatomical obstructions are most often due to the tongue. When a person becomes unconscious, the tongue loses muscle tone and falls back, blocking the airway.
- Airway obstructions cause choking. Choking is commonly a result of:
  - Chewing food poorly.
  - Consuming alcohol before or during meals.
  - Eating too fast or talking or laughing while eating.
  - Walking, playing or running with food or objects in the mouth.
  - Wearing dentures.
- The universal sign for choking is a conscious person clutching the throat.
- Encourage coughing as long as the person can cough forcefully.
- If the person cannot cough, speak, cry or breathe, immediate action is needed.
- Back blows and abdominal thrusts or chest thrusts are used to effectively clear an obstructed airway.
| **When a conscious choking victim is too large for you to reach around or if the victim is obviously pregnant or known to be pregnant, back blows and chest thrusts are used.**  
| **When a conscious choking victim becomes unconscious, lower the victim to the ground, open the mouth and look for an object.**  
| - If you see the object, use a finger sweep to remove it.  
| - If you do not see an object, reopen the airway and try to give 2 ventilations, watching for the chest to rise.  
| - If the chest does not rise, begin chest compressions. |

### CONSCIOUS CHOKEING—ADULT OR CHILD

**Video**  
- Show the video segment, “Conscious Choking—Adult and Child” (2:34). Answer participants’ questions about the segment.

**Skill Session**  
**WATCH-THEN-PRACTICE**  
**Instructor’s Note:** Participants need to demonstrate either how to care for either a conscious choking adult or a child and be able to point out the differences for the other, such as kneeling if the victim is shorter.

- Divide participants into pairs and guide them through the steps listed on the Conscious Choking—Adult or Child skill chart.  
- Have each participant simulate on his or her partner how to clear the airway of a conscious choking adult or child.  
- Instruct participants not to give actual back blows or abdominal thrusts to their partners.  
- Observe participants performing the technique and evaluate completion of the skill using the skill assessment tool.  
- Point out any common errors, such as failing to obtain the victim’s consent, performing chest thrusts before back blows, positioning the hands improperly or not using the thumb side of the fist to give abdominal thrusts.  
- Check off each participant’s progress on the Participant Progress Log.

### CONSCIOUS CHOKEING—INFANT

**Video**  
- Show the video segment, “Conscious Choking—Infant” (1:22). Answer participants’ questions about the segment.

**Skill Session**  
**WATCH-THEN-PRACTICE**  
- Ask participants to return to the practice area.  
- Divide participants into pairs and guide them through the steps listed on the Conscious Choking—Infant skill chart.  
- Have each participant practice clearing the airway of a conscious choking infant on a manikin while the other participants use their skill sheets to give feedback.  
- Follow the same steps as in the previous skill session:  
  - Have participants practice the skill.  
  - Observe and evaluate each participant’s performance of the skill using the skill assessment tool.  
  - Point out any common errors for giving ventilations.  
  - Check off each participant’s progress on the Participant Progress Log.

### UNCONSCIOUS CHOKEING—ADULT, CHILD AND INFANT

**Video**  
- Show the video segment, “Unconscious Choking—Adult, Child and Infant” (3:29). Answer participants’ questions about the segment.
In review, ask participants the following questions and answer any participants’ questions:

- **What are some of the signs and symptoms that would make you suspect someone is suffering from respiratory distress rather than respiratory arrest?**
  
  **Answers:** Responses should include the following:
  
  - Respiratory distress involves difficulty breathing. Signs and symptoms include slow or rapid breathing; unusually deep or shallow breathing; shortness of breath or noisy breathing; gasping; wheezing, gurgling or high-pitched noises; dizziness, drowsiness or light-headedness; changes in LOC; increased heart rate; chest pain or discomfort; flushed, pale, ashen or bluish skin that is unusually moist or cool; inability to speak in full sentences; tingling in the hands, feet or lips; and feelings of apprehension or fear.
  
  - Respiratory arrest occurs when the person stops breathing. Signs and symptoms include the absence of breathing, irregular or shallow breaths, or lack of the chest rising and falling.

- **Why is it recommended that two rescuers use a BVM rather than one rescuer?**
  
  **Answer:** One rescuer is needed to position and adequately seal the mask while the other rescuer squeezes the bag to give ventilations.

- **You are on duty at a local church carnival and are called to assist a 20-year-old man who is choking on a hot dog. The victim is clutching his throat and coughing. What should you do?**
  
  **Answers:** Responses should include the following:
  
  - Obtain consent from the conscious victim.
  
  - Encourage the victim to continue to cough forcefully until the object is cleared or the victim is unable to cough, speak or breathe.

- **After giving ventilations with a BVM for approximately 2 minutes, you recheck the victim and find that he is not breathing and now does not have a pulse. What would you do?**
  
  **Answer:** Begin CPR.
Skill Charts and Skill Assessment Tools

In addition to performing the steps listed in the skill charts in the correct order, participants must meet the criteria below at the proficient level to be checked off for a skill.

**SKILL CHART: GIVING VENTILATIONS—ADULT**

*Note: Always follow standard precautions when providing care. Size-up the scene for safety and then perform a primary assessment. Always select the properly sized mask for the victim.*

If the victim has a pulse but is *not* breathing:
1. Position and seal the resuscitation mask.
2. Open the airway and blow into the mask.
   - Give 1 ventilation about every 5 seconds.
   - Each ventilation should last about 1 second and make the chest clearly rise. The chest should fall before the next ventilation is given.
3. Recheck for breathing and a pulse about every 2 minutes.
   - Remove the mask and look, listen and feel for breathing and a pulse for *no more than 10 seconds*.
4. Provide care as needed.
   - If the victim is unconscious but breathing, place in a recovery position.
   - If the victim is unconscious and not breathing but there is a pulse, continue giving ventilations.
   - If the victim is unconscious, not breathing and there is no pulse, begin CPR.
   - If the chest does not clearly rise, provide care for an unconscious choking victim.

**SKILL ASSESSMENT TOOL: GIVING VENTILATIONS—ADULT**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Proficient</th>
<th>Not Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open the airway</td>
<td>Tilts head back so that jaw line is at an angle of 80° to 100° to the floor</td>
<td>Tilts head back so that jaw line is at an angle less than 80° or greater than 100° to the floor</td>
</tr>
</tbody>
</table>
| Give ventilations | Gives 1 ventilation about every 5 seconds that makes the chest clearly rise and lasts about 1 second | ■ Gives 1 ventilation about every 5 seconds that does not make the chest clearly rise and lasts 2 or more seconds  
  ■ Gives ventilations too fast or too slow (less than 1 ventilation every 3 seconds or greater than 1 ventilation every 7 seconds) |
**SKILL CHART: GIVING VENTILATIONS—CHILD OR INFANT**

*Note:* Always follow standard precautions when providing care. Size-up the scene for safety and then perform a primary assessment. Always select the properly sized mask for the victim.

If the victim has a pulse but is not breathing:
1. Position and seal the pediatric resuscitation mask.
2. Open the airway and blow into the mask.
   - Give 1 ventilation about every 3 seconds.
   - Each ventilation should last about 1 second and make the chest clearly rise. The chest should fall before the next ventilation is given.
3. Recheck for breathing and a pulse about every 2 minutes.
   - Remove the mask and look, listen and feel for breathing and a pulse for *no more than 10 seconds*.
4. Provide care as needed.
   - If the victim is unconscious but breathing, place in a recovery position.
   - If the victim is unconscious and not breathing but there is a pulse, continue giving ventilations.
   - If the victim is unconscious, not breathing and there is no pulse, begin CPR.
   - If the chest does not clearly rise, provide care for an unconscious choking victim.

**SKILL ASSESSMENT TOOL: GIVING VENTILATIONS—CHILD OR INFANT**

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| Give ventilations       | Gives 1 ventilation about every 3 seconds that makes the chest clearly rise and lasts about 1 second                                                                                                | ■ Gives 1 ventilation about every 3 seconds that does not make the chest clearly rise and lasts 2 or more seconds  
■ Gives ventilations too fast or too slow (less than 1 ventilation every second or greater than 1 ventilation every 5 seconds) |
SKILL CHART: GIVING VENTILATIONS USING A BVM—TWO RESCUERS

**Note:** Always follow standard precautions when providing care. Size-up the scene for safety and then perform a primary assessment. Prepare the BVM for use during the primary assessment. Always select the properly sized BVM for the victim.

If the victim has a pulse but is not breathing:

1. Rescuer 1 positions the mask over the victim’s mouth and nose.
   - Kneel behind the victim’s head.
2. Rescuer 1 seals the mask.
3. Rescuer 1 opens the airway.
   - Place the thumbs along each side of the mask, using the elbows for support.
   - Slide the fingers behind the angles of the victim’s jawbone.
   - Push down on the mask with the thumbs, lift the jaw and tilt the head back.
4. Rescuer 2 gives ventilations.
   - Squeeze the bag slowly with both hands.
   - For an adult, give 1 ventilation about every 5 seconds.
   - For a child or an infant, give 1 ventilation about every 3 seconds.
   - Each ventilation should last about 1 second and make the chest clearly rise. The chest should fall before the next ventilation is given.
5. Rescuer 2 rechecks for breathing and a pulse about every 2 minutes.
   - Remove the mask and look, listen and feel for breathing and a pulse for no more than 10 seconds.
6. Provide care as needed.
   - If the victim is unconscious but breathing, place in a recovery position.
   - If the victim is unconscious and not breathing but there is a pulse, continue giving ventilations.
   - If the victim is unconscious, not breathing and there is no pulse, begin CPR.
   - If the chest does not clearly rise, provide care for an unconscious choking victim.

**SKILL ASSESSMENT TOOL: GIVING VENTILATIONS USING A BVM—TWO RESCUERS**

<table>
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<td>Open the airway</td>
<td>Tilts head back so that jaw line is at an angle of 80° to 100° to the floor</td>
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| Give ventilations       | Gives 1 ventilation about every 5 seconds that makes the chest clearly rise and lasts about 1 second | ■ Gives 1 ventilation about every 5 seconds that does not make the chest clearly rise and lasts 2 or more seconds  
  ■ Gives ventilations too fast or too slow (less than 1 ventilation every 3 seconds or greater than 1 ventilation every 7 seconds) |
Notes:
■ Size-up the scene for safety, including using appropriate PPE.
■ Obtain consent from a choking adult. If a child is choking, obtain consent from the parent or guardian if present. If the parent or guardian is not available, consent is implied.
■ For a child, stand or kneel behind the child, depending on the child’s size. Use less force on a child than you would on an adult.

If the victim cannot cough, speak or breathe:
1. Give 5 back blows.
   ■ Position yourself slightly behind the victim.
   ■ Provide support by placing one arm diagonally across the chest and bend the victim forward. The victim’s upper airway should be at least parallel to the ground.
   ■ Firmly strike the victim between the shoulder blades with the heel of your hand.
   ■ Each back blow should be a separate and distinct attempt to dislodge the object.

2. Give 5 abdominal thrusts.
   ■ Standing behind the victim, place the thumb side of your fist against the middle of the victim’s abdomen, just above the navel.
   ■ Grab your fist with your other hand and give quick, upward thrusts.
   ■ Each abdominal thrust should be a separate and distinct attempt to dislodge the object.

Continue giving 5 back blows and 5 abdominal thrusts until:
■ The object is forced out.
■ The victim begins to cough forcefully or breathe.
■ The victim becomes unconscious.

If the victim becomes unconscious:
■ Carefully lower the victim to the ground and provide care for an unconscious choking victim.

Note: Some conscious choking victims, including those too large to reach your arms around and those who are obviously pregnant or known to be pregnant, may require chest thrusts instead of abdominal thrusts.

<table>
<thead>
<tr>
<th>SKILL ASSESSMENT TOOL: CONSCIOUS CHOKING—ADULT OR CHILD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Criterion</strong></td>
</tr>
<tr>
<td>Bend the person forward at the waist</td>
</tr>
<tr>
<td>Give 5 back blows</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Give 5 abdominal thrusts</td>
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</table>
**SKILL CHART: CONSCIOUS CHOKEING—INFANT**

**Notes:**
- **Size-up the scene for safety, including using appropriate PPE.**
- **Obtain consent from the parent or guardian if present. If the parent or guardian is not available, consent is implied.**

If the infant cannot cough, cry or breathe:
1. Carefully position the infant face-down along your forearm.
   - Support the infant’s head and neck with your hand.
   - Lower the infant onto your thigh, keeping the infant’s head lower than his or her chest.
2. Give 5 back blows.
   - Use the heel of your hand.
   - Give back blows between the infant's shoulder blades.
   - Each back blow should be a separate and distinct attempt to dislodge the object.
3. Position the infant face-up along your forearm.
   - Position the infant between both of your forearms, supporting the infant’s head and neck.
   - Turn the infant face-up.
   - Lower the infant onto your thigh with the infant’s head lower than his or her chest.
4. Give 5 chest thrusts.
   - Put two or three fingers on the center of the chest just below the nipple line.
   - Compress the chest 5 times about 1½ inches.
   - Each chest thrust should be a separate and distinct attempt to dislodge the object.

**Continue giving 5 back blows and 5 chest thrusts until:**
- The object is forced out.
- The infant begins to cough forcefully, cry or breathe.
- The infant becomes unconscious.

If the infant becomes unconscious:
- Carefully lower the infant to the ground and provide care for an unconscious choking infant.
<table>
<thead>
<tr>
<th>Criterion</th>
<th>Proficient</th>
<th>Not Proficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep the head lower than the chest</td>
<td>Positions infant with upper airway (infant’s head and neck) angled downward, lower than chest</td>
<td>Positions infant with upper airway (infant’s head and neck) parallel to ground or angled upward</td>
</tr>
<tr>
<td>Support the head and neck securely</td>
<td>Places thumb and fingers on infant’s jaw</td>
<td>□ Places thumb on front of infant’s neck</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Places fingers on front of infant’s neck</td>
</tr>
<tr>
<td>Maintain firm support</td>
<td>Holds infant securely</td>
<td>□ Drops infant</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Loses control of infant</td>
</tr>
<tr>
<td>Give back blows</td>
<td>□ Strikes the back with the heel of one hand</td>
<td>□ Strikes the back with a closed hand</td>
</tr>
<tr>
<td></td>
<td>□ Strikes the center of the back between the shoulder blades</td>
<td>□ Strikes the back with a palm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Strikes the back more than 1 inch from the center of both shoulder blades</td>
</tr>
<tr>
<td>Give chest thrusts</td>
<td>□ Places fingers in line with the breastbone (not across/perpendicular to the breastbone)</td>
<td>□ Places fingers perpendicular to breastbone</td>
</tr>
<tr>
<td></td>
<td>□ Places fingers in center of chest not more than 1 inch below nipple line</td>
<td>□ Places fingers outside center of chest</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Places fingers more than 1 inch below nipple line</td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ Places fingers more than 1 inch above nipple line</td>
</tr>
</tbody>
</table>
Lesson Length: 1 hour, 15 minutes

LESSON OBJECTIVES
After completing this lesson, participants should be able to:
- List the links of the Cardiac Chain of Survival.
- Recognize the signs and symptoms of a heart attack.
- Identify how to care for a heart attack.
- Identify special situations that may arise when performing CPR.
- Describe the role and importance of early CPR in cardiac arrest.
- Demonstrate how to perform CPR (adult, child and infant).
- Demonstrate how to perform two-rescuer CPR (adult, child and infant).

GUIDANCE FOR THE INSTRUCTOR
To complete this lesson and meet the lesson objectives, you must:
- Conduct a lecture and guided discussion on the signs and symptoms of a heart attack.
- Show the video segment, “Heart Attack and the Cardiac Chain of Survival,” then lead a guided discussion on the four links.
- Conduct a lecture on the causes and signs of cardiac arrest and lead a guided discussion differentiating a heart attack from a cardiac arrest.
- Lead a guided discussion on CPR; show the video segments, “CPR—Adult and Child” and “CPR—Infant”; and conduct the skill sessions.
- Lead a guided discussion on two-rescuer CPR; show the video segments, “Two-Rescuer CPR—Adult and Child” and “Two-Rescuer CPR—Infant”; and conduct the skill sessions.
- Conduct the Lesson Wrap-Up.

MATERIALS, EQUIPMENT AND SUPPLIES
- Non-latex disposable gloves (one pair per participant)
- Manikins (one adult and one infant manikin per two participants, child manikins optional)
- Resuscitation masks (one adult and one pediatric mask per participant)
- Decontamination supplies
A heart attack, also called myocardial infarction (MI), occurs when the heart muscle experiences a loss of oxygenated blood.

The sooner the signs and symptoms are recognized, the better the victim’s chances are for survival.

Even people who have had a heart attack may not recognize the signs because each heart attack may not show the same signs.

Name some signs and symptoms of a heart attack.

**Answers:** Responses should include the following:

- Chest discomfort or pain that is severe, lasts longer than 3 to 5 minutes, goes away and comes back, or persists even during rest
- Discomfort, pressure or pain that is persistent and ranges from discomfort to an unbearable crushing sensation in the chest, possibly spreading to the shoulder, arm, neck, jaw, stomach or back, and usually not relieved by resting, changing position or taking medication
- Pain that comes and goes (such as angina pectoris)
- Difficulty breathing, such as at a faster rate than normal or noisy breathing
- Pale or ashen skin, especially around the face
- Sweating, especially on the face
- Dizziness or light-headedness
- Possible loss of consciousness
- Nausea or vomiting

Women may experience the most common signs and symptoms, such as chest pain or discomfort, but are more likely to experience other warning signs, such as shortness of breath; nausea or vomiting; stomach, back or jaw pain; or unexplained fatigue or malaise. When they do experience chest pain, it is generally atypical—sudden sharp but short-lived pain outside the breastbone.

To care for a victim having a possible heart attack, you should:

- Take immediate action and summon more advanced medical personnel.
- Have the victim stop any activity and rest.
- Loosen any tight or uncomfortable clothing on the victim.
- Closely monitor the victim until more advanced medical personnel take over, noting any changes in appearance or behavior.
- Comfort the victim.
- Assist the victim with taking aspirin if he or she can swallow and has no contraindications to taking aspirin, only when medically appropriate and local protocols or medical direction permit.
- Assist the victim with prescribed medication, such as nitroglycerin, and administer emergency oxygen, if available and trained to do so.
- Be prepared to perform CPR and use an automated external defibrillator (AED).
**TOPIC: CARDIAC CHAIN OF SURVIVAL**

<table>
<thead>
<tr>
<th>Video</th>
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</thead>
<tbody>
<tr>
<td>- Show the video segment, “Heart Attack and the Cardiac Chain of Survival” (6:05). Answer participants’ questions about the segment.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Guided Discussion</th>
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</table>
| - Ask participants: “In the video segment, the police officer checked breathing and a pulse as he took over for the art instructor. Why?”  
  **Answer:** When a professional rescuer takes over for a lay responder, he or she should check the victim’s condition.  
- Pose the following scenario to participants: “A customer shopping in a supermarket suddenly collapses.”  
- Ask participants: “What four steps do you think are necessary to improve this victim’s chance for survival?”  
  **Answers:** Responses should include the following:  
  - Early recognition and early access to the emergency medical services (EMS) system  
  - Early CPR  
  - Early defibrillation  
  - Early advanced medical care  
- Emphasize that these four steps are known as the Cardiac Chain of Survival and inform participants of the correct order of the steps.  
- Tell participants that they will learn more about defibrillation—the delivery of an electrical shock to help restore heart rhythm—in the next lesson. |

**TOPIC: CARDIAC ARREST**

<table>
<thead>
<tr>
<th>Lecture Points</th>
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</table>
| - Cardiac arrest is a life-threatening situation in which the heart stops beating or beats too irregularly or too weakly to circulate blood efficiently.  
- Heart attack, electrocution, respiratory arrest, drowning or other conditions may cause cardiac arrest.  
- In children and infants, airway and breathing problems, traumatic injuries or accidents, a hard blow to the chest, congenital heart disease or sudden infant death syndrome may cause cardiac arrest.  
- Signs of cardiac arrest include:  
  - Unconsciousness.  
  - Absence of breathing.  
  - Absence of a pulse. |

<table>
<thead>
<tr>
<th>Guided Discussion</th>
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</table>
| - Ask participants: “What is the difference between a heart attack and cardiac arrest?”  
  **Answers:** Responses should include the following:  
  - A heart attack occurs when the heart muscle experiences a loss of oxygenated blood.  
  - Heart attack may cause cardiac arrest. Cardiac arrest occurs when the heart stops beating or the heart is beating too irregularly or too weakly to circulate blood efficiently. The victim is unconscious, is not breathing and does not have a pulse. |
**Lecture Points and Guided Discussion**

- Ask participants: “What would you do if a victim is experiencing cardiac arrest?”
  
  **Answer:** Perform CPR.

- CPR is a combination of chest compressions and ventilations that circulates blood containing oxygen to the vital organs of a person whose heart and breathing have stopped.

- CPR is used in combination with an AED according to local protocols until more advanced medical personnel take over.

- Effective chest compressions are needed to ensure that blood circulates to the victim’s brain and other vital organs and to increase the likelihood that a successful shock can be delivered to a victim, especially if more than several minutes have elapsed since the victim’s collapse.

- Ask participants: “How can you make sure that your chest compressions are effective?”
  
  **Answers:** Responses should include the following:

  - Ensuring that the victim is on a firm, flat surface
  - Compressing the chest in a straight-down manner to the proper depth
  - Making sure the chest recoils fully between each compression
  - Performing compressions at a rate of at least 100 per minute
  - Minimizing interruptions in CPR

- Once started, do not stop CPR except in one of these situations:

  - You notice an obvious sign of life, such as breathing.
  - An AED is available and ready to use.
  - Another trained rescuer takes over.
  - More advanced medical personnel take over.
  - You are presented with a valid Do Not Resuscitate (DNR) order.
  - You are too exhausted to continue.
  - The scene becomes unsafe.

- Ask participants: “What should you do if, at any time, you notice breathing?”
  
  **Answer:** Stop CPR and monitor the victim’s condition.

- Even with the best of preparation and effort, complications can arise, including broken ribs, separation of cartilage, vomiting, frothing from the mouth or nose and chaos at the scene. Despite your best efforts to provide quality care, not all victims of cardiac arrest survive.

- Through your training, you can and should continue to provide care.

**CPR—ADULT OR CHILD**

**Skill Session**

- You may choose either the Practice-While-You-Watch or Watch-Then-Practice methods, depending on the experience of the participants and whether your training facility can accommodate the Practice-While-You-Watch method, which requires adequate practice space and a monitor large enough for everyone to see clearly. Participants need to demonstrate adult CPR and be able to point out the differences of performing CPR on a child, such as compressing the chest to a depth less than that for an adult.

  - **PRACTICE-WHILE-YOU-WATCH**

    - Explain to the participants that, for this skill, they will follow along with and practice the steps for performing CPR as they are guided by the segment.
    - Show the video segment, “CPR—Adult and Child” (4:55).
    - Do not interrupt this skill session to lecture or communicate anything other than guidance related to skill practice. In general, answering questions should occur after the video segment (and skill session) has ended.
### CPR—Continued

- **WATCH-THEN-PRACTICE**
  - Tell participants that, for this segment, they will watch the video segment without practicing until you pause it, even though the narration may say to follow along.
  - Show the video segment, “CPR—Adult and Child” (4:55).
  - After the video segment, guide participants through the steps of the skill.
  - Observe participants performing the technique and evaluate completion of the skill using the skill assessment tool.
  - Be sure to point out any common errors, such as compressions that are too shallow or too deep, interrupting compressions for too long or too frequently, incorrect hand position, failure to allow full recoil after each compression or inappropriate rate of compressions.
  - Check off each participant’s progress on the Participant Progress Log.

### CPR—INFANT

**Skill Session**

- Follow the same steps as in the previous skill session:
  - Have participants practice the skill using either the Practice-While-You-Watch or Watch-Then-Practice method using the video segment, “CPR—Infant” (2:23).
  - Observe and evaluate each participant’s performance using the skill assessment tool.
  - Point out any common errors for CPR.
  - Check off each participant’s progress on the Participant’s Progress Log.

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**TOPIC: TWO-RESCUER CPR**

**Lecture Points**

- Two-rescuer CPR is used when two rescuers arrive on the scene at the same time and begin CPR together or one rescuer is performing CPR and a second rescuer becomes available.
  - In two-rescuer CPR, one rescuer gives ventilations while the other performs chest compressions.
  - Rescuers switch positions about every 2 minutes.
- When CPR is in progress by one rescuer and a second rescuer arrives, the second rescuer should confirm whether more advanced medical personnel have been summoned. If not, the second rescuer does so before getting the AED or assisting with care.

### TWO-RESCUER CPR—ADULT OR CHILD

**Video**

- Show the video segment, “Two-Rescuer CPR—Adult and Child” (2:25). Answer any participants’ questions about the segment.

**Skill Session**

*Instructor’s Note:* Participants need to demonstrate either adult two-rescuer CPR or child two-rescuer CPR and be able to point out the differences for the other, such as depth of compressions and ratio of compressions to ventilations.

- Guide participants through the steps of the skill and evaluate completion of the skill using the skill assessment tool.
- Be sure to point out any common errors, such as compressing too shallow or at an inappropriate rate, compressing and ventilating at the same time, failing to call for a position change or using an incorrect cycle of compressions and ventilations.
- Check off each participant’s progress on the Participant Progress Log.
**In review, ask participants the following questions and answer any participants’ questions:**

- **A middle-aged man’s wife called 9-1-1 because he was complaining of severe pressure in his chest and pain that was radiating to his shoulder. The victim is sweating profusely and breathing rapidly and appears very anxious. He states, “I feel like I can’t catch my breath. I still feel the pressure in my chest but it has gotten a little bit better.” What signs and symptoms is the victim exhibiting that would lead you to suspect that he is experiencing a heart attack?**

  **Answers:** Responses should include the following:
  - Complaints of severe pressure in his chest with pain that radiates to his shoulder
  - Profuse sweating and rapid breathing
  - Complaints of difficulty breathing

- **Going back to the previous scenario, what links in the Cardiac Chain of Survival have been met?**

  **Answer:** Only the first step of the chain has been met, early recognition of the emergency and early access to the EMS system.

- **What is the cycle of compressions to ventilations when performing one-rescuer CPR?**

  **Answer:** When performing one-rescuer CPR, cycles of 30 chest compressions and 2 ventilations are given.

- **When performing CPR on a child, a rescuer compresses the chest to which depth?**

  **Answer:** When performing CPR on a child, the rescuer compresses the chest about 2 inches.

- **What would you do if a victim begins to vomit while you are performing CPR?**

  **Answer:** Stop CPR and turn the victim as a unit, while supporting the head and neck, onto his or her side. After the vomiting stops, clear the victim’s airway by wiping the victim’s mouth out using a finger sweep and suction (if necessary), and then turn the victim onto his or her back and continue CPR.
Skill Charts and Skill Assessment Tools

In addition to performing the steps listed in the skill charts in the correct order, participants must meet the criteria below at the proficient level to be checked off for a skill.

**SKILL CHART: CPR—ADULT OR CHILD**

**Notes:**

- Size-up the scene for safety and then perform a primary assessment.
- Ensure that the victim is on a firm, flat surface.

If the victim is not breathing and has no pulse:

1. Give 30 chest compressions.
   - Find the correct hand position to give chest compressions.
     - Place the heel of one hand on the center of the chest.
     - Place the other hand on top.
     - Keep your arms as straight as possible and your shoulders directly over your hands.
   - Push hard, push fast.
     - Compress the chest at least 2 inches for an adult and about 2 inches for a child.
     - Compress at a rate of at least 100 per minute.
     - Let the chest rise completely before pushing down again.

**Notes:**

- Keep your fingers off the chest when giving chest compressions and use your body weight, not your arms, to compress the chest. Position your shoulders over your hands with your arms as straight as possible.
- Counting out loud or to yourself helps keep an even pace.

2. Give 2 ventilations.
   - Each ventilation should last about 1 second and make the chest clearly rise.
   - The chest should fall before the next ventilation is given.

3. Perform cycles of 30 chest compressions and 2 ventilations.

**Do not stop CPR except in one of these situations:**

- You see an obvious sign of life, such as breathing.
- An AED is ready to use.
- Another trained rescuer takes over.
- More advanced medical personnel take over.
- You are presented with a valid DNR order.
- You are too exhausted to continue.
- The scene becomes unsafe.
### Skill Assessment Tool: CPR—Adult or Child

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Proficient</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Compress chest at least 2 inches deep for an adult</td>
<td>Compresses the chest straight down at least 2 inches for at least 24 of the 30 compressions</td>
<td>Compresses the chest less than 2 inches for 7 or more times per 30 compressions</td>
</tr>
<tr>
<td>Compress chest about 2 inches deep for a child</td>
<td>Compresses the chest straight down at least 1¾ inches for at least 24 of the 30 compressions</td>
<td>Compresses the chest less than 1¾ inches for 7 or more times per 30 compressions</td>
</tr>
<tr>
<td>Let chest rise completely before pushing down again</td>
<td>Compresses and fully releases the chest without pausing or taking hands off chest for 24 of the 30 compressions</td>
<td>Pauses or fails to fully release the chest while compressing for 7 or more times per 30 compressions</td>
</tr>
<tr>
<td>Compress chest at a rate of at least 100 times per minute (30 compressions in about 18 seconds)</td>
<td>Compresses the chest 24–36 times in about 18 seconds</td>
<td>Compresses the chest less than 24 or more than 36 times in about 18 seconds</td>
</tr>
<tr>
<td>Give ventilations</td>
<td>Gives 2 ventilations that make the chest clearly rise and that last about 1 second each</td>
<td>Gives 2 ventilations that do not make the chest clearly rise and that last 2 or more seconds each</td>
</tr>
<tr>
<td>Return to compressions</td>
<td>Gives ventilations and returns to chest compressions within 3–6 seconds</td>
<td>Gives ventilations and returns to chest compressions but takes 7 or more seconds</td>
</tr>
</tbody>
</table>
Notes:
- Size-up the scene for safety and then perform a primary assessment.
- Ensure that the victim is on a firm, flat surface.

If the infant is not breathing and has no pulse:
1. Give 30 chest compressions.
   - Find the correct hand position to give chest compressions.
     - Place one hand on the infant’s forehead.
     - Place two or three fingers on the center of the chest just below the nipple line.
   - Push hard, push fast.
     - Compress the chest about 1½ inches.
     - Compress at a rate of at least 100 per minute.
   - Let the chest rise completely before pushing down again.

Notes:
- Position your hand over your fingers.
- Counting out loud or to yourself helps keep an even pace.

2. Give 2 ventilations.
   - Each ventilation should last about 1 second and make the chest clearly rise.
   - The chest should fall before the next ventilation is given.

3. Perform cycles of 30 chest compressions and 2 ventilations.

Do not stop CPR except in one of these situations:
- You see an obvious sign of life, such as breathing.
- An AED is ready to use.
- Another trained rescuer takes over.
- More advanced medical personnel take over.
- You are presented with a valid DNR order.
- You are too exhausted to continue.
- The scene becomes unsafe.

**SKILL ASSESSMENT TOOL: CPR—INFANT**

<table>
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<tr>
<th>Criterion</th>
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<tbody>
<tr>
<td>Compress chest about 1½ inches deep</td>
<td>Compresses chest straight down at least 1¼ inches for at least 24 of the 30 compressions</td>
<td>Compresses chest less than 1¼ inches for 7 or more times per 30 compressions</td>
</tr>
<tr>
<td>Let the chest rise completely before pushing down again</td>
<td>Compresses and releases chest without pausing for at least 24 of the 30 compressions</td>
<td>Pauses while compressing or releasing for 7 or more times per 30 compressions</td>
</tr>
<tr>
<td>Compress chest at a rate of at least 100 times per minute (30 compressions in about 18 seconds)</td>
<td>Compresses chest 24–36 times in about 18 seconds</td>
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<td>Give ventilations</td>
<td>Gives 2 ventilations that make the chest clearly rise and that last about 1 second each</td>
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</table>
SKILL CHART: TWO-RESCUER CPR—ADULT OR CHILD

Notes:
■ Size-up the scene for safety and then perform a primary assessment.
■ Ensure that the victim is on a firm, flat surface.

If the victim is not breathing and has no pulse:

1. Rescuer 1 finds the correct hand position to give chest compressions.
   o For an adult or a child:
     ● Place the heel of one hand on the center of the chest.
     ● Place the other hand on top.
     ● Keep your arms as straight as possible and your shoulders directly over your hands.

2. Rescuer 1 gives chest compressions.
   o Push hard, push fast.
     ● Compress the chest at least 2 inches for an adult and about 2 inches for a child.
     ● For an adult, give 30 chest compressions. For a child, give 15 chest compressions.
     ● Compress at a rate of at least 100 per minute.
     ● Let the chest rise completely before pushing down again.

Notes:
  o Keep your fingers off the chest when performing chest compressions.
  o Use your body weight, not your arms, to compress the chest.
  o Counting out loud or to yourself helps keep an even pace.

3. Rescuer 2 gives 2 ventilations.
   o Each ventilation should last about 1 second and make the chest clearly rise.
   o The chest should fall before the next ventilation is given.

4. Rescuers change positions about every 2 minutes.
   o Rescuer 1 calls for a position change by using the word “Change” at the end of the last compression cycle:
     ● For an adult, use the word “Change” in place of the word “30.”
     ● For a child, use the word “Change” in place of the word “15.”
   o Rescuer 2 gives 2 ventilations.
   o Rescuer 1 quickly moves to the victim’s head with his or her own mask.
   o Rescuer 2 quickly moves into position at the victim’s chest and locates the correct hand position.
   o Changing positions should take less than 5 seconds.

5. Rescuer 2 begins chest compressions.
   o Rescuers 1 and 2 continue cycles of chest compressions and ventilations.

Do not stop CPR except in one of these situations:
■ You see an obvious sign of life, such as breathing.
■ An AED is ready to use.
■ Another trained rescuer takes over.
■ More advanced medical personnel take over.
■ You are presented with a valid DNR order.
■ You are too exhausted to continue.
■ The scene becomes unsafe.
## SKILL ASSESSMENT TOOL: TWO-RESCUER CPR—ADULT OR CHILD

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<td>Compress chest about 2 inches deep for a child</td>
<td>Compresses chest straight down at least 1¾ inches for at least 10 of the 15 compressions</td>
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<td>Let chest rise completely before pushing down again</td>
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SKILL CHART: TWO-RESCUER CPR—INFANT

Notes:

- Size-up the scene for safety and then perform a primary assessment.
- Ensure that the victim is on a firm, flat surface.

If the victim is not breathing and has no pulse:

1. Rescuer 1 finds the correct hand position to give chest compressions.
   - Use the two thumbs-encircling technique on the infant’s chest.
     - Place thumbs next to each other on the center of the chest just below the nipple line.
     - Place both hands underneath the infant’s back and support the infant’s back with your fingers.
     - Ensure that your hands do not compress or squeeze the side of the ribs.
   - If available, place a towel or padding underneath the infant’s shoulders to help maintain the head in the neutral position.

2. Rescuer 1 gives chest compressions.
   - Push hard, push fast.
     - Compress the chest about 1½ inches.
     - Give 15 chest compressions.
     - Compress at a rate of at least 100 per minute.
     - Let the chest rise completely before pushing down again.

   Note: Counting out loud or to yourself helps keep an even pace.

3. Rescuer 2 gives 2 ventilations.
   - Each ventilation should last about 1 second and make the chest clearly rise.
   - The chest should fall before the next ventilation is given.

4. Rescuers change positions about every 2 minutes.
   - Rescuer 1 calls for a position change by using the word “Change” in place of the word “15” in the last compression cycle
   - Rescuer 2 gives 2 ventilations.
   - Rescuer 1 quickly moves to the victim’s head with his or her own mask.
   - Rescuer 2 quickly moves into position at the victim’s chest and locates the correct hand position.
   - Changing positions should take less than 5 seconds.

5. Rescuer 2 begins chest compressions.
   - Rescuers 1 and 2 continue cycles of chest compressions and ventilations.

Do not stop CPR except in one of these situations:

- You see an obvious sign of life, such as breathing.
- An AED is ready to use.
- Another trained rescuer takes over.
- More advanced medical personnel take over.
- You are presented with a valid DNR order.
- You are too exhausted to continue.
- The scene becomes unsafe.
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LESSON OBJECTIVES

After completing this lesson, participants should be able to:

- Describe what defibrillation is and how it works.
- Describe the role and importance of early defibrillation in cardiac arrest.
- List the general steps for using an automated external defibrillator (AED).
- Identify precautions for using an AED.
- Demonstrate how to use an AED (adult, child or infant).
- Describe the differences in using an AED (adult, child or infant) when CPR is in progress.

GUIDANCE FOR THE INSTRUCTOR

To complete this lesson and meet the lesson objectives, you must:

- Conduct a lecture about what happens when the heart stops.
- Conduct a lecture on automated external defibrillation and its purpose and the role of defibrillation as a vital link in the Cardiac Chain of Survival.
- Conduct a lecture for using an AED; show the video segment, “Using an AED”; and conduct the skill session.
- Conduct the lecture and show the video segment, “Using an AED—CPR in Progress.”
- Lead a guided discussion on AED precautions and conduct the large-group activity on the special situations that may affect the use of an AED.
- Conduct the Lesson Wrap-Up.

MATERIALS, EQUIPMENT AND SUPPLIES

- Non-latex disposable gloves (one pair per participant)
- Manikins (one adult per two participants, child and infant manikins optional)
- Resuscitation masks (one adult mask per participant, pediatric mask optional)
- Decontamination supplies
- AED training devices (one per two participants)
- AED training pads (one set of adult and one set of pediatric training pads per two participants)
TOPIC: WHEN THE HEART STOPS

Lecture Points

- Any damage to the heart muscle from disease or injury can disrupt the heart’s electrical system.
- The two most common treatable abnormal rhythms associated with sudden cardiac arrest are ventricular fibrillation (V-fib) and ventricular tachycardia (V-tach).
- With V-fib, the ventricles quiver without any organized rhythm, the electrical impulses fire at random, creating chaos, and the heart is unable to pump and circulate blood.
- V-tach occurs when an abnormal electrical impulse originates in the ventricles instead of at the sinoatrial (SA) node. The impulse fires rapidly, preventing the chambers from filling, and the heart is not able to pump effectively.
- With either abnormal rhythm, there is no breathing or pulse.

TOPIC: AUTOMATED EXTERNAL DEFIBRILLATION

Lecture Points

- Defibrillation is the delivery of an electrical shock that may help re-establish an effective rhythm.
- AEDs are portable electronic devices that analyze the heart’s rhythm and provide an electrical shock.
- Often, early defibrillation can correct V-fib and V-tach. If not corrected, asystole (cessation of all electrical activity) occurs; defibrillation does not correct asystole.
- Each minute that CPR and defibrillation are delayed, the victim’s chance for survival is reduced by about 10 percent.

TOPIC: USING AN AED

Lecture Points

- When cardiac arrest occurs, use an AED as soon as it is ready to use.
- If the AED advises that a shock is needed, follow protocols to provide 1 shock followed by about 2 minutes of CPR.
- If CPR is in progress, do not interrupt chest compressions until the AED is turned on, the AED pads are applied and the AED is ready to analyze the heart rhythm.
- AEDs may be equipped with pediatric AED pads; however, pediatric pads are only appropriate for use on infants and children up to 8 years of age or weighing less than 55 pounds.
  - If pediatric-specific equipment is not available and local protocols allow, you can use an AED designed for adults.
  - If the AED pads risk touching each other because of the smaller chest size, use the anterior/posterior pad placement.

Video

- Show the video segment, “Using an AED” (2:07). Answer participants’ questions about the segment.
**USING AN AED—ADULT, CHILD OR INFANT**

**Skill Session**

*Instructor’s Note:* Participants need to demonstrate how to use an AED on an adult, a child or an infant and be able to point out the differences in the use of an AED for the other age groups.

- Divide participants into pairs. Have each participant practice using an AED while the other participant uses his or her skill sheet to give feedback.
- While participants are practicing, observe and evaluate each participant’s performance of the skill using the skill assessment tool.
- Point out any common errors, such as not wiping the victim’s chest, using pediatric AED pads on an adult or failing to resume CPR after delivery of a shock.
- Check off each participant’s progress on the Participant Progress Log.

**USING AN AED—CPR IN PROGRESS**

**Lecture Points**

- When one rescuer is on the scene, that rescuer begins CPR and instructs someone to summon more advanced medical personnel and obtain the AED, if one is available.
- When the second rescuer arrives, that rescuer prepares the AED for use while the first rescuer continues CPR.
- If at any time either rescuer notices an obvious sign of life, such as breathing, stop CPR, monitor the victim’s breathing and pulse, and monitor for any changes in the victim’s condition.

**Video**

- Show the video segment, “Using an AED—CPR in Progress” (1:45). Answer participants’ questions about the segment.

**TOPIC: AED Precautions**

**Guided Discussion**

- Have participants open the handbook, which discusses general AED precautions. Using the information, ask participants to identify general precautions.

**Answers:** Responses should include the following:

- Do not use alcohol to wipe the victim’s chest dry.
- Do not touch the victim while the AED is analyzing.
- Before shocking a victim with an AED, make sure that no one is touching or is in contact with the victim or any resuscitation equipment.
- Do not touch the victim while the device is defibrillating.
- Do not defibrillate someone when around flammable or combustible materials.
- Do not use an AED in a moving vehicle.
- Do not use an AED on a victim wearing a nitroglycerin patch or other patch on the chest. With a gloved hand, remove any patches from the chest before attaching the device. Never place AED pads directly on top of medication patches.
- Do not use a mobile phone or radio within 6 feet of an AED.

**Large-Group Activity**

- Ask participants to identify whether the statements are fact or fiction.

**Answer:** Fact. It is safe to use AEDs in all weather conditions. However, if at all possible, move the victim to a shelter to protect him or her from rain or snow, and ensure that the victim is as dry as possible. If the victim is lying in water, move him or her to a relatively dry area and wipe the chest dry before using the AED. Once you have removed the victim from the water, be sure there are no puddles of water around you, the victim or the AED. In wet weather, be sure to remove wet clothing and wipe the victim’s chest dry before placing the
AED pads. Minimize delaying defibrillation when taking steps to provide for a dry environment. Different AEDs are more or less resistant to exposure to water—check the manufacturer’s instructions for specific information about the AED you will be using.

- **An AED cannot be used on a pregnant woman. Fact or fiction?**
  
  **Answer: Fiction.** Defibrillation shocks transfer no significant electrical current to the fetus. Local protocols and medical direction should be followed.

- **If someone has chest hair, you should shave it before using the AED. Fact or fiction?**
  
  **Answer: Fiction.** Some men have excessive chest hair that may cause problems with AED pad-to-skin contact. Because the time to delivery of the first shock is critical, and chest hair rarely interferes with pad adhesion, attach the AED pads and analyze the heart’s rhythm as soon as possible. Press firmly on the pads to attach them to the victim’s chest. If you continue to get the “Check pads” message after removing the first set of AED pads, shave the victim’s chest and attach new pads to the victim’s chest.

- **If a victim has a body piercing or is wearing jewelry, you should remove the item before using an AED. Fact or fiction?**
  
  **Answer: Fiction.** Jewelry and body piercings do not need to be removed when you use an AED. These are simply distractions that do no harm to the victim, but taking time to remove them delays delivery of the first shock. Do not delay the use of an AED to remove jewelry or body piercings. However, do not place the AED pads directly over metallic jewelry or body piercings. Adjust AED pad placement if necessary.

- **Never shock someone who has an implantable cardioverter-defibrillator (ICD) or pacemaker device. Fact or fiction?**
  
  **Answer: Fiction.** If the implanted device is visible, or you know that the victim has one, do not place the AED pads directly over the device. This may interfere with the delivery of the shock. Adjust AED pad placement if necessary, and continue to follow established protocols. If you are not sure, use the AED as needed. It will not harm the victim or rescuer.

- **Never shock a victim on a metal surface. Fact or fiction?**
  
  **Answer: Fiction.** It is safe to deliver a shock to a victim in cardiac arrest on a metal surface as long as appropriate safety precautions are taken. Specifically, care should be taken that AED pads do not contact the conductive (metal) surface and that no one is touching the victim when the shock button is pushed.

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**TOPIC: AED MAINTENANCE**

**Time:** 2 minutes

**Lecture Points**

- AEDs require minimal maintenance; however, rescuers should be familiar with the various visual and audible prompts to warn of malfunction or low battery.
- Read the operator’s manual thoroughly.
- Periodically check equipment; have a fully charged backup battery and properly sealed, unexpired and correct AED pads available; replace all used accessories; and make sure the machine is in proper working order before placing it back in service.
In review, ask participants the following questions and answer any participants’ questions:

- **What are the two most common types of abnormal heart rhythm that can be corrected by defibrillation?**
  
  *Answer: V-fib and V-tach*

- **Why is early CPR and defibrillation such an important component in the Cardiac Chain of Survival?**
  
  *Answer: For each minute that CPR and defibrillation are delayed, the victim’s chance for survival is reduced by 10 percent.*

- **You are the second rescuer on the scene. EMS personnel have been summoned and an AED is available. When should you apply the AED pads?**
  
  *Answers: Apply the AED pads as soon as the AED is ready to use.*
Skill Chart and Skill Assessment Tool

In addition to performing the steps listed in the skill chart in the correct order, participants must meet the criteria below at the proficient level to be checked off for a skill.

### SKILL CHART: USING AN AED—ADULT, CHILD OR INFANT

*Note: Size-up the scene for safety and then perform a primary assessment.*

If the victim is not breathing and has no pulse:

1. Turn on the AED and follow the voice and/or visual prompts.
2. Wipe the victim’s bare chest dry.
3. Attach the AED pads to the victim’s bare, dry chest.
   - Place one pad on the upper right side of the victim’s chest and the other pad on the left side of the chest.
     - For a child or an infant, use pediatric AED pads if available. If the pads risk touching each other, place one pad in the middle of the child’s chest and the other on the back, between the shoulder blades.
4. Plug in the connector, if necessary.
5. Make sure no one, including you, is touching the victim.
   - Say, “Everyone, stand clear!”
6. Analyze the heart rhythm.
   - Push the “Analyze” button, if necessary. Let the AED analyze the heart rhythm.
7. Deliver a shock or perform CPR based on the AED recommendation.
   - If a shock is advised:
     - Make sure no one, including you, is touching the victim.
     - Say, “Everyone, stand clear!”
     - Deliver the shock by pushing the “Shock” button, if necessary.
     - After delivering the shock, perform about 2 minutes of CPR.
     - Continue to follow the prompts of the AED.
   - If no shock is advised:
     - Perform about 2 minutes of CPR.
     - Continue to follow the prompts of the AED.

**Notes:**

- If at any time you notice an obvious sign of life, such as breathing, stop CPR and monitor the victim’s condition.
- If two trained rescuers are present, one should perform CPR while the second rescuer operates the AED.
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| Attach AED pads to bare chest | Places one pad on the upper right chest and one on the left side of the chest | ■ Places one pad on the upper left chest  
■ Places one pad on the lower right side of the chest  
■ Places one or more pads on a location other than the chest |
| Make sure that pads do not touch (child or infant) | ■ Places pads on the chest so that they are separated from each other  
■ Places one pad in the middle of the chest and one on the back centered between the shoulder blades  
■ Pads are placed so that the heart is between the two pads | ■ Places pads on the chest, but pads touch each other  
■ Places the center of one pad more than 2 inches from the center of the chest  
■ Places the center of one pad more than 2 inches from the center of both shoulder blades |
| Make sure that no one is touching the victim | ■ Says, “Everyone, stand clear” before pushing the “Analyze” button if necessary  
■ Says, “Everyone, stand clear” before pushing the “Shock” button if necessary | ■ Does not say, “Everyone, stand clear.”  
■ Pushes the “Analyze” button if necessary, before saying, “Everyone, stand clear.”  
■ Pushes the “Shock” button if necessary, before saying, “Everyone, stand clear.” |
| After delivering the shock, or if no shock is advised, perform about 2 minutes of CPR | Returns to chest compressions within 5 seconds | Returns to chest compressions after 6 or more seconds |
COURSE WRAP-UP

Lesson Length: 1 hour, 10 minutes

LESSON OBJECTIVES

After completing this lesson, participants should be able to:

- Decide what care to provide for breathing and cardiac emergencies.

GUIDANCE FOR THE INSTRUCTOR

To complete this lesson and meet the lesson objectives, you must:

- Conduct a discussion to introduce the participants to the simulated scenarios and their responsibilities during the simulations.
- Lead participants through the scenarios.
- Conduct a brief review discussion of the course content.
- Administer the final written exam.
- Issue an American Red Cross Universal Certificate for participants who have successfully completed the course.

MATERIALS, EQUIPMENT AND SUPPLIES

- Non-latex disposable gloves (one pair per participant)
- Manikins (one adult and one infant manikin per two participants, child manikins optional)
- Resuscitation masks (one adult and one pediatric mask per participant)
- Bag-valve-mask resuscitators (BVMs) (one per two participants)
- Automated external defibrillators (AEDs) training devices (one per two participants)
- AED training pads (one set of adult and one set of pediatric training pads per two participants)
- Decontamination supplies
- Copies of Final Written Exams A and B and answer sheets (one exam, either Exam A or Exam B, per participant)
- Answer keys for Final Written Exams A and B
- American Red Cross Universal Certificate (one per participant) (Optional)

TOPIC: CPR/AED SKILL SCENARIOS

Time: 30 minutes

Activity

Tell participants that to achieve course certification, they must successfully participate in an adult or a child and an infant course scenario to provide them with an opportunity to practice their decision-making skills. Explain that they will:

- Have approximately 2 to 3 minutes to prepare for the scenario, including designing the role each group member will assume based on the actual scenario and gathering any necessary equipment and supplies.
- Need to formulate a response to the scenario that integrates key points from the course.
- Demonstrate any previously learned skills that would be required as part of the response, explaining their actions while providing care.
- Need to answer any questions asked by the instructor or other class members.
Successful participation means that a participant went through the entire scenario (as Rescuer 1 or 2) with minimal guidance from you.

Inform the participants that you will be leading each scenario, providing them with prompts related to the situation or results of their actions to promote the decision-making process.

Emphasize that you will be observing the participants’ demonstration of the skills to ensure that each participant is competent in the skills.

**Instructor’s Note:** Participants should be put in different roles for different scenarios to allow evaluation of their performance; they should not always be Rescuer 1 or always be Rescuer 2. Participants not directly involved in the scenario (i.e., those acting as observers) should not provide comments or feedback during the scenarios. Observe and document successful completion of the scenarios on the Participant Progress Log.

---

**SCENARIO 1**

**Instructor’s Note:** For this scenario, in each group there should be two participants acting as athletic trainers and an adult manikin as the victim.

**Setup: Scenario 1**

You are one of two athletic trainers on duty at a college basketball game when a player suddenly collapses. The coach tells you that the player has a history of heart disease.

<table>
<thead>
<tr>
<th>Instructor/Rescuer</th>
<th>Action</th>
<th>What to Look For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rescuer 1</td>
<td>Sizes up the scene for safety</td>
<td>Pauses and looks at the scene before responding</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The scene is safe.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Checks for responsiveness by tapping the victim’s shoulder and shouting, “Are you okay?”</td>
<td>Physically touches the manikin; speaks out loud</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no response.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Directs Rescuer 2 to summon more advanced medical personnel and to get the AED</td>
<td>Points; speaks out loud</td>
</tr>
<tr>
<td></td>
<td>Opens the airway</td>
<td>Tilts the head and lifts the chin</td>
</tr>
<tr>
<td></td>
<td>Checks for breathing and a pulse for no more than 10 seconds</td>
<td>Places ear above the manikin’s mouth; looks toward the manikin’s chest; places two fingers in the groove on the side of the manikin’s neck and presses in lightly; check should last for no more than 10 seconds</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no breathing and no pulse.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Quickly scans for severe bleeding</td>
<td>Looks over the manikin’s body</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no bleeding.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Gives 30 chest compressions</td>
<td>Ensures the victim is on a firm, flat surface; uses two hands on the center of the chest and pushes down on the center of the manikin’s chest 30 times to a depth of at least 2 inches and at a rate of at least 100 compressions per minute; allows the chest to fully rise before pushing down again</td>
</tr>
<tr>
<td></td>
<td>Gives 2 ventilations</td>
<td>Places a resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the resuscitation mask</td>
</tr>
</tbody>
</table>
### SCENARIO 1 Continued

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Says, “The chest clearly rises.”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Gives 30 chest compressions</td>
</tr>
<tr>
<td></td>
<td>Gives 2 ventilations</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The other athletic trainer arrives with the AED.”</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Continues compressions and ventilations</td>
</tr>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Turns on the AED; bares the victim’s chest and wipes the chest dry; attaches AED pads to the chest; plugs in the connector; makes sure no one is touching the victim</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “Everyone is clear.”</td>
</tr>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Pushes the “Analyze” button and lets the AED analyze the heart rhythm</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says (or the device says), “Shock advised.”</td>
</tr>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Makes sure no one is touching the victim; pushes the “Shock” button</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Resumes CPR</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says (or the device says), “Analyzing heart rhythm. Shock advised.”</td>
</tr>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Makes sure no one is touching the victim; pushes the “Shock” button</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says (or the device says), “Shock delivered.”</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Resumes CPR</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “More advanced medical personnel arrive on the scene.”</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Continues CPR</td>
</tr>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Provides more advanced medical personnel with information about what has been done and the victim’s response and allows more advanced medical personnel to take over care of the victim</td>
</tr>
</tbody>
</table>
**SCENARIO 2**

*Instructor’s Note:* For this scenario, in each group there should be two participants acting as the rescuers and a child manikin as the victim. (An adult manikin can be used in place of a child manikin.)

**Setup: Scenario 2**
You and a fellow rescuer arrive at an emergency scene involving a 3-year-old child pulled from a hotel pool that does not have a lifeguard. The mother is distraught and crying.

<table>
<thead>
<tr>
<th>Instructor/Rescuer</th>
<th>Action</th>
<th>What to Look For</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rescuer 1</td>
<td>Sizes up the scene for safety</td>
<td>Pauses and looks at the scene before responding</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The scene is safe.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Obtains consent to provide care</td>
<td>Speaks out loud asking the mother for consent</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The mother gives consent.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Checks for responsiveness by tapping the child’s shoulder and shouting, “Are you okay?”</td>
<td>Physically touches the manikin; speaks out loud</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no response.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Directs Rescuer 2 to summon more advanced medical personnel and get the AED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Opens the airway</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Checks for breathing and a pulse for no more than 10 seconds</td>
<td></td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The scene is safe.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Directs Rescuer 2 to summon more advanced medical personnel and get the AED</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Opens the airway</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Checks for breathing and a pulse for no more than 10 seconds</td>
<td></td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no breathing and no pulse.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Gives 2 initial ventilations</td>
<td>Places the appropriately sized resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the resuscitation mask</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The chest clearly rises.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Quickly scans for severe bleeding</td>
<td>Looks over the manikin’s body</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no bleeding.”</td>
<td></td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Gives 30 chest compressions</td>
<td>Ensures the victim is on a firm, flat surface; uses two hands on the center of the chest and pushes down on the center of the manikin’s chest 30 times to a depth of about 2 inches and at a rate of at least 100 compressions per minute; allows the chest to fully rise before pushing down again</td>
</tr>
<tr>
<td></td>
<td>Gives 2 ventilations</td>
<td>Places the resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the resuscitation mask</td>
</tr>
</tbody>
</table>
### SCENARIO 2 Continued

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Says, “The chest clearly rises.”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Gives 30 chest compressions</td>
</tr>
<tr>
<td></td>
<td>Removes the resuscitation mask; uses two hands on the center of the chest and pushes down on the center of the manikin’s chest 30 times to a depth of about 2 inches and at a rate of at least 100 compressions per minute; allows the chest to fully rise before pushing down again</td>
</tr>
<tr>
<td></td>
<td>Gives 2 ventilations</td>
</tr>
<tr>
<td></td>
<td>Replaces the resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the resuscitation mask</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Says, “The chest clearly rises.”</th>
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<tbody>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Gives 30 chest compressions</td>
</tr>
<tr>
<td></td>
<td>Removes the resuscitation mask; uses two hands on the center of the chest and pushes down on the center of the manikin’s chest 30 times to a depth of about 2 inches and at a rate of at least 100 compressions per minute; allows the chest to fully rise before pushing down again</td>
</tr>
<tr>
<td></td>
<td>Gives 2 ventilations</td>
</tr>
<tr>
<td></td>
<td>Replaces the resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the resuscitation mask</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Says, “The other rescuer arrives with the AED.”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Continues compressions and ventilations</td>
</tr>
<tr>
<td></td>
<td>Continues cycles of 30 chest compressions and 2 ventilations until Rescuer 2 says, “Everyone, stand clear!”</td>
</tr>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Ensures there are no puddles of water around the child or the AED</td>
</tr>
<tr>
<td></td>
<td>Turns on the AED</td>
</tr>
<tr>
<td></td>
<td>Bares the child’s chest and wipes the chest dry</td>
</tr>
<tr>
<td></td>
<td>Attaches pediatric AED pads to the chest</td>
</tr>
<tr>
<td></td>
<td>Plugs in the connector</td>
</tr>
<tr>
<td></td>
<td>Makes sure no one is touching the child</td>
</tr>
<tr>
<td></td>
<td>Looks around the manikin and the AED</td>
</tr>
<tr>
<td></td>
<td>Turns on the AED</td>
</tr>
<tr>
<td></td>
<td>Bares the manikin’s chest and wipes the chest dry with gauze</td>
</tr>
<tr>
<td></td>
<td>Places one pad on the upper right chest and the other pad on the left side of the chest</td>
</tr>
<tr>
<td></td>
<td>Plugs the connector into the device</td>
</tr>
<tr>
<td></td>
<td>Says, “Everyone, stand clear!”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Says, “Everyone is clear.”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Pushes the “Analyze” button and lets the AED analyze the heart rhythm</td>
</tr>
<tr>
<td></td>
<td>Pushes the “Analyze” button and stays clear of the child and the AED</td>
</tr>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Makes sure no one is touching the child</td>
</tr>
<tr>
<td></td>
<td>Says, “Everyone, stand clear!”</td>
</tr>
<tr>
<td></td>
<td>Pushes the “Shock” button</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Resumes CPR</td>
</tr>
<tr>
<td></td>
<td>Quickly resumes cycles of 30 chest compressions and 2 ventilations</td>
</tr>
<tr>
<td><strong>Instructor</strong></td>
<td>Says (or the device says), “Shock advised.”</td>
</tr>
<tr>
<td><strong>Rescuer 2</strong></td>
<td>Makes sure no one is touching the child</td>
</tr>
<tr>
<td></td>
<td>Says, “Everyone, stand clear!”</td>
</tr>
<tr>
<td></td>
<td>Pushes the “Shock” button</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Resumes CPR</td>
</tr>
<tr>
<td></td>
<td>Quickly resumes cycles of 30 chest compressions and 2 ventilations</td>
</tr>
</tbody>
</table>

**LESSON 6 \| Course Wrap-Up**
### SCENARIO 2 Continuing

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Says, “You notice the child is breathing.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rescuer 2</td>
<td>Opens the airway</td>
</tr>
<tr>
<td></td>
<td>Checks for breathing and a pulse for no more than 10 seconds</td>
</tr>
<tr>
<td></td>
<td>Monitors the child’s condition</td>
</tr>
<tr>
<td>Rescuer 2</td>
<td>Tilts the head and lifts the chin</td>
</tr>
<tr>
<td></td>
<td>Places ear above the manikin’s mouth; looks toward the manikin’s chest; places two fingers in the groove on the side of the manikin’s neck and presses in lightly; check should last for no more than 10 seconds</td>
</tr>
<tr>
<td></td>
<td>Looks over the child</td>
</tr>
</tbody>
</table>

### SCENARIO 3

**Instructor’s Note:** For this scenario, in each group there should be two participants acting as the rescuers and an infant manikin as the victim.

**Setup: Scenario 3**
You and a partner arrive at the home of the parents of an 8-month-old because the parents were unable to wake the infant and noticed that he was not breathing. The parents are distraught and sobbing. You find the infant lying face-up on the floor near the crib.

<table>
<thead>
<tr>
<th>Instructor/Rescuer</th>
<th>Action</th>
<th>What to Look For</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Sizes up the scene for safety</td>
<td>Pauses and looks at the scene before responding</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The scene is safe.”</td>
<td></td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Obtains consent to provide care</td>
<td>Speaks out loud</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Checks for responsiveness by tapping the infant’s shoulder or flicking the infant’s foot, and shouting, “Are you okay?”</td>
<td>Physically touches the manikin; speaks out loud</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no response.”</td>
<td></td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Directs Rescuer 2 to summon more advanced medical personnel and get the AED</td>
<td>Points; speaks out loud</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Opens the airway</td>
<td>Tilts the head and lifts the chin</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Checks for breathing and a pulse for no more than 10 seconds</td>
<td>Places ear above the manikin’s mouth; looks toward the manikin’s chest; places two fingers on the inside of the upper arm and presses in lightly; check should last for no more than 10 seconds</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no breathing and no pulse.”</td>
<td>Places the pediatric resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the resuscitation mask</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Gives 1 initial ventilation</td>
<td></td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The chest does not clearly rise.”</td>
<td></td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Retilts the infant’s head</td>
<td>Retilts the head and lifts the chin</td>
</tr>
<tr>
<td><strong>Rescuer 1</strong></td>
<td>Gives 1 ventilation</td>
<td>Places the pediatric resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the resuscitation mask</td>
</tr>
</tbody>
</table>
### Scenario 3 Continued

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Says, “The chest does not clearly rise.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rescuer 1</td>
<td>Quickly scans for severe bleeding</td>
</tr>
<tr>
<td></td>
<td>Looks over the manikin’s body while moving into position to give chest compressions</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no bleeding.”</td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Gives 30 chest compressions</td>
</tr>
<tr>
<td></td>
<td>Ensures the victim is on a firm, flat surface; uses two fingers on the center of the chest and pushes down on the center of the manikin’s chest 30 times to a depth of about 1½ inches and at a rate of at least 100 compressions per minute; allows the chest to fully rise before pushing down again</td>
</tr>
<tr>
<td></td>
<td>Opens the infant’s mouth and looks for an object</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “You see an object.”</td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Uses a hooking motion to get the object out</td>
</tr>
<tr>
<td></td>
<td>Simulates removing the object by using a hooking motion with the little finger to the side of the manikin’s mouth</td>
</tr>
<tr>
<td></td>
<td>Places the pediatric resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the pediatric resuscitation mask</td>
</tr>
<tr>
<td></td>
<td>Gives 2 ventilations</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The chest clearly rises.”</td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Opens the airway</td>
</tr>
<tr>
<td></td>
<td>Tilts the head and lifts the chin</td>
</tr>
<tr>
<td></td>
<td>Places ear above the manikin’s mouth; looks toward the manikin’s chest; places two fingers on the inside of the upper arm and presses in lightly; check should last for no more than 10 seconds</td>
</tr>
<tr>
<td></td>
<td>Checks for breathing and a pulse for no more than 10 seconds</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “There is no breathing and no pulse.”</td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Gives 30 chest compressions</td>
</tr>
<tr>
<td></td>
<td>Removes the pediatric resuscitation mask on the manikin; seals the mask; tilts the head, lifts the chin; and blows into the pediatric resuscitation mask</td>
</tr>
<tr>
<td></td>
<td>Gives 2 ventilations</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “The chest clearly rises. The other rescuer arrives with the AED.”</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Continues compressions and ventilations</td>
</tr>
<tr>
<td></td>
<td>Continues cycles of 30 chest compressions and 2 ventilations until Rescuer 2 says, “Everyone, stand clear!”</td>
</tr>
<tr>
<td>Rescuer 2</td>
<td>Turns on the AED</td>
</tr>
<tr>
<td></td>
<td>Bares the infant’s chest and back, and wipes the chest and back dry</td>
</tr>
<tr>
<td></td>
<td>Attaches pediatric AED pads to the chest and back</td>
</tr>
<tr>
<td></td>
<td>Plugs in the connector</td>
</tr>
<tr>
<td></td>
<td>Makes sure no one is touching the infant</td>
</tr>
<tr>
<td>Rescuer 2</td>
<td>Turns on the AED</td>
</tr>
<tr>
<td></td>
<td>Bares the manikin’s chest and back, and wipes the chest and back dry with gauze</td>
</tr>
<tr>
<td></td>
<td>Places one pad on the center of the chest and the other pad on the infant’s back between the shoulder blades</td>
</tr>
<tr>
<td></td>
<td>Plugs the connector into the device</td>
</tr>
<tr>
<td></td>
<td>Says, “Everyone, stand clear!”</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “Everyone is clear.”</td>
</tr>
<tr>
<td>Rescuer 2</td>
<td>Pushes the “Analyze” button and lets the AED analyze the heart rhythm</td>
</tr>
<tr>
<td></td>
<td>Pushes the “Analyze” button and stays clear of the person and the AED</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says (or the device says), “No shock advised.”</td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Resumes CPR</td>
</tr>
<tr>
<td></td>
<td>Quickly resumes cycles of 30 chest compressions and 2 ventilations</td>
</tr>
<tr>
<td>Instructor</td>
<td>Says, “You notice the infant is breathing.”</td>
</tr>
<tr>
<td>Rescuer 1</td>
<td>Opens the airway</td>
</tr>
<tr>
<td></td>
<td>Checks for breathing and a pulse for no more than 10 seconds</td>
</tr>
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<td>Monitors the infant’s condition</td>
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<td>Tilts the head and lifts the chin</td>
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<td>Places ear above the manikin’s mouth; looks toward the manikin’s chest; places two fingers on the inside of the upper arm and presses in lightly; check should last for no more than 10 seconds</td>
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<td>Looks over the manikin</td>
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**TOPIC:** **REVIEW OF COURSE CONTENT**

- Review the scenarios that the participants have just practiced.
- Ask participants if they have any questions about the course content before taking the final written exam. Answer any participants’ questions.
TOPIC: **FINAL WRITTEN EXAM**

- Tell participants that they will now take a final written exam on the information covered in this course.
- Explain that they may not use their books or notes to answer the questions.
- Hand out an exam and answer sheet to each participant.
- Tell participants to use a pencil, to write only on the answer sheet and to mark the answers clearly.
- Tell participants to come to you or to raise their hands when they have finished the exam or if they have any questions.
- Collect all answer sheets and exams.
- Grade the exam using the answer key (see back of instructor’s manual).
- After grading the exam, if time allows, discuss with the class any exam questions that were confusing or frequently missed. Privately counsel any participant who does not successfully complete the exam and schedule a retest. If scheduling a retest, be sure to use the alternative test and not the original. If the participant tested the first time with Exam A, for example, have him or her retest with Exam B.

**Time:** 30 minutes

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TOPIC: **CLOSING**

- Inform participants about how they will get their American Red Cross Universal Certificate if they have:
  - Passed the final written exam with a score of 80 percent or better (20 correct answers out of 25 questions).
  - Demonstrated competency for all required skills and scenarios.
- Thank all participants for attending the course.
- Inform participants of other Red Cross courses they may be interested in taking and of volunteer opportunities.
- Arrange to retest any participants who did not pass the final written exam.

**Time:** 5 minutes
American Red Cross CPR/AED for Professional Rescuers and Health Care Providers Course Final Written Exam A

- American Red Cross CPR/AED for Professional Rescuers and Health Care Providers Course Final Written Exam B
- Answer Sheet—Final Written Exam
- Answer Key—Final Written Exam A (see back of instructor's manual)
- Answer Key—Final Written Exam B (see back of instructor’s manual)
xx. Why does the American Red Cross teach this course?
   a. To help people recognize and respond appropriately in an emergency
   b. To help people make appropriate decisions when they see an emergency
   c. To enable people to give immediate care to a suddenly injured or ill person until more advanced medical personnel take over
   d. All of the above

1. When providing care during an emergency, which of the following should you do first?
   a. Check for responsiveness.
   b. Perform a primary assessment.
   c. Size-up the scene.
   d. Summon more advanced medical personnel.

2. As the only rescuer on the scene, you are performing CPR on an adult. When performing chest compressions, how deeply should you compress the chest?
   a. About ½ inch
   b. About 1½ inches
   c. At least 1 inch
   d. At least 2 inches

3. CPR should be performed on which of the following victims?
   a. One who is conscious and has an airway obstruction
   b. One who is experiencing difficulty breathing
   c. One who is in cardiac arrest
   d. One who responds to painful stimuli
4. What is the first step of the Cardiac Chain of Survival?
   a. Early CPR
   b. Early defibrillation
   c. Early more advanced medical care
   d. Early recognition and access to the emergency medical services (EMS) system

5. You are providing care to a victim having a heart attack. Which of the following would you do first?
   a. Loosen any tight clothing.
   b. Monitor the victim’s appearance.
   c. Provide comfort to the victim.
   d. Summon more advanced medical personnel.

6. Once you have turned on the automated external defibrillator (AED), you should:
   a. Apply the pads and allow the AED to analyze the heart rhythm.
   b. Check for breathing.
   c. Give abdominal thrusts.
   d. Give chest compressions.

7. To ensure effective chest compressions during CPR, which of the following is most appropriate?
   a. Allowing the chest to fully recoil between compressions
   b. Compressing the chest to a shallow depth
   c. Placing the victim on a soft, flat surface
   d. Positioning the hands at the upper part of the victim’s chest

8. You are performing CPR on a victim and a second rescuer arrives. Which of the following is most appropriate for the second rescuer to do first?
   a. Begin giving ventilations to the victim.
   b. Call for a change in position to assist with CPR.
   c. Check to see whether more advanced medical personnel have been called.
   d. Have the first rescuer stop CPR to allow for victim reassessment.

9. Which of the following is most essential to use when giving ventilations to protect you and the victim from disease transmission?
   a. CPR breathing barriers
   b. Protective clothing
   c. Gowns
   d. Protective eyewear
10. You are providing care to a victim who has fallen from a 6-foot ladder. The victim is conscious. Which of the following should you do first?
   a. Ask the victim what happened when he or she fell.
   b. Check the victim’s pulse.
   c. Obtain consent from the victim to provide care.
   d. Question the victim about any complaints of pain.

11. For which of the following should you summon more advanced medical personnel?
   a. A victim with a minor cut on the forearm that is lightly bleeding
   b. A victim with an airway obstruction who is forcefully coughing
   c. A victim with intermittent abdominal pressure
   d. A victim with an open leg wound with the bone protruding

12. You notice an unconscious adult who was pulled from the water is taking infrequent gasps. Which of the following should you do next?
   a. Begin CPR.
   b. Check for severe bleeding.
   c. Continue to monitor the victim’s breathing closely.
   d. Give 2 initial ventilations.

13. If there is a risk of the AED pads touching each other, such as with a small child or an infant, you should:
   a. Place one pad in the middle of the chest and the other on the back.
   b. Place one pad on the stomach and one pad on the chest.
   c. Place them as usual. It does not matter if the pads touch each other.
   d. Reverse the pads’ position on the chest.

14. When performing a primary assessment, you size-up the scene. Which of the following would you do next?
   a. Check for responsiveness.
   b. Summon more advanced medical personnel.
   c. Open the victim’s airway.
   d. Check for breathing and a pulse.

15. Which of the following statements about bag-valve-mask resuscitators (BVMs) is most accurate?
   a. BVMs are readily available at all emergency scenes.
   b. Monitoring the victim for full exhalation is not required.
   c. Two rescuers need to operate the BVM.
   d. When used by a single rescuer, BVMs allow easy coordination with chest compressions.
16. You are preparing to give ventilations to a 5-year-old boy using a resuscitation mask. You should give 1 ventilation about every:
   a. 1 second.
   b. 2 seconds.
   c. 3 seconds.
   d. 5 seconds.

17. When compressing a child’s chest during CPR, you should compress at a rate of at least how many compressions per minute?
   a. 80
   b. 100
   c. 120
   d. 140

18. An AED has advised that a shock should be given. Which of the following is appropriate?
   a. Apply new AED pads to the victim’s chest.
   b. Begin chest compressions immediately.
   c. Cover the AED pads with a blanket.
   d. Tell everyone to stand clear of the victim.

19. You are about to apply AED pads to a victim’s chest when you notice that the victim has several body piercings with jewelry on his chest. Which of the following should you do?
   a. Apply the pads to the chest, making sure to avoid the jewelry.
   b. Remove the jewelry before applying the pads.
   c. Use one pad, applying it directly over the jewelry.
   d. Wipe the chest, including the jewelry, with alcohol.

20. The cycle of chest compressions and ventilations in two-rescuer CPR for an infant is:
   a. 15 chest compressions and 1 ventilation.
   b. 15 chest compressions and 2 ventilations.
   c. 30 chest compressions and 1 ventilation.
   d. 30 chest compressions and 2 ventilations.

21. You are positioned above the child's head and are using a resuscitation mask to give ventilations. After you position the mask, which of the following should you do next?
   a. Blow into the mask.
   b. Lower the mask over the mouth.
   c. Open the airway.
   d. Seal the mask.
22. You are providing care to a restaurant patron who started choking on some food. The victim is now unconscious. Which of the following should you do first?
   a. Attempt to give ventilations to the victim.
   b. Ensure that the victim is on a firm, flat surface.
   c. Give 5 chest compressions.
   d. Look inside the victim’s mouth.

23. Where should you place your hands when giving chest compressions to an infant during CPR?
   a. One hand on the chin and one hand on the chest
   b. One hand on the chin and two or three fingers on the center of the chest
   c. One hand on the forehead and one hand on the chest
   d. One hand on the forehead and two or three fingers on the center of the chest

24. When giving abdominal thrusts to an adult, where should you position your fist?
   a. In the center of the breastbone
   b. In the middle of the abdomen, just above the navel
   c. In the middle of the abdomen, just below the navel
   d. On the rib cage

25. When providing care to a conscious infant who is choking, which of the following is most appropriate?
   a. Giving 10 chest thrusts then 10 back blows
   b. Positioning the infant so the head is lower than the chest
   c. Standing slightly behind the infant with one arm around the chest
   d. Using the heel of your hand to give the chest thrusts
xx. Why does the American Red Cross teach this course?
   a. To help people recognize and respond appropriately in an emergency
   b. To help people make appropriate decisions when they see an emergency
   c. To enable people to give immediate care to a suddenly injured or ill person until more advanced medical personnel take over
   d. All of the above

1. Which of the following would you identify as the universal sign that a conscious person is choking?
   a. Clutching the throat
   b. Coughing
   c. Inability to speak or cry
   d. Yelling out “I’m choking”

2. As you are giving ventilations with a resuscitation mask, the victim vomits. Which of the following would you do first?
   a. Clear the airway of the vomit immediately.
   b. Reposition the victim’s head to reopen the airway.
   c. Turn the victim as a unit onto his or her side.
   d. Use greater force when ventilating to bypass the vomit.

3. You are providing care to a conscious infant who is choking. When giving chest thrusts, which of the following would you use?
   a. Fist of the hand
   b. Heel of the hand
   c. Two hands
   d. Two or three fingers
4. You determine that a victim is unconscious but breathing. While waiting with the victim for more advanced medical personnel, you would position the victim:
   a. Face-up.
   b. In a modified high arm in endangered spine (H.A.I.N.E.S.) recovery position.
   c. On his or her abdomen.
   d. On his or her side.

5. While preparing to use an automated external defibrillator (AED) on a victim, you notice a medication patch on the victim’s chest. Which action is most appropriate?
   a. Applying one of the pads directly over the patch
   b. Removing the patch with a gloved hand
   c. Placing one pad on the victim’s chest and the other on his or her back
   d. Wiping the victim’s chest dry, avoiding the patch

6. You are giving ventilations to a 5-year-old child using a resuscitation mask. You should give 1 ventilation about every:
   a. 1 second.
   b. 2 seconds.
   c. 3 seconds.
   d. 5 seconds.

7. Which of the following statements about bag-valve-mask resuscitators (BVMs) is most accurate?
   a. BVMs are readily available at all emergency scenes.
   b. Monitoring the victim for full exhalation is not required.
   c. Two rescuers need to operate the BVM.
   d. When used by a single rescuer, BVMs allow easy coordination with chest compressions.

8. When giving chest compressions to an adult, how would you position your hands?
   a. Side-by-side at the middle of the victim’s chest
   b. Encircling the chest with the thumbs centered at the nipple line
   c. Heel of one hand on the center of the chest with the other hand on top
   d. Three fingers of one hand on the chest with the palm of the other on top

9. You are performing CPR on a victim and you notice that the victim’s chest begins to rise and fall. Which of the following would you do first?
   a. Continue to perform CPR.
   b. Place the victim face-down to maintain the airway.
   c. Stop chest compressions but continue ventilations.
   d. Stop CPR and monitor the victim’s condition.
10. When using a resuscitation mask, which of the following should you do?
   a. Blow into the mask for at least 2 seconds to give ventilations.
   b. Cover the nose completely with the mask with the bottom edge at the upper lip.
   c. Hold the mask at the one-way valve to seal it.
   d. Place the broad end of the mask between the lower lip and chin.

11. You are performing CPR on a victim and a second rescuer arrives. Which of the following is most appropriate for the second rescuer to do first?
   a. Begin giving ventilations to the victim.
   b. Call for a change in position to assist with CPR.
   c. Check to see whether more advanced medical personnel have been called.
   d. Have the first rescuer stop CPR to allow for victim reassessment.

12. Which of the following findings would lead you to determine that an infant’s airway is open?
   a. The infant is crying uncontrollably.
   b. The infant is not breathing.
   c. The infant is unable to speak.
   d. The infant’s chest fails to rise and fall.

13. During a primary assessment, which of the following should you evaluate first?
   a. Airway
   b. Breathing
   c. Circulation
   d. Level of consciousness (LOC)

14. When providing care, which of the following is the most important measure to prevent the spread of bloodborne pathogens?
   a. Checking with the victim to see whether he or she has any infectious diseases
   b. Using disposable supplies such as bandages and dressings instead of gloves
   c. Using personal protective equipment during care
   d. Washing your hands only before providing care

15. Based on which of the following signs and symptoms would you determine that a victim is experiencing respiratory distress?
   a. Audible high-pitched gurgling
   b. Complaints of feeling “really thirsty”
   c. Sneezing with watery eyes
   d. Yellowish skin
16. You and another rescuer find an unconscious adult on the floor. The other rescuer goes to summon more advanced medical personnel. You complete a primary assessment and find that the victim has a pulse but is not breathing. Which of the following should you do next?
   a. Give 1 ventilation about every 5 seconds.
   b. Give the victim back blows and chest thrusts.
   c. Perform a finger sweep of the victim’s mouth.
   d. Perform CPR.

17. As the only rescuer performing CPR on a 7-year-old child, you would perform cycles of:
   a. 15 chest compressions and 1 ventilation.
   b. 20 chest compressions and 1 ventilation.
   c. 25 chest compressions and 2 ventilations.
   d. 30 chest compressions and 2 ventilations.

18. An AED indicates that “No shock is advised.” Which of the following is most appropriate to do next?
   a. Monitor the victim’s airway and breathing.
   b. Perform CPR for about 2 minutes.
   c. Readjust the pad placement on the victim.
   d. Turn off the AED for 5 seconds and try again.

19. You are providing care to an adult who is unconscious and not breathing. You give 1 ventilation during CPR and notice that the chest does not rise. Which of the following should you do next?
   a. Change the position of the mask, then look for chest movement.
   b. Blow into the mask more forcefully, then look for the chest to rise.
   c. Give 5 back blows, then check the victim’s mouth.
   d. Retilt the head, then attempt another ventilation.

20. You and a fellow rescuer are giving ventilations using a BVM. You position the mask over the victim’s mouth and nose. What should the other rescuer do?
   a. Ensure that the mask is sealed.
   b. Open the airway with the thumbs.
   c. Position fingers behind the jawbone.
   d. Squeeze the bag with both hands.
21. You and another rescuer are performing CPR on an adult. You determine that there is no breathing or pulse and state, “Victim has no pulse. Begin CPR.” Which of the following should the other rescuer do next?  
   a. Check for breathing.  
   b. Begin chest compressions.  
   c. Give 2 ventilations.  
   d. Open the airway.  

22. Which of the following is most essential to use when giving ventilations to protect you and the victim from disease transmission?  
   a. CPR breathing barriers  
   b. Protective clothing  
   c. Gowns  
   d. Protective eyewear  

23. Which of the following should you do first when approaching the scene of an emergency?  
   a. Complete a primary assessment.  
   b. Obtain the victim’s consent to provide care.  
   c. Size-up the scene.  
   d. Summon more advanced medical personnel.  

24. To ensure effective chest compressions during CPR, which of the following is most appropriate?  
   a. Allowing the chest to fully recoil between compressions  
   b. Compressing the chest to a shallow depth  
   c. Placing the victim on a soft, flat surface  
   d. Positioning the hands at the upper part of the victim’s chest  

25. When using an AED, which of the following should you do immediately after attaching the AED pads to the victim’s chest?  
   a. Push the “Analyze” button.  
   b. Tell everyone to stand clear.  
   c. Turn on the AED.  
   d. Wipe the victim’s chest dry.
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HEALTH PRECAUTIONS AND GUIDELINES DURING TRAINING

The American Red Cross has trained millions of people in first aid, CPR and AED using manikins as training aids. The Red Cross follows widely accepted guidelines for cleaning and decontaminating training manikins. If these guidelines are adhered to, the risk of any kind of disease transmission during training is extremely low.

To help minimize the risk of disease transmission, you should follow some basic health precautions and guidelines while participating in training. You should take additional precautions if you have a condition that would increase your risk or other participants’ risks of exposure to infections. Request a separate training manikin if you:

- Have an acute condition, such as a cold, sore throat or cuts or sores on your hands or around your mouth.
- Know that you are seropositive (have had a positive blood test) for hepatitis B surface antigen (HBsAg), which indicates that you are currently infected with the hepatitis B virus.*
- Know that you have a chronic infection as indicated by long-term seropositivity (long-term positive blood tests) for HBsAg* or a positive blood test for anti-HIV, that is, a positive test for antibodies to HIV, the virus that causes many severe infections, including AIDS.
- Have had a positive blood test for hepatitis C virus.
- Have a type of condition that makes you extremely likely to get an infection.

To obtain information about testing for individual health status, go to the Centers for Disease Control and Prevention website (www.cdc.gov).

After a person has had an acute hepatitis B infection, he or she will no longer test positive for HBsAg but will test positive for the hepatitis B antibody (anti-HBs). People who have been vaccinated against hepatitis B will also test positive for anti-HBs. A positive test for anti-HBs should not be confused with a positive test for HBsAg.

If you decide that you should have your own manikin, ask your instructor if he or she can provide one for you. You will not be asked to explain why you make this request. The manikin will not be used by anyone else until it has been cleaned according to the recommended end-of-class decontamination procedures. Because the number of manikins available for class use is limited, the more advance notice you give, the more likely it is that you can be provided a separate manikin.

Guidelines

In addition to taking the precautions regarding manikins, you can protect yourself and other participants from infection by following these guidelines:

- Wash your hands thoroughly before participating in class activities.
- Do not eat, drink, use tobacco products or chew gum during class when manikins are used.
- Clean the manikin properly before use.
- For some manikins, cleaning properly means vigorously wiping the manikin’s face and the inside of its mouth with a clean gauze pad soaked with either a fresh solution of liquid chlorine bleach and water (¼ cup of sodium hypochlorite per gallon of tap water) or rubbing alcohol. The surfaces should remain wet for at least 1 minute before they are wiped dry with a second piece of clean, absorbent material.
- For other manikins, cleaning properly means changing the manikin’s face. Your instructor will provide you with instructions for cleaning the type of manikin used in your class.
- Follow the guidelines provided by your instructor when practicing skills such as clearing a blocked airway with your finger.
Physical Stress and Injury

Successful course completion requires full participation in classroom and skill sessions, as well as successful performance during skill and knowledge evaluations. Because of the nature of the skills in this course, you will participate in strenuous activities, such as performing CPR on the floor. If you have a medical condition or disability that will prevent you from taking part in the skill practice sessions, please tell your instructor so that accommodations can be made.

If you are unable to participate fully in the course, you may audit the course and participate as much as you can or desire but you will not be evaluated. To participate in the course in this way, you must tell the instructor before training begins. Be aware that you will not be eligible to receive a course completion certificate.

*People with hepatitis B infection will test positive for HBsAg. Most people infected with hepatitis B virus will get better in time. However, some hepatitis B infections will become chronic and linger for much longer. People with these chronic infections will continue to test positive for HBsAg. Their decision to participate in CPR training should be guided by their physician.*
Teaching the Lessons

Before you teach a lesson, you should read the lesson plan, review the appropriate pages in the handbook and gather necessary materials, equipment and supplies.

Each lesson plan contains the following:

- Lesson name
- Lesson objectives (specific course knowledge and skill objectives appropriate to the lesson)
- Guidance for the instructor (steps to be taken to complete the lesson)
- Materials, equipment and supplies (materials specific to course being taught)
- Topic names
- Activities (class exercises that enhance participants’ understanding of the course material)
- Skill sessions (practice of skills by participants; not all lessons contain skill sessions)
- Lesson wrap-up (lesson review)

There are multiple teaching strategies used throughout the course to keep participants engaged, including activities and skill sessions. Rather than simply lecturing to participants, maximize learning by facilitating class discussion and interaction. Question-and-answer sessions are built into the course to help such interaction. The questions enable participants to think about the issues and draw on experience or prior knowledge.

Working with Your Audience

Understanding your audience will help you engage participants in course activities. If you can relate to your audience, you will be better able to facilitate the activities successfully, help participants associate classroom information with personal experiences, provide a positive learning environment and maintain each participant’s self-esteem. You may have adults and youths from a variety of age groups in your course. Being aware of these differences before the course begins can help you anticipate any issues before they arise, such as different levels of understanding and skill.

Facilitating Discussion

Many activities and discussions in this course make use of facilitation principles, with the course instructor serving as the facilitator.

Facilitation is based on the concept of pushing, pulling and balancing the flow of information. Push skills have to do with information flowing mostly from instructor to participants. Pull skills are used when the instructor engages participants through the use of interactive exercises and by asking and answering questions or using other approaches that actively involve participants in their own learning, such as with the use of open-ended questions. Balance skills involve managing the push and pull of information to keep the learning process moving and to maximize learning.

When you facilitate classroom discussion and participant responses, keep in mind the following points:

- Maximize class interaction.
- Use pull skills to engage participants in classroom discussions and to keep discussions on topic or to provide necessary information.
Pull skills are also useful to solicit responses from different participants to prevent one participant from dominating the discussion.

Promote an open exchange of information and ideas by asking open-ended questions (i.e., questions that begin with “who,” “what,” “when,” “where,” “why” or “how”), waiting for responses, listening, managing silence and referring participants’ questions back to the group for discussion and resolution.

Ensure effective discussion sessions by giving and receiving feedback, maintaining an open perspective, setting the climate, staying on topic and managing time effectively.

Facilitation techniques allow you to evaluate participants’ knowledge and understanding throughout the course. In addition, facilitation:

- Gives you the opportunity to evaluate the group’s needs and focus the activities on those needs.
- Allows you to build on participants’ previous knowledge and skills.
- Allows participants to associate previous knowledge and skills with new information.
- Allows participants to learn from one another.
- Keeps participants engaged and interested throughout the course.

**Activities**

The educational activities in this course:

- Are learner-focused and involve ongoing evaluation of participants, beginning when they enter the classroom.
- Teach participants to use their critical-thinking skills to solve problems.
- Allow participants to associate information with their personal experience.

**Guided Discussion**

The instructor’s role in the guided discussions is critical. The ability to introduce questions that prompt discussion is an important aspect of facilitating good discussions. The purposes of asking questions for guided discussions are to:

- Increase comprehension (i.e., when the group does not understand something, the discussion may offer an alternative explanation that clarifies the information for participants).
- Monitor and evaluate the group’s level of understanding.
- Focus the group’s attention on the relevant topic.
- Ensure that the group covers all of the supplied content for each activity.

**Lectures**

Instructor presentation, or lecture, is sometimes the most effective way to deliver information. However, because lecturing is a passive way for participants to learn, it should be kept as brief as possible. Too much lecturing causes participants to become disengaged, resulting in less effective learning. Lecture points are specific content that instructors must communicate to participants and are written so that they can be read aloud as written or rephrased as needed. When you use lecture points, it is important that you fully understand the content in order to rephrase or provide context as needed. If you are using the course presentation, the main points for the lecture are included on the accompanying slide. If you are not using the course presentation, it is often helpful to write bullet points on newsprint before the class to facilitate the learning process. This practice also helps you meet the various learning needs of participants.

When delivering a lecture, it is important that the lecture be dynamic and engaging. Keeping the lecture moving, avoiding long stories of personal experiences and maintaining a learner-centered focus will vastly improve educational outcomes. One way to accomplish this is to prepare for interactive lectures. An *interactive lecture*
will have opportunities for two-way communication between participants and the instructor as well as among the participants themselves. To prepare an interactive lecture, keep the following suggestions in mind:

- Ensure that you understand the purpose of the lecture and plan accordingly.
- Feel free to rephrase the lecture points to fit your natural speaking style.
- Prepare lecture notes so that you can avoid reading from the instructor’s manual while lecturing.
- Use analogies to help create a bridge between lecture material and participants’ experiences.
- Strive for interaction with participants during lectures.
- Encourage participants to add to the lecture.

**Group Activities**

This course also uses group exercises to meet learning needs and promote interaction. When conducting group exercises, you should choose both the size and makeup of the groups. Form groups using the fewest number of participants necessary to conduct the exercise. Keeping the group size small will help avoid potential group-dynamics issues and establish a comfortable environment for the exchange of ideas.

Form new groups for each activity. Changing group members among activities promotes class cohesion, avoids situations in which one or more participant feels left out and keeps friendships from taking precedence over learning. Using an arbitrary selection criterion each time you form groups will help you vary group makeup and give participants the chance to interact with many different classmates. For example, try using selection criteria, such as find the person in class whose birthday is closest to yours and form a pair, find the person who lives the farthest from you and form a pair, or find the other people in class whose birthday is in the same season as yours (winter, spring, summer or fall) and form a group.

**Small-Group Exercises**

Small-group exercises use two to four participants working together to solve a problem or complete an activity. These exercises allow participants to use one another’s knowledge to solve problems and learn from others’ experiences.

**Large-Group Exercises**

Large-group exercises use large numbers of participants or the whole class to solve a problem or complete an activity. When the entire class works together, it provides an opportunity to exchange ideas, discuss problems and think about the many ways to solve a problem.

**Lesson Wrap-Ups**

These question-and-answer sessions are found at the end of each lesson. As you lead the wrap-ups, ask for volunteers to provide answers. Waiting up to 10 seconds for an answer can help encourage hesitant participants to answer. Call on participants by name if you are having a hard time finding volunteers. However, do not insist that all participants provide answers. Participants can still gain from this format even if they appear reluctant to answer.

Ideal responses are provided for each question. Answers labeled “Responses could include” are examples of one or more possible correct answers. For these questions, an example of a correct answer is provided in case participants are unable to come up with the correct answer(s) on their own. Answers labeled “Responses should include” are the correct answer(s) that must be covered. In this case, instructors must provide any or all of the answers if participants are unable to come up with the correct answer(s) on their own.

**Conducting Skill Sessions**

Skill sessions are a critical component of most American Red Cross courses that result in certification. Skill sessions should be well organized and well managed. During the skill sessions, participants are learning and perfecting skills. These sessions should include direction and instruction, ample practice time, instructor reinforcement, corrective feedback and encouragement to ensure each participant’s success. Plan the skill sessions to reinforce learning objectives.
Skill session structure may include Practice-While-You-Watch, when participants practice the skill along with on-screen instruction, and Watch-Then-Practice, when participants receive on-screen instruction and then apply that knowledge by practicing the skill.

When conducting a course that includes adult and child skills, you may conduct either the adult or the child skill sessions, based on the needs of the participants. The video segments and class instruction for these skills contain all the necessary information for both skills. However, if your course includes infant skills in combination with adult and/or child skills, you must conduct the infant skill sessions. For courses that include only infant skills, the full infant video segments must be viewed.

During the skill sessions, you are responsible for:

- Maintaining a safe learning environment.
- Ensuring that participants can see the video monitor when appropriate.
- Helping participants form pairs and making sure that they have the necessary equipment for skill practice (e.g., CPR breathing barriers, non-latex disposable gloves).
- Demonstrating a skill or skill components and/or guiding participants through a skill.
- Keeping the sessions running smoothly.
- Providing sufficient time for all participants to practice each skill.
- Identifying errors promptly and providing appropriate feedback to help participants improve their skills.
- Encouraging participants to improve their skills.
- Checking each participant for skill competency.

**Orienting Participants to Skill Sessions**

Orienting participants to the skill sessions will help them get started quickly and practice more efficiently. Participants should practice in groups of two or three. Some skill sessions require participants to practice on a partner, whereas others require practice on a manikin. Practice on a real person (partner) is important because participants can experience providing care to someone and understanding how care is experienced.

**Coaching vs. Prompting Participants**

The desired outcome of each skill session is for participants to demonstrate a skill correctly from beginning to end without receiving any assistance from you or a partner or referring to the participant materials. Because participants learn at different rates, bring different levels of knowledge and learn in different ways, you will find yourself generally coaching or guiding participants as they first learn skill elements. Coaching occurs in the initial phases of skill practice and allows you to give participants information that they need to establish a sequence, timing, duration and technique of a particular skill. When coaching, also known as guided practice, provide information such as the sequence of steps in a skill. Statements such as “Size-up the scene for safety” or “Check for responsiveness” are examples of coaching.

Once guided practice ends and independent demonstration of a skill begins, you should change tactics and shift to prompting. Prompting allows instructors to assess that a participant is able to make the right decision at the right time and provide the appropriate care. The Putting It All Together portion of the video segments are designed for prompt-only practice.

Because participants are expected to demonstrate skills without any assistance, when you prompt someone, provide only the information necessary for the participant to make a decision and provide care. In other words, you should give information only about the conditions found. For example, say, “The child is unconscious” instead of “Call 9-1-1” or “Ventilations do not make the chest clearly rise” instead of “Give ventilations.”

**Partner Practice**

Practicing on a partner has been included in this training to provide participants with experience in providing care to a real person. One participant acts as the injured or ill person while the other provides care. Participants change roles so that each participant has a chance to practice the skill. During partner practice, be sure that participants do not
engage in horseplay, which can lead to injury. To ensure a satisfactory comfort level, it is better to allow participants to choose their partners. Some participants may be reluctant to practice with participants of the opposite sex. Instructors should accommodate participants’ preferences. It is important that partner pairs be rotated (exchange roles), or one partner will gain most of the skills while the other partner misses a critical learning experience.

**Instructor-Led Practice**

Instructor-led practice can be used to focus on a skill or part of a skill. It is particularly useful for introducing new skills that build on previously learned skills or for safety reasons. With this method, the instructor guides participants through each step of a skill while checking on participants to ensure that all in the group complete the steps properly as the instructor calls them out.

When you lead the practice, position yourself so that you can see everyone. It may help to have participants’ heads pointing in the same direction and their partners in the same relative position next to them. Being able to see everyone allows you to monitor skill performance as well as ensure participant safety.

**Reciprocal Practice**

Reciprocal practice occurs when course participants guide, provide feedback and check one another’s skill performance. The goal is for a participant to demonstrate a skill correctly without any assistance from a partner. During reciprocal practice, move among participants and observe to ensure that they are appropriately practicing the skills and are receiving feedback from their partners. Provide feedback as appropriate and assistance as needed. Remember, if you can observe a participant correctly demonstrate a skill from start to finish without assistance and at the level of proficiency indicated on the skill assessment tool, you may check off that person’s skill on the Participant Progress Log. Let the participant know that no further demonstration of that skill is required.

**How Participants Learn Skills**

Closely supervise participants during skill sessions. The time for learning and refining skills in this course is relatively short. Therefore, skill sessions, particularly the first one, are demanding of the instructors. By carefully planning the first session and commending participants for practicing correctly, you can create a positive learning environment.

The skills taught will likely be new to most participants and may require frequent one-on-one attention. Keeping in mind the following list of skill characteristics will allow for more effective skill sessions.

- Course skills are complex. Participants often have some difficulties when they first begin.
- Skills are learned by hands-on practice. Immediate success in demonstrating the skill is unlikely. Refinements in technique take time and practice. Allow participants multiple opportunities to practice skills.
- Skills require a defined sequence of movements. Participants should consistently follow this sequence when learning skills.
- Learning times for each skill differ because some skills are easier than others.
- Participants have different learning rates. Take individual differences into account when teaching any course.
- Skills, especially the individual components of opening the airway and checking for breathing, are quickly forgotten. Frequent practice improves skill retention.

**Helping Participants Practice Correctly**

Practicing a skill aids learning only when the skill is performed correctly. One of your most difficult challenges as an instructor is to ensure that participants practice correctly. Continually monitor all participants, watching for errors participants make while practicing. Try to correct problems as soon as possible so that participants practice the skill correctly. While you are working closely with one participant, check others with an occasional glance. Correct any problems you notice to keep participants from continuing to practice incorrectly. Encourage participants to ask questions if they are unsure how to perform any part of a skill.

A positive learning environment is important. Participants perform best when you keep them informed of their progress. When participants are practicing correctly, provide positive feedback that identifies what they are doing
correctly. If participants are practicing incorrectly, provide specific corrective feedback. Before saying what they are doing wrong, tell them what they are doing correctly. Then, tactfully help them improve their performance.

Other strategies for corrective feedback include the following:

- If the error is simple, explain directly and positively how to correct the skill performance. Be specific when providing feedback. For example, if the participant is having trouble finding the proper hand placement for CPR, you might say, “The steps leading up to beginning CPR are good; now try finding the center of the chest for compressions. That will be the spot you want to aim for.”
- Show the participant what he or she should be doing. For the previous example, you might have to demonstrate hand placement for the person doing the skill.
- Explaining why participants should perform a skill in a certain way may help them remember how to perform the skill correctly. For example, if a participant continually forgets to size-up a scene for safety before assessing a victim, you might remind the participant that the rescuer can quickly become injured or ill because of an unsafe scene.
- If a participant has an ongoing problem with a technique, carefully observe what he or she is doing. Give specific instructions for performing the technique the correct way and lead the participant through the skill. It may help to have the participant state the steps back to you for reinforcement.
- Emphasize the critical performance steps to focus on those skills that make a difference in the successful completion of a skill.
- During skill sessions, resist telling participants anecdotes, which can distract or confuse participants.
- Remind participants what they are doing right and what they need to improve. Use phrases such as, “Your arms are lined up well, but try to keep them as straight as possible while giving compressions to help ensure that they are effective.” Help participants focus on the critical components of each skill.

Participants with Disabilities and Other Health Considerations

People with disabilities and other health conditions can perform the skills in the CPR/AED for Professional Rescuers and Health Care Providers program. In some cases, the skills needed to care for injured or ill individuals may need modification, but the result is the same. Instructors should focus on the critical components of a skill that are needed to successfully meet the objective. Instructors must always teach to the standards set forth but must be aware that participants may modify how a skill is accomplished and still meet the objective, which allows them to receive certification in the course. See the Americans with Disabilities Act (ADA) Resource Guide for Conducting and Administering Health and Safety Services Courses on Instructor’s Corner (redcross.org/instructorscorner) for more information.

As a Red Cross instructor, you may conduct a course that includes a person with a disability or other condition. Participants with a physical disability include those who are deaf or hard of hearing, legally blind, lack full use of limbs, have breathing difficulties or have other physical problems. When a participant with a disability or other condition can successfully meet course objectives, he or she should receive a course completion certificate. If a participant cannot meet the course objectives because of a disability or other condition, this should be communicated to the participant as early as possible.

Helping Participants with Physical Disabilities

To help a participant who has a physical disability, you may modify the delivery of course materials as follows:

- Increase the amount of time you spend with each participant.
- Allow frequent rest periods.
- Help participants modify the techniques necessary for successful skill completion.
People with Reading Difficulties and Disabilities

If you believe that a class includes participants who have reading difficulties or disabilities, you should discuss this with those participants individually and privately without attracting the attention of the rest of the class. You should make modifications that will allow these individuals to participate fully in class, such as reading any necessary material to the class.

**Identifying People with Reading Difficulties or Disabilities**

Course participants will do some reading during this course. You must be prepared to detect any difficulties and provide those participants with every opportunity to succeed, including modifications. Some participants may have difficulty reading because English is his or her second language. Through observation, you may be able to detect that an individual has reading difficulties.

Problems with reading skills may be present when:

- A participant does not follow along with written material or turn pages as the instructor reads.
- A participant says that he or she:
  - Forgot his or her glasses.
  - Has not done well in educational settings.
  - Does not do well in testing situations.

**Helping Participants with Reading Difficulties or Disabilities**

Final written exams are not a required component of the course. If a final exam has been requested or required by an employer, course provider, or state or local regulations, you may administer an oral exam instead.
Criteria for Course Completion

Many agencies, organizations and individuals look to the American Red Cross for formal training that results in certification. Red Cross certification means that on a particular date an instructor verified that a course participant could demonstrate competency in all required skills taught in the course. Competency is defined as being able to perform each skill to meet the objective without guidance and apply those skills in a simulated emergency.

Achieving course certification does not imply any future demonstration of the knowledge or skill at the level achieved on the particular date of course completion.

To successfully complete the course, the participant must:

■ Attend the entire course.
■ Participate in all skill sessions and scenarios.
■ Demonstrate competency in all required skills and scenarios.
■ Pass the final written exam with a minimum grade of 80 percent (20 correct answers out of 25 questions).

Evaluating Skills

In the CPR/AED for Professional Rescuers and Health Care Providers program, skills are evaluated during skill sessions within the lessons. As an instructor, your goal is to help participants achieve the performance criteria for each skill. The primary tools to assist you in evaluating participants’ skills are the skill charts and skill assessment tools.

Before conducting a course, become familiar with the skill charts and skill assessment tools. The skill charts contain the required steps of a skill in numerical order. The skill assessment tools provide assessment criteria for proficient and not proficient performance of the critical components of a skill that are necessary to meet the objective. Skill assessment tools include specific depths, ranges, rates, intervals, times and other quantifiable elements by which to assess skill performance. The skill assessment tools are designed to help you decide whether a participant has met the objective.

During skill sessions, you should check off a skill as completed on the Participant Progress Log once participants demonstrate proficiency in it. It is your responsibility as the instructor to observe participants’ skill performances to determine whether they are performing the skill correctly with respect to sequence, timing and duration, and whether their techniques meet the established skill proficiency criteria.

In order to complete the course requirements and receive a completion certificate, the participant must be able to complete all required skills proficiently without any coaching or assistance.

For additional guidance on evaluating skill performance, you may also review How to Run Skill Practice Sessions in Appendix C: Teaching Strategies.
Scenarios

Participants have the opportunity to demonstrate decision making and apply their knowledge and skills in an emergency scenario conducted at the conclusion of the course.

To conduct the scenario activity, have the class form pairs and then communicate the setup for the scenario used. Participants then work together in pairs to complete the scenario. Two participants play the role of rescuers and use either an adult or child manikin and an infant manikin. Participants should switch roles between scenarios.

The groups complete the scenarios at the same time. During the scenarios, your focus should be on helping participants apply the knowledge and skills covered in the course to the simulated emergency situation. Step in and provide guidance only if absolutely necessary. As participants work in pairs to complete the scenario, your role is to monitor the class and provide any feedback as necessary.

Although participants are expected to act on the basis of their training, they should be encouraged to work together and/or use skill sheets for reference. Because participants are going to simulate responding to a real emergency situation, you should say the prompts in the scenario exactly as they are written. These prompts provide only the information necessary for rescuers to make a decision and provide care. If the rescuer has difficulty determining the correct next step, you should provide basic feedback, such as, “That is not quite right” or “Remember to quickly scan for severe bleeding.” Because the skills may still be relatively new, it is okay if participants hesitate, start and stop, self-correct or otherwise momentarily interrupt the skill during scenarios.

To achieve course certification, participants must successfully participate in an adult or a child and an infant course scenario. Successful participation means that a participant went through the entire scenario (as Rescuer 1 or 2) with minimal guidance from you.

Written Exams

Written exams are a required component of the course. When administering the final written exam, you must use the exam provided and may not substitute exam questions. Either Exam A or Exam B can be used. To pass the written exam, participants must score 80 percent or better (correctly answer 20 out of 25 questions). If a participant does not achieve a score of 80 percent, he or she has the opportunity to take the alternative exam. It is acceptable to allow participants who passed the exam to review questions they missed. Graded answer sheets and written exams must be returned to you.

Oral exams may be given if the instructor determines that a participant has a reading or language difficulty.

Contact the local Red Cross chapter for guidance if a participant fails the written exam but successfully completes all other course requirements.

Criteria for Grading Participants

Course participants are assigned one of the following grades:

- **Successful** is entered for a participant who has attended all class sessions, participated in all course activities, passed all the required course skills and scenarios, and passed the final written exam.

- **Unsuccessful** is entered for a participant who has not met course objectives and/or does not successfully attend all class sessions, participate in all course activities, complete all the required course skills and scenarios, and does not pass the final written exam and who prefers not to be retested or does not pass a retest.

- **Not Evaluated** is entered as the final grade for a participant who is not attending the course with intent to receive a completion certificate. The participant, with your approval as the instructor, is allowed to choose his or her own level of participation in the course. This grade should not be substituted for **Unsuccessful** for a participant who attempts certification but is unable to pass the completion requirements. Participants must make his or her intent known to the instructor at the beginning of the class.
Make any notations that you think are necessary to record in the comments section on the Course Record, for instance, when you make accommodations, such as administering the final exam verbally.

## Awarding Certificates

Discuss with the local Red Cross chapter the procedures for obtaining Red Cross course completion certificates for participants in your courses. Be sure to follow approved procedures.
Main Video Segments:

- Professional Rescuers (0:51)
- Standard Precautions (2:26)
- Using a Resuscitation Mask (2:29)
- Performing a Primary Assessment (2:03)
- Giving Ventilations—Adult, Child and Infant (4:07)
- Using a Bag-Valve-Mask Resuscitator—Two Rescuers (1:24)
- Conscious Choking—Adult and Child (2:34)
- Conscious Choking—Infant (1:22)
- Unconscious Choking—Adult, Child and Infant (3:29)
- Heart Attack and the Cardiac Chain of Survival (6:05)
- CPR—Adult and Child (4:55)
- CPR—Infant (2:23)
- Two-Rescuer CPR—Adult and Child (2:25)
- Two-Rescuer CPR—Infant (1:51)
- Using an AED (2:07)
- Using an AED—CPR in Progress (1:45)

Bonus Segments:

- Putting It All Together: CPR—Adult (2:10)
- Putting It All Together: CPR—Infant (2:02)
- The Heart’s Electrical System (5:31)
- Anaphylaxis and Epinephrine Auto-Injectors (4:11)
- Asthma (2:57)
- Stroke (4:10)
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## Answer Key: CPR/AED for Professional Rescuers and Health Care Providers

### Exam A

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